

## Calendar No. 110

111TH CONGRESS  
1ST SESSION**S. 1462****[Report No. 111–48]**

To promote clean energy technology development, enhanced energy efficiency, improved energy security, and energy innovation and workforce development, and for other purposes.

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## IN THE SENATE OF THE UNITED STATES

JULY 16, 2009

Mr. BINGAMAN, from the Committee on Energy and Natural Resources, reported the following original bill; which was read twice and placed on the calendar

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**A BILL**

To promote clean energy technology development, enhanced energy efficiency, improved energy security, and energy innovation and workforce development, and for other purposes.

1       *Be it enacted by the Senate and House of Representa-*  
2       *tives of the United States of America in Congress assembled,*

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

4       (a) SHORT TITLE.—This Act may be cited as the  
5       “American Clean Energy Leadership Act of 2009”.

- 1 (b) TABLE OF CONTENTS.—The table of contents of  
 2 this Act is as follows:

- Sec. 1. Short title; table of contents.  
 Sec. 2. Definition of Secretary.

## TITLE I—CLEAN ENERGY TECHNOLOGY DEPLOYMENT

### Subtitle A—Clean Energy Financing

- Sec. 101. Purpose.  
 Sec. 102. Definitions.  
 Sec. 103. Improvements to existing programs.  
 Sec. 104. Energy technology deployment goals.  
 Sec. 105. Clean Energy Deployment Administration.  
 Sec. 106. Administration functions.  
 Sec. 107. Federal Credit Authority.  
 Sec. 108. General provisions.

### Subtitle B—Improved Transmission Siting

- Sec. 121. Siting of interstate electric transmission facilities.

### Subtitle C—Federal Renewable Electricity Standard

- Sec. 131. Sense of Congress on renewable energy and energy efficiency.  
 Sec. 132. Federal renewable electricity standard.  
 Sec. 133. Federal purchase requirement amendments.

### Subtitle D—Energy and Water Integration

- Sec. 141. Energy water nexus study.  
 Sec. 142. Power plant water and energy efficiency.  
 Sec. 143. Reclamation water conservation and energy savings study.  
 Sec. 144. Brackish groundwater national desalination research facility.  
 Sec. 145. Enhanced information on water-related energy consumption.  
 Sec. 146. Energy-Water Research and Development Roadmap.  
 Sec. 147. Energy-water clean technology grant program.  
 Sec. 148. Rural water utilities energy and water efficiency program.  
 Sec. 149. Comprehensive water use and energy savings study.

### Subtitle E—Vehicle Technology Deployment

- Sec. 151. Transportation roadmap study.  
 Sec. 152. Vehicle technology and recharging infrastructure.  
 Sec. 153. Electric drive transportation standardization.  
 Sec. 154. Pilot program for plug-in electric drive vehicles for Federal fleet.  
 Sec. 155. Study of end-of-useful life options for motor vehicle batteries.

## TITLE II—ENHANCED ENERGY EFFICIENCY

### Subtitle A—Manufacturing Energy Efficiency

- Sec. 201. State partnership industrial energy efficiency revolving loan program.  
 Sec. 202. Coordination of research and development of energy efficient technologies for industry.  
 Sec. 203. Energy efficient technologies assessment.

- Sec. 204. Future of Industry program.
- Sec. 205. Sustainable manufacturing initiative.
- Sec. 206. Innovation in industry grants.
- Sec. 207. Study of advanced energy technology manufacturing capabilities in the United States.
- Sec. 208. Industrial Technologies steering committee.
- Sec. 209. Authorization of appropriations.

#### Subtitle B—Improved Efficiency in Appliances and Equipment

- Sec. 221. Test procedure petition process.
- Sec. 222. Energy Star program.
- Sec. 223. Petition for amended standards.
- Sec. 224. Portable light fixtures.
- Sec. 225. GU-24 base lamps.
- Sec. 226. Standards for certain incandescent reflector lamps and reflector lamps.
- Sec. 227. Standards for commercial furnaces.
- Sec. 228. Motor efficiency rebate program.
- Sec. 229. Study of compliance with energy standards for appliances.
- Sec. 230. Study of direct current electricity supply in certain buildings.
- Sec. 231. Motor market assessment and commercial awareness program.
- Sec. 232. Study regarding Energy Superstar concept.
- Sec. 233. Technical amendment.

#### Subtitle C—Building Efficiency

##### PART I—BUILDING CODES

- Sec. 241. Greater energy efficiency in building codes.
- Sec. 242. Multifamily and Manufactured Housing Energy Efficiency Grant Program.
- Sec. 243. Building training and assessment centers.

##### PART II—WEATHERIZATION ASSISTANCE FOR LOW-INCOME PERSONS

- Sec. 251. Weatherization assistance for low-income persons.

##### PART III—STATE ENERGY PROGRAM

- Sec. 255. State Energy Program.

##### PART IV—STATE ENERGY EFFICIENCY GRANTS PROGRAM

- Sec. 261. Definitions.
- Sec. 262. State energy efficiency retrofit programs.
- Sec. 263. Administrative and technical support.
- Sec. 264. Regulations.
- Sec. 265. Funding.
- Sec. 266. Home Energy Retrofit Finance Program.

##### PART V—FEDERAL EFFICIENCY AND RENEWABLES

- Sec. 271. Federal purchase requirement.
- Sec. 272. Competition requirements for task or delivery orders under energy savings performance contracts.
- Sec. 273. Funding flexibility.
- Sec. 274. Definition of energy savings.

- Sec. 275. National energy efficiency improvement goals.
- Sec. 276. Energy sustainability and efficiency grants and loans for institutions.
- Sec. 277. Federal implementation strategy for energy-efficient information and communications technologies.
- Sec. 278. Incentives for Federal agencies to participate in energy efficiency programs.

#### PART VI—ENERGY EFFICIENCY INFORMATION ON HOMES AND BUILDINGS

- Sec. 281. Building energy performance information program.
- Sec. 282. Evaluation, measurement, and verification of energy savings.

#### PART VII—RESIDENTIAL HIGH PERFORMANCE ZERO-NET-ENERGY BUILDINGS INITIATIVE

- Sec. 291. Residential High Performance Zero-Net-Energy Buildings Initiative.

##### Subtitle D—Electric Grid

- Sec. 295. National electric system efficiency and peak demand reduction goal.
- Sec. 296. Uniform national standards for interconnection of certain small power production facilities.

#### TITLE III—IMPROVED ENERGY SECURITY

##### Subtitle A—Cyber Security of the Electric Transmission Grid

- Sec. 301. Critical electric infrastructure.

##### Subtitle B—Nuclear Energy

- Sec. 311. National Commission on Nuclear Waste.
- Sec. 312. Sense of Congress regarding the strategic role of nuclear energy.
- Sec. 313. Advanced fuel recycling process development.

##### Subtitle C—Improving United States Strategic Reserves

- Sec. 321. Petroleum product reserve.
- Sec. 322. Petroleum exchange authority.

##### Subtitle D—Federal Oil and Gas Development

#### PART I—OIL AND GAS LEASING

- Sec. 331. Oil and Gas Permit Processing Improvement Fund.
- Sec. 332. Facilitation of coproduction of geothermal energy on oil and gas leases.

#### PART II—OUTER CONTINENTAL SHELF

- Sec. 341. Implementation of inventory of outer Continental Shelf resources.
- Sec. 342. Alaska OCS permit processing coordination office.
- Sec. 343. Moratorium of oil and gas leasing in certain areas of the Gulf of Mexico.
- Sec. 344. Repeal of outer Continental Shelf deep water and deep gas royalty relief.

#### PART III—MISCELLANEOUS

- Sec. 351. Minerals Management Service.

- Sec. 352. Preservation of geological and geophysical data.
- Sec. 353. Alaska natural gas pipeline.
- Sec. 354. Denali National Park and Preserve natural gas pipeline.
- Sec. 355. Exemption of trans-Alaska oil pipeline system from certain requirements.
- Sec. 356. Procurement and acquisition of alternative fuels.
- Sec. 357. Geologic Materials Archiving Grant Program.

#### Subtitle E—Public Land Renewable Energy Deployment

- Sec. 361. Renewable energy Federal permit coordination.
- Sec. 362. Extension of funding for implementation of Geothermal Steam Act of 1970.
- Sec. 363. Programmatic environmental impact statements and land use planning.
- Sec. 364. Report.
- Sec. 365. Renewable energy development on brownfield sites.
- Sec. 366. Development of solar and wind energy on public land.

#### Subtitle F—Carbon Capture

- Sec. 371. Large-scale carbon storage program.
- Sec. 372. Training program for State agencies.

#### Subtitle G—Island Energy

- Sec. 381. Affiliated island energy independence team.

### TITLE IV—ENERGY INNOVATION AND WORKFORCE DEVELOPMENT

#### Subtitle A—Funding

- Sec. 401. Authorization of appropriations for energy research, development, demonstration, and commercial application activities.

#### Subtitle B—Grand Energy Challenges Research Initiative

- Sec. 411. Grand Energy Challenges Research Initiative.

#### Subtitle C—Improvements to Existing Energy Research and Development Programs

- Sec. 421. Advanced Research Projects Agency—Energy.
- Sec. 422. Domestic vehicle battery manufacturing research.
- Sec. 423. Lightweight materials research and development.
- Sec. 424. Amendments to the Methane Hydrate Research and Development Act of 2000.
- Sec. 425. Program to exploit low-Btu gas and conserve helium resources.
- Sec. 426. Office of Arctic Energy.
- Sec. 427. Ultra-deepwater and unconventional natural gas and other petroleum resources program.

#### Subtitle D—Energy Workforce Development

- Sec. 431. Best practices for energy career academies.
- Sec. 432. Energy career academies.
- Sec. 433. Energy utility trades program for community colleges.
- Sec. 434. Student awareness of energy career opportunities.

- Sec. 435. Coordination of energy workforce training programs.
- Sec. 436. Direct hire authority.
- Sec. 437. Critical pay authority.
- Sec. 438. Reemployment of civilian retirees.
- Sec. 439. Sustainable energy training program for community colleges.

Subtitle E—Strengthening Education and Training in the Subsurface  
Geosciences and Engineering for Energy Development

- Sec. 451. Definitions.
- Sec. 452. Policy.
- Sec. 453. Research personnel and programs.
- Sec. 454. Scholarships and fellowships.
- Sec. 455. Career technical and community college education.
- Sec. 456. Use of funds by institutions.
- Sec. 457. Advisory Committee.
- Sec. 458. Office; regulations.
- Sec. 459. Authorization of appropriations.
- Sec. 460. Study of availability of skilled workers.

Subtitle F—Miscellaneous

- Sec. 471. Other transactions authority.
- Sec. 472. Definition of National Laboratory.
- Sec. 473. Protection of results.
- Sec. 474. Marine and hydrokinetic renewable energy research and development.

TITLE V—ENERGY MARKETS

- Sec. 501. Enhanced information on critical energy supplies.
- Sec. 502. Working Group on Energy Markets.
- Sec. 503. Study of regulatory framework for energy markets.
- Sec. 504. Metadata formats for energy prices.
- Sec. 505. Emergency orders under the Federal Power Act.
- Sec. 506. Cease-and-desist authority under the Federal Power Act.
- Sec. 507. Cease-and-desist authority under the Natural Gas Act.
- Sec. 508. De novo review of civil penalties under the Natural Gas Act.

TITLE VI—POLICY STUDIES AND REPORTS

- Sec. 601. Helium gas resource assessment.
- Sec. 602. Potash mineral resource assessment.
- Sec. 603. Better energy strategy for tomorrow.
- Sec. 604. Addressing climate change in China and India.
- Sec. 605. Carbon leakage mitigation study.
- Sec. 606. Study of foreign fuel subsidies.
- Sec. 607. Assessment of renewable energy resources.
- Sec. 608. Efficiency review of electric generation facilities.
- Sec. 609. Report on emissions of alternative transportation fuels.
- Sec. 610. Oil savings.

**1 SEC. 2. DEFINITION OF SECRETARY.**

- 2** In this Act, the term “Secretary” means the Sec-
- 3** retary of Energy.

**TITLE I—CLEAN ENERGY**  
**TECHNOLOGY DEPLOYMENT**  
**Subtitle A—Clean Energy**  
**Financing**

**SEC. 101. PURPOSE.**

The purpose of this subtitle is to promote the domestic development and deployment of clean energy technologies required for the 21st century through the improvement of existing programs and the establishment of a self-sustaining Clean Energy Deployment Administration that will provide for an attractive investment environment through partnership with and support of the private capital market in order to promote access to affordable financing for accelerated and widespread deployment of—

- (1) clean energy technologies;
- (2) advanced or enabling energy infrastructure technologies;
- (3) energy efficiency technologies in residential, commercial, and industrial applications, including end-use efficiency in buildings; and
- (4) manufacturing technologies for any of the technologies or applications described in this section.

**SEC. 102. DEFINITIONS.**

In this subtitle:

1           (1) ADMINISTRATION.—The term “Administra-  
2           tion” means the Clean Energy Deployment Adminis-  
3           tration established by section 105.

4           (2) ADMINISTRATOR.—The term “Adminis-  
5           trator” means the Administrator of the Administra-  
6           tion.

7           (3) ADVISORY COUNCIL.—The term “Advisory  
8           Council” means the Energy Technology Advisory  
9           Council of the Administration.

10          (4) BREAKTHROUGH TECHNOLOGY.—The term  
11          “breakthrough technology” means a clean energy  
12          technology that—

13                (A) presents a significant opportunity to  
14                advance the goals developed under section 104,  
15                as assessed under the methodology established  
16                by the Advisory Council; but

17                (B) has generally not been considered a  
18                commercially ready technology as a result of  
19                high perceived technology risk or other similar  
20                factors.

21          (5) CLEAN ENERGY TECHNOLOGY.—The term  
22          “clean energy technology” means a technology re-  
23          lated to the production, use, transmission, storage,  
24          control, or conservation of energy that will—



1 (A) reduce the need for additional energy  
2 supplies by using existing energy supplies with  
3 greater efficiency or by transmitting, distrib-  
4 uting, or transporting energy with greater effec-  
5 tiveness through the infrastructure of the  
6 United States;

7 (B) diversify the sources of energy supply  
8 of the United States to strengthen energy secu-  
9 rity and to increase supplies with a favorable  
10 balance of environmental effects if the entire  
11 technology system is considered; or

12 (C) contribute to a stabilization of atmos-  
13 pheric greenhouse gas concentrations through  
14 reduction, avoidance, or sequestration of en-  
15 ergy-related emissions.

16 (6) COST.—The term “cost” has the meaning  
17 given the term in section 502 of the Federal Credit  
18 Reform Act of 1990 (2 U.S.C. 661a).

19 (7) DIRECT LOAN.—The term “direct loan” has  
20 the meaning given the term in section 502 of the  
21 Federal Credit Reform Act of 1990 (2 U.S.C. 661a).

22 (8) FUND.—The term “Fund” means the Clean  
23 Energy Investment Fund established by section  
24 103(a).

1           (9) LOAN GUARANTEE.—The term “loan guar-  
2       antee” has the meaning given the term in section  
3       502 of the Federal Credit Reform Act of 1990 (2  
4       U.S.C. 661a).

5           (10) NATIONAL LABORATORY.—The term “Na-  
6       tional Laboratory” has the meaning given the term  
7       in section 2 of the Energy Policy Act of 2005 (42  
8       U.S.C. 15801).

9           (11) SECRETARY.—The term “Secretary”  
10      means the Secretary of Energy.

11          (12) SECURITY.—The term “security” has the  
12      meaning given the term in section 2 of the Securities  
13      Act of 1933 (15 U.S.C. 77b).

14          (13) STATE.—The term “State” means—

15               (A) a State;

16               (B) the District of Columbia;

17               (C) the Commonwealth of Puerto Rico;

18              and

19               (D) any other territory or possession of the  
20      United States.

21          (14) TECHNOLOGY RISK.—The term “tech-  
22      nology risk” means the risks during construction or  
23      operation associated with the design, development,  
24      and deployment of clean energy technologies (includ-  
25      ing the cost, schedule, performance, reliability and

1 maintenance, and accounting for the perceived risk),  
 2 from the perspective of commercial lenders, that  
 3 may be increased as a result of the absence of ade-  
 4 quate historical construction, operating, or perform-  
 5 ance data from commercial applications of the tech-  
 6 nology.

7 **SEC. 103. IMPROVEMENTS TO EXISTING PROGRAMS.**

8 (a) CLEAN ENERGY INVESTMENT FUND.—

9 (1) ESTABLISHMENT.—There is established in  
 10 the Treasury of the United States a revolving fund,  
 11 to be known as the “Clean Energy Investment  
 12 Fund”, consisting of—

13 (A) such amounts as have been appro-  
 14 priated for administrative expenses to carry out  
 15 title XVII of the Energy Policy Act of 2005 (42  
 16 U.S.C. 16511 et seq.);

17 (B) such amounts as are deposited in the  
 18 Fund under this subtitle and amendments made  
 19 by this subtitle; and

20 (C) such sums as may be appropriated to  
 21 supplement the Fund.

22 (2) EXPENDITURES FROM FUND.—

23 (A) IN GENERAL.—Notwithstanding sec-  
 24 tion 1705(e) of the Energy Policy Act of 2005  
 25 (42 U.S.C. 16516(e)), amounts in the Fund

1 shall be available to the Secretary for obligation  
2 without fiscal year limitation, to remain avail-  
3 able until expended.

4 (B) ADMINISTRATIVE EXPENSES.—

5 (i) FEES.—Fees collected for adminis-  
6 trative expenses shall be available without  
7 limitation to cover applicable expenses.

8 (ii) FUND.—To the extent that ad-  
9 ministrative expenses are not reimbursed  
10 through fees, an amount not to exceed 1.5  
11 percent of the amounts in the Fund as of  
12 the beginning of each fiscal year shall be  
13 available to pay the administrative ex-  
14 penses for the fiscal year necessary to  
15 carry out title XVII of the Energy Policy  
16 Act of 2005 (42 U.S.C. 16511 et seq.).

17 (3) TRANSFERS OF AMOUNTS.—

18 (A) IN GENERAL.—The amounts required  
19 to be transferred to the Fund under this sub-  
20 section shall be transferred at least monthly  
21 from the general fund of the Treasury to the  
22 Fund on the basis of estimates made by the  
23 Secretary of the Treasury.

24 (B) CASH FLOWS.—Cash flows associated  
25 with costs of the Fund described in section

1           502(5)(B) of the Federal Credit Reform Act of  
 2           1990 (2 U.S.C. 661a(5)(B)) shall be trans-  
 3           ferred to appropriate credit accounts.

4           (C) ADJUSTMENTS.—Proper adjustment  
 5           shall be made in amounts subsequently trans-  
 6           ferred to the extent prior estimates were in ex-  
 7           cess of or less than the amounts required to be  
 8           transferred.

9           (b) REVISIONS TO LOAN GUARANTEE PROGRAM AU-  
 10          THORITY.—

11           (1) DEFINITION OF COMMERCIAL TECH-  
 12          NOLOGY.—Section 1701(1) of the Energy Policy Act  
 13          of 2005 (42 U.S.C. 16511(1)) is amended by strik-  
 14          ing subparagraph (B) and inserting the following:

15                   “(B) EXCLUSION.—The term ‘commercial  
 16                   technology’ does not include a technology if the  
 17                   sole use of the technology is in connection  
 18                   with—

19                           “(i) a demonstration project; or

20                           “(ii) a project for which the Secretary  
 21                           approved a loan guarantee.”.

22           (2) SPECIFIC APPROPRIATION OR CONTRIBU-  
 23          TION.—Section 1702 of the Energy Policy Act of  
 24          2005 (42 U.S.C. 16512) is amended by striking sub-  
 25          section (b) and inserting the following:

1       “(b) SPECIFIC APPROPRIATION OR CONTRIBU-  
2 TION.—

3               “(1) IN GENERAL.—No guarantee shall be  
4 made unless sufficient amounts to account for the  
5 cost are available—

6                       “(A) in unobligated balances within the  
7 Clean Energy Investment Fund established  
8 under section 103(a) of the American Clean  
9 Energy Leadership Act of 2009;

10                      “(B) as a payment from the borrower and  
11 the payment is deposited in the Clean Energy  
12 Investment Fund; or

13                      “(C) in any combination of balances and  
14 payments described in subparagraphs (A) and  
15 (B), respectively.

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

20               “(3) RELATION TO OTHER LAWS.—Section  
21 504(b) of the Federal Credit Reform Act of 1990 (2  
22 U.S.C. 661c(b)) shall not apply to a loan or loan  
23 guarantee under this section.”.

24               (3) SUBROGATION.—Section 1702(g)(2) of the  
25 Energy Policy Act of 2005 (42 U.S.C. 16512(g)(2))

1 is amended by striking subparagraphs (B) and (C)  
2 and inserting the following:

3 “(B) SUPERIORITY OF RIGHTS.—Except as  
4 provided in subparagraph (C), the rights of the  
5 Secretary, with respect to any property ac-  
6 quired pursuant to a guarantee or related  
7 agreements, shall be superior to the rights of  
8 any other person with respect to the property.

9 “(C) TERMS AND CONDITIONS.—A guar-  
10 antee agreement shall include such detailed  
11 terms and conditions as the Secretary deter-  
12 mines appropriate to—

13 “(i) protect the interests of the United  
14 States in the case of default;

15 “(ii) have available all the patents and  
16 technology necessary for any person se-  
17 lected, including the Secretary, to complete  
18 and operate the project;

19 “(iii) provide for sharing the proceeds  
20 received from the sale of project assets  
21 with other creditors or control the disposi-  
22 tion of project assets if necessary to pro-  
23 tect the interests of the United States in  
24 the case of default; and

1                   “(iv) provide such lien priority in  
2                   project assets as necessary to protect the  
3                   interests of the United States in the case  
4                   of a default.”.

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

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

10                   “(A) be deposited by the Secretary in the  
11                   Clean Energy Investment Fund established  
12                   under section 103(a) of the American Clean  
13                   Energy Leadership Act of 2009; and

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

18                   “(3) ADJUSTMENT.—The Secretary may adjust  
19                   the amount or manner of collection of fees under  
20                   this title as the Secretary determines is necessary to  
21                   promote, to the maximum extent practicable, eligible  
22                   projects under this title.

23                   “(4) EXCESS FEES.—Of the amount of a fee  
24                   imposed on an applicant at the conditional commit-  
25                   ment stage, 75 percent of the amount shall be re-



1 fundable to the applicant if there is no financial  
2 close on the application, unless the Secretary deter-  
3 mines that the administrative costs of the Depart-  
4 ment have exceeded the amount retained.

5 “(5) CREDIT REPORT.—If, in the opinion of the  
6 Secretary, the credit rating of an applicant is not  
7 relevant to the determination of whether or not sup-  
8 port will be provided and the applicant agrees to ac-  
9 cept the credit rating assigned to the applicant by  
10 the Secretary, the Secretary may waive any require-  
11 ment to provide a third-party credit report.”.

12 (5) PROCESSING.—Section 1702 of the Energy  
13 Policy Act of 2005 (42 U.S.C. 16512) is amended  
14 by adding at the end the following:

15 “(k) ACCELERATED REVIEWS.—To the maximum ex-  
16 tent practicable and consistent with sound business prac-  
17 tices, the Secretary shall seek to conduct necessary reviews  
18 concurrently of an application for a loan guarantee under  
19 this title such that decisions as to whether to enter into  
20 a commitment on the application can be issued not later  
21 than 180 days after the date of submission of a completed  
22 application.”.

23 (6) WAGE RATES.—Section 1705(c) of the En-  
24 ergy Policy Act of 2005 (42 U.S.C. 16516(c)) is

1       amended by striking “support under this section”  
2       and inserting “support under this title”.

3   **SEC. 104. ENERGY TECHNOLOGY DEPLOYMENT GOALS.**

4       (a) GOALS.—Not later than 1 year after the date of  
5   enactment of this Act, the Secretary, after consultation  
6   with the Advisory Council, shall develop and publish for  
7   review and comment in the Federal Register near-, me-  
8   dium-, and long-term goals (including numerical perform-  
9   ance targets at appropriate intervals to measure progress  
10  toward those goals) for the deployment of clean energy  
11  technologies through the credit support programs estab-  
12  lished by this subtitle (including an amendment made by  
13  this subtitle) to promote—

14           (1) sufficient electric generating capacity using  
15       clean energy technologies to meet the energy needs  
16       of the United States;

17           (2) clean energy technologies in vehicles and  
18       fuels that will substantially reduce the reliance of  
19       the United States on foreign sources of energy and  
20       insulate consumers from the volatility of world en-  
21       ergy markets;

22           (3) a domestic commercialization and manufac-  
23       turing capacity that will establish the United States  
24       as a world leader in clean energy technologies across  
25       multiple sectors;

1           (4) installation of sufficient infrastructure to  
2           allow for the cost-effective deployment of clean en-  
3           ergy technologies appropriate to each region of the  
4           United States;

5           (5) the transformation of the building stock of  
6           the United States to zero net energy consumption;

7           (6) the recovery, use, and prevention of waste  
8           energy;

9           (7) domestic manufacturing of clean energy  
10          technologies on a scale that is sufficient to achieve  
11          price parity with conventional energy sources;

12          (8) domestic production of commodities and  
13          materials (such as steel, chemicals, polymers, and  
14          cement) using clean energy technologies so that the  
15          United States will become a world leader in environ-  
16          mentally sustainable production of the commodities  
17          and materials;

18          (9) a robust, efficient, and interactive electricity  
19          transmission grid that will allow for the incorpora-  
20          tion of clean energy technologies, distributed genera-  
21          tion, smart grid functions, and demand-response in  
22          each regional electric grid;

23          (10) sufficient availability of financial products  
24          to allow owners and users of residential, retail, com-  
25          mercial, and industrial buildings to make energy ef-

1       ficiency and distributed generation technology in-  
2       vestments with reasonable payback periods; and

3           (11) such other goals as the Secretary, in con-  
4       sultation with the Advisory Council, determines to be  
5       consistent with the purposes of this subtitle.

6       (b) REVISIONS.—The Secretary shall revise the goals  
7       established under subsection (a), from time to time as ap-  
8       propriate, to account for advances in technology and  
9       changes in energy policy.

10   **SEC. 105. CLEAN ENERGY DEPLOYMENT ADMINISTRATION.**

11       (a) ESTABLISHMENT.—

12           (1) IN GENERAL.—There is established in the  
13       Department of Energy an administration to be  
14       known as the Clean Energy Deployment Administra-  
15       tion, under the direction of the Administrator and  
16       the Board of Directors.

17           (2) STATUS.—

18           (A) IN GENERAL.—The Administration  
19       (including officers, employees, and agents of the  
20       Administration) shall not be responsible to, or  
21       subject to the authority, direction, or control of,  
22       any other officer, employee, or agent of the De-  
23       partment of Energy other than the Secretary,  
24       acting through the Administrator.

1 (B) EXEMPTION FROM REORGANIZA-  
2 TION.—The Administration shall be exempt  
3 from the reorganization authority provided  
4 under section 643 of the Department of Energy  
5 Organization Act (42 U.S.C. 7253).

6 (C) INSPECTOR GENERAL.—Section 12 of  
7 the Inspector General Act of 1978 (5 U.S.C.  
8 App.) is amended—

9 (i) in paragraph (1), by inserting “the  
10 Administrator of the Clean Energy Deploy-  
11 ment Administration;” after “Export-Im-  
12 port Bank;”; and

13 (ii) in paragraph (2), by inserting  
14 “the Clean Energy Deployment Adminis-  
15 tration,” after “Export-Import Bank,”.

16 (3) OFFICES.—

17 (A) PRINCIPAL OFFICE.—The Administra-  
18 tion shall—

19 (i) maintain the principal office of the  
20 Administration in the District of Columbia;  
21 and

22 (ii) for purposes of venue in civil ac-  
23 tions, be considered to be a resident of the  
24 District of Columbia.

1 (B) OTHER OFFICES.—The Administration  
2 may establish other offices in such other places  
3 as the Administration considers necessary or  
4 appropriate for the conduct of the business of  
5 the Administration.

6 (b) ADMINISTRATOR.—

7 (1) IN GENERAL.—The Administrator shall  
8 be—

9 (A) appointed by the President, with the  
10 advice and consent of the Senate, for a 5-year  
11 term; and

12 (B) compensated at the annual rate of  
13 basic pay prescribed for level II of the Execu-  
14 tive Schedule under section 5313 of title 5,  
15 United States Code.

16 (2) DUTIES.—The Administrator shall—

17 (A) serve as the Chief Executive Officer of  
18 the Administration and Chairman of the Board;

19 (B) ensure that—

20 (i) the Administration operates in a  
21 safe and sound manner, including mainte-  
22 nance of adequate capital and internal con-  
23 trols (consistent with section 404 of the  
24 Sarbanes-Oxley Act of 2002 (15 U.S.C.  
25 7262));

1 (ii) the operations and activities of the  
2 Administration foster liquid, efficient, com-  
3 petitive, and resilient energy and energy ef-  
4 ficiency finance markets;

5 (iii) the Administration carries out the  
6 purposes of this subtitle only through ac-  
7 tivities that are authorized under and con-  
8 sistent with this subtitle; and

9 (iv) the activities of the Administra-  
10 tion and the manner in which the Adminis-  
11 tration is operated are consistent with the  
12 public interest;

13 (C) develop policies and procedures for the  
14 Administration that will—

15 (i) promote a self-sustaining portfolio  
16 of investments that will maximize the value  
17 of investments to effectively promote clean  
18 energy technologies;

19 (ii) promote transparency and open-  
20 ness in Administration operations;

21 (iii) afford the Administration with  
22 sufficient flexibility to meet the purposes of  
23 this subtitle;

24 (iv) provide for the efficient proc-  
25 essing of applications;

(v) promote, consistent with the purposes of this Act, the participation of private financial institutions and other sources of private capital, on commercially reasonable terms, if and to the extent the capital is available; and

(vi) promote the availability of financial products to small business through working with entities that have appropriate expertise extending credit or other relevant financial services to small companies developing clean energy technologies; and

(D) with the concurrence of the Board, set expected loss reserves for the support provided by the Administration consistent with section 106(a)(1)(C).

(c) BOARD OF DIRECTORS.—

(1) IN GENERAL.—The Board of Directors of the Administration shall consist of—

(A) the Secretary or the designee of the Secretary, who shall serve as an ex-officio voting member of the Board of Directors;

(B) the Administrator, who shall serve as the Chairman of the Board of Directors; and

(C) 7 additional members who shall—



1 (i) be appointed by the President,  
2 with the advice and consent of the Senate,  
3 for staggered 5-year terms; and

4 (ii) have experience in banking or fi-  
5 nancial services relevant to the operations  
6 of the Administration, including individuals  
7 with substantial experience in the develop-  
8 ment of energy projects, the electricity  
9 generation sector, the transportation sec-  
10 tor, the manufacturing sector, and the en-  
11 ergy efficiency sector.

12 (2) DUTIES.—The Board of Directors shall—

13 (A) oversee the operations of the Adminis-  
14 tration and ensure industry best practices are  
15 followed in all financial transactions involving  
16 the Administration;

17 (B) consult with the Administrator on the  
18 general policies and procedures of the Adminis-  
19 tration to ensure the interests of the taxpayers  
20 are protected;

21 (C) ensure the portfolio of investments are  
22 consistent with purposes of this subtitle and  
23 with the long-term financial stability of the Ad-  
24 ministration;

1 (D) ensure that the operations and activi-  
2 ties of the Administration are consistent with  
3 the development of a robust private sector that  
4 can provide commercial loans or financing prod-  
5 ucts; and

6 (E) not serve on a full-time basis, except  
7 that the Board of Directors shall meet at least  
8 quarterly to review, as appropriate, applications  
9 for credit support and set policies and proce-  
10 dures as necessary.

11 (3) REMOVAL.—An appointed member of the  
12 Board of Directors may be removed from office by  
13 the President for good cause.

14 (4) VACANCIES.—An appointed seat on the  
15 Board of Directors that becomes vacant shall be  
16 filled by appointment by the President, but only for  
17 the unexpired portion of the term of the vacating  
18 member.

19 (5) COMPENSATION OF MEMBERS.—An ap-  
20 pointed member of the Board of Directors shall be  
21 compensated at a rate equal to the daily equivalent  
22 of the annual rate of basic pay prescribed for level  
23 III of the Executive Schedule under section 5314 of  
24 title 5, United States Code, for each day (including  
25 travel time) during which the member is engaged in

1 the performance of the duties of the Board of Direc-  
 2 tors.

3 (d) ENERGY TECHNOLOGY ADVISORY COUNCIL.—

4 (1) IN GENERAL.—The Administration shall  
 5 have an Energy Technology Advisory Council con-  
 6 sisting of—

7 (A) 5 members selected by the Secretary;  
 8 and

9 (B) 3 members selected by the Board of  
 10 Directors of the Administration.

11 (2) QUALIFICATIONS.—The members of the Ad-  
 12 visory Council shall—

13 (A) have relevant scientific expertise; and

14 (B) in the case of the members selected by  
 15 the Secretary under paragraph (1)(A), include  
 16 representatives of—

17 (i) the academic community;

18 (ii) the private research community;

19 (iii) National Laboratories;

20 (iv) the technology or project develop-  
 21 ment community; and

22 (v) the commercial energy financing  
 23 and operations sector.

24 (3) DUTIES.—The Advisory Council shall—

1 (A) develop and publish for comment in  
2 the Federal Register a methodology for assess-  
3 ment of clean energy technologies that will  
4 allow the Administration to evaluate projects  
5 based on the progress likely to be achieved per-  
6 dollar invested in maximizing the attributes of  
7 the definition of clean energy technology, taking  
8 into account the extent to which support for a  
9 clean energy technology is likely to accrue sub-  
10 sequent benefits that are attributable to a com-  
11 mercial scale deployment taking place earlier  
12 than that which otherwise would have occurred  
13 without the support; and

14 (B) advise on the technological approaches  
15 that should be supported by the Administration  
16 to meet the technology deployment goals estab-  
17 lished by the Secretary pursuant to section 104.

18 (4) TERM.—

19 (A) IN GENERAL.—Members of the Advi-  
20 sory Council shall have 5-year staggered terms,  
21 as determined by the Secretary and the Admin-  
22 istrator.

23 (B) REAPPOINTMENT.—A member of the  
24 Advisory Council may be reappointed.

(5) COMPENSATION.—A member of the Advisory Council, who is not otherwise compensated as a Federal employee, shall be compensated at a rate equal to the daily equivalent of the annual rate of basic pay prescribed for level IV of the Executive Schedule under section 5315 of title 5, United States Code, for each day (including travel time) during which the member is engaged in the performance of the duties of the Advisory Council.

(e) STAFF.—

(1) IN GENERAL.—The Administrator, in consultation with the Board of Directors, may—

(A) appoint and terminate such officers, attorneys, employees, and agents as are necessary to carry out this subtitle; and

(B) vest those personnel with such powers and duties as the Administrator may determine.

(2) DIRECT HIRE AUTHORITY.—

(A) IN GENERAL.—Notwithstanding section 3304 and sections 3309 through 3318 of title 5, United States Code, the Administrator may, on a determination that there is a severe shortage of candidates or a critical hiring need for particular positions, recruit and directly appoint highly qualified critical personnel with

1 specialized knowledge important to the function  
2 of the Administration into the competitive serv-  
3 ice.

4 (B) EXCEPTION.—The authority granted  
5 under subparagraph (A) shall not apply to posi-  
6 tions in the excepted service or the Senior Exec-  
7 utive Service.

8 (C) REQUIREMENTS.—In exercising the  
9 authority granted under subparagraph (A), the  
10 Administrator shall ensure that any action  
11 taken by the Administrator—

12 (i) is consistent with the merit prin-  
13 ciples of section 2301 of title 5, United  
14 States Code; and

15 (ii) complies with the public notice re-  
16 quirements of section 3327 of title 5,  
17 United States Code.

18 (D) TERMINATION OF EFFECTIVENESS.—  
19 The authority provided by this paragraph ter-  
20 minates effective on the date that is 2 years  
21 after the date of enactment of this Act.

22 (3) CRITICAL PAY AUTHORITY.—

23 (A) IN GENERAL.—Notwithstanding sec-  
24 tion 5377 of title 5, United States Code, and  
25 without regard to the provisions of that title

1 governing appointments in the competitive serv-  
2 ice or the Senior Executive Service and chap-  
3 ters 51 and 53 of that title (relating to classi-  
4 fication and pay rates), the Administrator may  
5 establish, fix the compensation of, and appoint  
6 individuals to critical positions needed to carry  
7 out the functions of the Administration, if the  
8 Administrator certifies that—

9 (i) the positions require expertise of  
10 an extremely high level in a financial, tech-  
11 nical, or scientific field;

12 (ii) the Administration would not suc-  
13 cessfully accomplish an important mission  
14 without such an individual; and

15 (iii) exercise of the authority is nec-  
16 essary to recruit an individual who is ex-  
17 ceptionally well qualified for the position.

18 (B) LIMITATIONS.—The authority granted  
19 under subparagraph (A) shall be subject to the  
20 following conditions:

21 (i) The number of critical positions  
22 authorized by subparagraph (A) may not  
23 exceed 20 at any 1 time in the Administra-  
24 tion.

1                   (ii) The term of an appointment  
2                   under subparagraph (A) may not exceed 4  
3                   years.

4                   (iii) An individual appointed under  
5                   subparagraph (A) may not have been an  
6                   Administration employee at any time dur-  
7                   ing the 2-year period preceding the date of  
8                   appointment.

9                   (iv) Total annual compensation for  
10                  any individual appointed under subpara-  
11                  graph (A) may not exceed the highest total  
12                  annual compensation payable at the rate  
13                  determined under section 104 of title 3,  
14                  United States Code.

15                  (v) An individual appointed under  
16                  subparagraph (A) may not be considered  
17                  to be an employee for purposes of sub-  
18                  chapter II of chapter 75 of title 5, United  
19                  States Code.

20                  (C) NOTIFICATION.—Each year, the Ad-  
21                  ministrator shall submit to Congress a notifica-  
22                  tion that lists each individual appointed under  
23                  this paragraph.

24 **SEC. 106. ADMINISTRATION FUNCTIONS.**

25                  (a) OPERATIONAL UNITS.—



1 (1) DIRECT SUPPORT.—

2 (A) IN GENERAL.—The Administration  
 3 may issue direct loans, letters of credit, loan  
 4 guarantees, insurance products, or such other  
 5 credit enhancements (including through partici-  
 6 pation as a co-lender or a lending member of a  
 7 syndication) as the Administrator considers ap-  
 8 propriate to deploy clean energy technologies if  
 9 the Administrator has determined that deploy-  
 10 ment of the technologies would benefit or be ac-  
 11 celerated by the support.

12 (B) ELIGIBILITY CRITERIA.—In carrying  
 13 out this paragraph and awarding credit support  
 14 to projects, the Administrator shall account  
 15 for—

16 (i) how the technology rates based on  
 17 an evaluation methodology established by  
 18 the Advisory Council;

19 (ii) how the project fits with the goals  
 20 established under section 104; and

21 (iii) the potential for the applicant to  
 22 successfully complete the project.

23 (C) RISK.—

24 (i) EXPECTED LOAN LOSS RE-  
 25 SERVE.—The Administrator shall establish

1 an expected loan loss reserve to account  
 2 for estimated losses attributable to activi-  
 3 ties under this section that is consistent  
 4 with the purposes of—

5 (I) developing breakthrough tech-  
 6 nologies to the point at which tech-  
 7 nology risk is largely mitigated;

8 (II) achieving widespread deploy-  
 9 ment and advancing the commercial  
 10 viability of clean energy technologies;  
 11 and

12 (III) advancing the goals estab-  
 13 lished under section 104.

14 (ii) INITIAL EXPECTED LOAN LOSS  
 15 RESERVE.—Until such time as the Admin-  
 16 istrator determines sufficient data exist to  
 17 establish an expected loan loss reserve that  
 18 is appropriate, the Administrator shall con-  
 19 sider establishing an initial rate of 10 per-  
 20 cent for the portfolio of investments under  
 21 this subtitle.

22 (iii) PORTFOLIO INVESTMENT AP-  
 23 PROACH.—The Administration shall—

(I) use a portfolio investment approach to mitigate risk and diversify investments across technologies;

(II) to the maximum extent practicable and consistent with long-term self-sufficiency, weigh the portfolio of investments in projects to advance the goals established under section 104; and

(III) consistent with the expected loan loss reserve established under this subparagraph, the purposes of this subtitle, and section 105(b)(2)(B), provide the maximum practicable percentage of support to promote breakthrough technologies.

(iv) LOSS RATE REVIEW.—

(I) IN GENERAL.—The Board of Directors shall review on an annual basis the loss rates of the portfolio to determine the adequacy of the reserves.

(II) REPORT.—Not later than 90 days after the date of the initiation of the review, the Administrator shall

1 submit to the Committee on Energy  
 2 and Natural Resources of the Senate  
 3 and the Committee on Energy and  
 4 Commerce of the House of Represent-  
 5 atives a report describing the results  
 6 of the review and any recommended  
 7 policy changes.

8 (D) APPLICATION REVIEW.—

9 (i) IN GENERAL.—To the maximum  
 10 extent practicable and consistent with  
 11 sound business practices, the Administra-  
 12 tion shall seek to consolidate reviews of ap-  
 13 plications for credit support under this  
 14 subtitle such that final decisions on appli-  
 15 cations can generally be issued not later  
 16 than 180 days after the date of submission  
 17 of a completed application.

18 (ii) ENVIRONMENTAL REVIEW.—In  
 19 carrying out this subtitle, the Administra-  
 20 tion shall, to the maximum extent prac-  
 21 ticable—

22 (I) avoid duplicating efforts that  
 23 have already been undertaken by  
 24 other agencies (including State agen-

1                   cies acting under Federal programs);  
2                   and

3                   (II) with the advice of the Coun-  
4                   cil on Environmental Quality and any  
5                   other applicable agencies, use the ad-  
6                   ministrative records of similar reviews  
7                   conducted throughout the executive  
8                   branch to develop the most expedi-  
9                   tious review process practicable.

10                  (E) WAGE RATE REQUIREMENTS.—

11                  (i) IN GENERAL.—No credit support  
12                  shall be issued under this section unless  
13                  the borrower has provided to the Adminis-  
14                  trator reasonable assurances that all labor-  
15                  ers and mechanics employed by contractors  
16                  and subcontractors in the performance of  
17                  construction work financed in whole or in  
18                  part by the Administration will be paid  
19                  wages at rates not less than those pre-  
20                  vailing on projects of a character similar to  
21                  the contract work in the civil subdivision of  
22                  the State in which the contract work is to  
23                  be performed as determined by the Sec-  
24                  retary of Labor in accordance with sub-

chapter IV of chapter 31 of part A of subtitle II of title 40, United States Code.

(ii) LABOR STANDARDS.—With respect to the labor standards specified in this section, the Secretary of Labor shall have the authority and functions set forth in Reorganization Plan Numbered 14 of 1950 (64 Stat. 1267; 5 U.S.C. App.) and section 3145 of title 40, United States Code.

(2) INDIRECT SUPPORT.—

(A) IN GENERAL.—The Administration shall work to develop financial products and arrangements to both promote the widespread deployment of, and mobilize private sector support of credit and investment institutions for, clean energy technologies by facilitating aggregation of small projects and by providing indirect credit support, including credit enhancement.

(B) FINANCIAL PRODUCTS.—The Administration—

(i) in cooperation with Federal, State, local, and private sector entities, shall develop debt instruments that provide for the aggregation of, or directly aggregate,

1 projects for clean energy technology de-  
 2 ployments on a scale appropriate for resi-  
 3 dential or commercial applications; and

4 (ii) may insure, purchase, and make  
 5 commitments to purchase, any debt instru-  
 6 ment associated with the deployment of  
 7 clean energy technologies (including instru-  
 8 ments secured by liens or other collateral  
 9 related to the funding of clean energy tech-  
 10 nology) for the purposes of enhancing the  
 11 availability of private financing for clean  
 12 energy technology deployments.

13 (C) DISPOSITION OF DEBT OR INTER-  
 14 EST.—The Administration may acquire, hold,  
 15 and sell or otherwise dispose of, pursuant to  
 16 commitments or otherwise, any debt associated  
 17 with the deployment of clean energy tech-  
 18 nologies or interest in the debt.

19 (D) PRICING.—

20 (i) IN GENERAL.—The Administrator  
 21 may establish requirements, and impose  
 22 charges or fees, which may be regarded as  
 23 elements of pricing, for different classes of  
 24 sellers, servicers, or services.

1 (ii) CLASSIFICATION OF SELLERS AND  
 2 SERVICERS.—For the purpose of clause (i),  
 3 the Administrator may classify sellers and  
 4 servicers as necessary to promote trans-  
 5 parency and liquidity and properly charac-  
 6 terize the risk of default.

7 (E) ELIGIBILITY.—The Administrator  
 8 shall establish—

9 (i) eligibility criteria for loan origina-  
 10 tors, sellers, and servicers seeking support  
 11 for portfolios of financial obligations relat-  
 12 ing to clean energy technologies so as to  
 13 ensure the capability of the loan origina-  
 14 tors, sellers, and servicers to perform the  
 15 functions required to maintain the ex-  
 16 pected performance of the portfolios; and

17 (ii) such criteria, standards, guide-  
 18 lines, and mechanisms such that, to the  
 19 maximum extent practicable, loan origina-  
 20 tors and sellers will be able to determine  
 21 the eligibility of loans for resale at the time  
 22 of initial lending.

23 (F) SECONDARY MARKET SUPPORT.—

24 (i) IN GENERAL.—The Administration  
 25 may lend on the security of, and make



1 commitments to lend on the security of,  
 2 any debt that the Administration has  
 3 issued or is authorized to purchase under  
 4 this section.

5 (ii) AUTHORIZED ACTIONS.—On such  
 6 terms and conditions as the Administrator  
 7 may prescribe, the Administration may,  
 8 based on the debt and with the concu-  
 9 rence of the Board of Directors—

10 (I) give security or guarantee;

11 (II) pay interest or other return;

12 and

13 (III) issue notes, debentures,  
 14 bonds, or other obligations or securi-  
 15 ties.

16 (G) LENDING ACTIVITIES.—

17 (i) IN GENERAL.—The Administrator  
 18 shall determine—

19 (I) the volume of the lending ac-  
 20 tivities of the Administration; and

21 (II) the types of loan ratios, risk  
 22 profiles, interest rates, maturities, and  
 23 charges or fees in the secondary mar-  
 24 ket operations of the Administration.

1                   (ii)     OBJECTIVES.—Determinations  
2                   under clause (i) shall be consistent with  
3                   the objectives of—

4                             (I) providing an attractive invest-  
5                             ment environment for clean energy  
6                             technologies;

7                             (II) making the operations of the  
8                             Administration self-supporting over  
9                             the long term; and

10                            (III) advancing the goals estab-  
11                            lished under section 104.

12                   (H) EXEMPT SECURITIES.—All securities  
13                   issued or guaranteed by the Administration  
14                   shall, to the same extent as securities that are  
15                   direct obligations of or obligations guaranteed  
16                   as to principal or interest by the United States,  
17                   be considered to be exempt securities within the  
18                   meaning of the laws administered by the Secu-  
19                   rities and Exchange Commission.

20                   (b) OTHER AUTHORIZED PROGRAMS.—

21                            (1) IN GENERAL.—The Secretary may delegate  
22                            to the Administration the provision of financial serv-  
23                            ices and program management for grant, loan, and  
24                            other credit enhancement programs authorized  
25                            under any other provision of law.

1           (2) ADMINISTRATION.—In administering any  
 2           other program delegated by the Secretary, the Ad-  
 3           ministration shall, to the maximum extent prac-  
 4           ticable (as determined by the Administrator)—

5                   (A) administer the program in a manner  
 6                   that is consistent with the terms and conditions  
 7                   of this subtitle; and

8                   (B) minimize the administrative costs to  
 9                   the Federal Government.

10 **SEC. 107. FEDERAL CREDIT AUTHORITY.**

11           (a) TRANSFER OF FUNCTIONS AND AUTHORITY.—

12                   (1) IN GENERAL.—Subject to paragraph (2), on  
 13                   a finding by the Secretary and the Administrator  
 14                   that the Administration is sufficiently ready to as-  
 15                   sume the functions and that applicants to those pro-  
 16                   grams will not be unduly adversely affected but in  
 17                   no case later than 18 months after the date of en-  
 18                   actment of this Act, all of the functions and author-  
 19                   ity of the Secretary under title XVII of the Energy  
 20                   Policy Act of 2005 (42 U.S.C. 16511 et seq.) and  
 21                   authorities established by this subtitle shall be trans-  
 22                   ferred to the Administration.

23                   (2) FAILURE TO TRANSFER FUNCTIONS.—If the  
 24                   functions and authorities are not transferred to the  
 25                   Administration in accordance with paragraph (1),

1 the Secretary and the Administrator shall submit to  
2 Congress a report on the reasons for delay and an  
3 expected timetable for transfer of the functions and  
4 authorities to the Administration.

5 (3) EFFECT ON EXISTING RIGHTS AND OBLIGA-  
6 TIONS.—The transfer of functions and authority  
7 under this subsection shall not affect the rights and  
8 obligations of any party that arise under a prede-  
9 cessor program or authority prior to the transfer  
10 under this subsection.

11 (4) TRANSFER OF FUND AUTHORITY.—

12 (A) IN GENERAL.—On transfer of func-  
13 tions pursuant to paragraph (1), the Adminis-  
14 tration shall have all authorities to make use of  
15 the Fund reserved for the Secretary before the  
16 transfer.

17 (B) ADMINISTRATIVE EXPENSES.—Effec-  
18 tive beginning on the date of enactment of this  
19 Act, the Administrator may make use of up to  
20 1.5 percent of the amounts in the Fund as of  
21 the beginning of each fiscal year to pay admin-  
22 istrative expenses for that fiscal year to carry  
23 out the purposes of this Act.

24 (5) USE.—

1 (A) IN GENERAL.—Amounts in the Fund  
 2 shall be available for discharge of liabilities and  
 3 all other expenses of the Administration, includ-  
 4 ing subsequent transfer to the respective credit  
 5 accounts.

6 (B) LIABILITY.—All activities of the Ad-  
 7 ministration that could result in a liability for  
 8 the United States shall be transparently ac-  
 9 counted for and no obligation or liability may  
 10 be incurred unless—

11 (i) the appropriate amounts are trans-  
 12 ferred to credit accounts for activities pur-  
 13 suant to the Federal Credit Reform Act of  
 14 1990 (2 U.S.C. 661a); or

15 (ii) sufficient amounts are reserved  
 16 within the Fund to account for such liabil-  
 17 ities.

18 (6) INITIAL INVESTMENT.—

19 (A) IN GENERAL.—On transfer of func-  
 20 tions pursuant to paragraph (1), out of any  
 21 funds in the Treasury not otherwise appro-  
 22 priated, the Secretary of the Treasury shall  
 23 transfer to the Fund to carry out this subtitle  
 24 \$10,000,000,000, to remain available until ex-  
 25 pended.

1 (B) RECEIPT AND ACCEPTANCE.—The  
 2 Fund shall be entitled to receive and shall ac-  
 3 cept, and shall be used to carry out this sub-  
 4 title, the funds transferred to the Fund under  
 5 subparagraph (A), without further appropria-  
 6 tion.

7 (7) AUTHORIZATION OF APPROPRIATIONS.—In  
 8 addition to funds made available by paragraphs (1)  
 9 through (6), there are authorized to be appropriated  
 10 to the Fund such sums as are necessary to carry out  
 11 this subtitle.

12 (b) PAYMENTS OF LIABILITIES.—

13 (1) IN GENERAL.—Any payment to discharge li-  
 14 abilities arising from agreements under this subtitle  
 15 shall be made exclusively out of the Fund or the as-  
 16 sociated credit account, as appropriate.

17 (2) SECURITY.—Subject to paragraph (1), the  
 18 full faith and credit of the United States is pledged  
 19 to the payment of all obligations entered into by the  
 20 Administration pursuant to this subtitle.

21 (c) FEES.—

22 (1) IN GENERAL.—Consistent with achieving  
 23 the purposes of this subtitle, the Administrator shall  
 24 charge fees or collect compensation generally in ac-  
 25 cordance with commercial rates.

1           (2) AVAILABILITY OF FEES.—All fees collected  
2       by the Administration may be retained by the Ad-  
3       ministration and placed in the Fund and may re-  
4       main available to the Administration, without fur-  
5       ther appropriation or fiscal year limitation, for use  
6       in carrying out the purposes of this subtitle.

7           (3) BREAKTHROUGH TECHNOLOGIES.—The Ad-  
8       ministration shall charge the minimum amount in  
9       fees or compensation practicable for breakthrough  
10      technologies, consistent with the long-term viability  
11      of the Administration, unless the Administration  
12      first determines that a higher charge will not impede  
13      the development of the technology.

14          (4) ALTERNATIVE FEE ARRANGEMENTS.—The  
15      Administration may use such alternative arrange-  
16      ments (such as profit participation, contingent fees,  
17      and other valuable contingent interests) as the Ad-  
18      ministration considers appropriate to compensate the  
19      Administration for the expenses of the Administra-  
20      tion and the risk inherent in the support of the Ad-  
21      ministration.

22          (d) COST TRANSFER AUTHORITY.—Amounts col-  
23      lected by the Administration for the cost of a loan or loan  
24      guarantee shall be transferred by the Administration to  
25      the respective credit program accounts.

1       (e) SUPPLEMENTAL BORROWING AUTHORITY.—In  
2 order to maintain sufficient liquidity for activities author-  
3 ized under section 106(a)(2), the Administration may  
4 issue notes, debentures, bonds, or other obligations for  
5 purchase by the Secretary of the Treasury.

6       (f) PUBLIC DEBT TRANSACTIONS.—For the purpose  
7 of subsection (e)—

8           (1) the Secretary of the Treasury may use as  
9 a public debt transaction the proceeds of the sale of  
10 any securities issued under chapter 31 of title 31,  
11 United States Code; and

12           (2) the purposes for which securities may be  
13 issued under that chapter are extended to include  
14 any purchase under this subsection.

15       (g) MAXIMUM OUTSTANDING HOLDING.—The Sec-  
16 retary of the Treasury shall purchase instruments issued  
17 under subsection (e) to the extent that the purchase would  
18 not increase the aggregate principal amount of the out-  
19 standing holdings of obligations under subsection (e) by  
20 the Secretary of the Treasury to an amount that is greater  
21 than \$2,000,000,000.

22       (h) RATE OF RETURN.—Each purchase of obligations  
23 by the Secretary of the Treasury under this section shall  
24 be on terms and conditions established to yield a rate of  
25 return determined by the Secretary of the Treasury to be



1 appropriate, taking into account the current average rate  
2 on outstanding marketable obligations of the United  
3 States as of the last day of the month preceding the pur-  
4 chase.

5 (i) SALE OF OBLIGATIONS.—The Secretary of the  
6 Treasury may at any time sell, on terms and conditions  
7 and at prices determined by the Secretary of the Treasury,  
8 any of the obligations acquired by the Secretary of the  
9 Treasury under this section.

10 (j) PUBLIC DEBT TRANSACTIONS.—All redemptions,  
11 purchases, and sales by the Secretary of the Treasury of  
12 obligations under this section shall be treated as public  
13 debt transactions of the United States.

14 **SEC. 108. GENERAL PROVISIONS.**

15 (a) IMMUNITY FROM IMPAIRMENT, LIMITATION, OR  
16 RESTRICTION.—

17 (1) IN GENERAL.—All rights and remedies of  
18 the Administration (including any rights and rem-  
19 edies of the Administration on, under, or with re-  
20 spect to any mortgage or any obligation secured by  
21 a mortgage) shall be immune from impairment, limi-  
22 tation, or restriction by or under—

23 (A) any law (other than a law enacted by  
24 Congress expressly in limitation of this para-  
25 graph) that becomes effective after the acquisi-

1           tion by the Administration of the subject or  
2           property on, under, or with respect to which the  
3           right or remedy arises or exists or would so  
4           arise or exist in the absence of the law; or

5                   (B) any administrative or other action that  
6           becomes effective after the acquisition.

7           (2) STATE LAW.—The Administrator may con-  
8           duct the business of the Administration without re-  
9           gard to any qualification or law of any State relating  
10          to incorporation.

11          (b) USE OF OTHER AGENCIES.—With the consent of  
12          a department, establishment, or instrumentality (including  
13          any field office), the Administration may—

14                  (1) use and act through any department, estab-  
15          lishment, or instrumentality; or

16                  (2) use, and pay compensation for, information,  
17          services, facilities, and personnel of the department,  
18          establishment, or instrumentality.

19          (c) PROCUREMENT.—The Administrator shall be the  
20          senior procurement officer for the Administration for pur-  
21          poses of section 16(a) of the Office of Federal Procure-  
22          ment Policy Act (41 U.S.C. 414(a)).

23          (d) FINANCIAL MATTERS.—

1           (1) INVESTMENTS.—Funds of the Administra-  
2           tion may be invested in such investments as the  
3           Board of Directors may prescribe.

4           (2) FISCAL AGENTS.—Any Federal Reserve  
5           bank or any bank as to which at the time of the des-  
6           ignation of the bank by the Administrator there is  
7           outstanding a designation by the Secretary of the  
8           Treasury as a general or other depository of public  
9           money, may be designated by the Administrator as  
10          a depository or custodian or as a fiscal or other  
11          agent of the Administration.

12          (e) JURISDICTION.—Notwithstanding section 1349 of  
13          title 28, United States Code, or any other provision of  
14          law—

15                (1) the Administration shall be considered a  
16                corporation covered by sections 1345 and 1442 of  
17                title 28, United States Code;

18                (2) all civil actions to which the Administration  
19                is a party shall be considered to arise under the laws  
20                of the United States, and the district courts of the  
21                United States shall have original jurisdiction of all  
22                such actions, without regard to amount or value;  
23                and

24                (3) any civil or other action, case or controversy  
25                in a court of a State, or in any court other than a

1 district court of the United States, to which the Ad-  
2 ministration is a party may at any time before trial  
3 be removed by the Administration, without the giv-  
4 ing of any bond or security and by following any  
5 procedure for removal of causes in effect at the time  
6 of the removal—

7 (A) to the district court of the United  
8 States for the district and division embracing  
9 the place in which the same is pending; or

10 (B) if there is no such district court, to the  
11 district court of the United States for the dis-  
12 trict in which the principal office of the Admin-  
13 istration is located.

14 (f) PERIODIC REPORTS.—Not later than 1 year after  
15 commencement of operation of the Administration and at  
16 least biannually thereafter, the Administrator shall submit  
17 to the Committee on Energy and Natural Resources of  
18 the Senate and the Committee on Energy and Commerce  
19 of the House of Representatives a report that includes a  
20 description of—

21 (1) the technologies supported by activities of  
22 the Administration and how the activities advance  
23 the purposes of this subtitle; and

24 (2) the performance of the Administration on  
25 meeting the goals established under section 104.

1 (g) AUDITS BY THE COMPTROLLER GENERAL.—

2 (1) IN GENERAL.—The programs, activities, re-  
3 cepts, expenditures, and financial transactions of  
4 the Administration shall be subject to audit by the  
5 Comptroller General of the United States under  
6 such rules and regulations as may be prescribed by  
7 the Comptroller General.

8 (2) ACCESS.—The representatives of the Gov-  
9 ernment Accountability Office shall—

10 (A) have access to the personnel and to all  
11 books, accounts, documents, records (including  
12 electronic records), reports, files, and all other  
13 papers, automated data, things, or property be-  
14 longing to, under the control of, or in use by  
15 the Administration, or any agent, representa-  
16 tive, attorney, advisor, or consultant retained by  
17 the Administration, and necessary to facilitate  
18 the audit;

19 (B) be afforded full facilities for verifying  
20 transactions with the balances or securities held  
21 by depositories, fiscal agents, and custodians;

22 (C) be authorized to obtain and duplicate  
23 any such books, accounts, documents, records,  
24 working papers, automated data and files, or

1 other information relevant to the audit without  
 2 cost to the Comptroller General; and

3 (D) have the right of access of the Comp-  
 4 troller General to such information pursuant to  
 5 section 716(c) of title 31, United States Code.

6 (3) ASSISTANCE AND COST.—

7 (A) IN GENERAL.—For the purpose of con-  
 8 ducting an audit under this subsection, the  
 9 Comptroller General may, in the discretion of  
 10 the Comptroller General, employ by contract,  
 11 without regard to section 3709 of the Revised  
 12 Statutes (41 U.S.C. 5), professional services of  
 13 firms and organizations of certified public ac-  
 14 countants for temporary periods or for special  
 15 purposes.

16 (B) REIMBURSEMENT.—

17 (i) IN GENERAL.—On the request of  
 18 the Comptroller General, the Administra-  
 19 tion shall reimburse the General Account-  
 20 ability Office for the full cost of any audit  
 21 conducted by the Comptroller General  
 22 under this subsection.

23 (ii) CREDITING.—Such reimburse-  
 24 ments shall—

1 (I) be credited to the appropria-  
 2 tion account entitled “Salaries and  
 3 Expenses, Government Accountability  
 4 Office” at the time at which the pay-  
 5 ment is received; and

6 (II) remain available until ex-  
 7 pended.

8 (h) ANNUAL INDEPENDENT AUDITS.—

9 (1) IN GENERAL.—The Administrator shall—

10 (A) have an annual independent audit  
 11 made of the financial statements of the Admin-  
 12 istration by an independent public accountant  
 13 in accordance with generally accepted auditing  
 14 standards; and

15 (B) submit to the Secretary the results of  
 16 the audit.

17 (2) CONTENT.—In conducting an audit under  
 18 this subsection, the independent public accountant  
 19 shall determine and report on whether the financial  
 20 statements of the Administration—

21 (A) are presented fairly in accordance with  
 22 generally accepted accounting principles; and

23 (B) comply with any disclosure require-  
 24 ments imposed under this subtitle.

25 (i) FINANCIAL REPORTS.—

1           (1) IN GENERAL.—The Administrator shall  
2       submit to the Secretary annual and quarterly re-  
3       ports of the financial condition and operations of the  
4       Administration, which shall be in such form, contain  
5       such information, and be submitted on such dates as  
6       the Secretary shall require.

7           (2) CONTENTS OF ANNUAL REPORTS.—Each  
8       annual report shall include—

9           (A) financial statements prepared in ac-  
10      cordance with generally accepted accounting  
11      principles;

12          (B) any supplemental information or alter-  
13      native presentation that the Secretary may re-  
14      quire; and

15          (C) an assessment (as of the end of the  
16      most recent fiscal year of the Administration),  
17      signed by the chief executive officer and chief  
18      accounting or financial officer of the Adminis-  
19      tration, of—

20           (i) the effectiveness of the internal  
21      control structure and procedures of the  
22      Administration; and

23           (ii) the compliance of the Administra-  
24      tion with applicable safety and soundness  
25      laws.



1           (3) SPECIAL REPORTS.—The Secretary may re-  
2       quire the Administrator to submit other reports on  
3       the condition (including financial condition), man-  
4       agement, activities, or operations of the Administra-  
5       tion, as the Secretary considers appropriate.

6           (4) ACCURACY.—Each report of financial condi-  
7       tion shall contain a declaration by the Administrator  
8       or any other officer designated by the Board of Di-  
9       rectors of the Administration to make the declara-  
10      tion, that the report is true and correct to the best  
11      of the knowledge and belief of the officer.

12          (5) AVAILABILITY OF REPORTS.—Reports re-  
13      quired under this section shall be published and  
14      made publicly available as soon as is practicable  
15      after receipt by the Secretary.

16      (j) SCOPE AND TERMINATION OF AUTHORITY.—

17          (1) NEW OBLIGATIONS.—The Administrator  
18      shall not initiate any new obligations under this sub-  
19      title on or after January 1, 2029.

20          (2) REVERSION TO SECRETARY.—The authori-  
21      ties and obligations of the Administration shall re-  
22      vert to the Secretary on January 1, 2029.

## Subtitle B—Improved Transmission Siting

### SEC. 121. SITING OF INTERSTATE ELECTRIC TRANSMISSION FACILITIES.

Section 216 of the Federal Power Act (16 U.S.C. 824p) is amended to read as follows:

### “SEC. 216. SITING OF INTERSTATE ELECTRIC TRANSMISSION FACILITIES.

“(a) POLICY.—It is the policy of the United States that the national interstate transmission system should be guided by the goal of maximizing the net benefits of the electricity system, taking into consideration—

“(1) support for the development of new renewable energy generation capacity, including renewable energy generation located distant from load centers and other location-constrained resources;

“(2) opportunities for reduced emissions from regional power production;

“(3) cost savings resulting from—

“(A) reduced transmission congestion;

“(B) enhanced opportunities for intraregional and interregional electricity trades;

“(C) reduced line losses;

“(D) generation resource-sharing; and

1 “(E) enhanced fuel diversity;

2 “(4) reliability benefits, including satisfying re-  
3 liability standards and guidelines for resource ade-  
4 quacy and system security;

5 “(5) diversification of risk relating to events af-  
6 fecting fuel supply or generating resources in a par-  
7 ticular region;

8 “(6) the enhancement of competition in elec-  
9 tricity markets and mitigation of market power;

10 “(7) the ability to collocate facilities on existing  
11 rights-of-way;

12 “(8) competing land use priorities, including  
13 land protected under Federal or State law;

14 “(9) the requirements of section 217(b)(4); and

15 “(10) the contribution of demand side manage-  
16 ment (including energy efficiency and demand re-  
17 sponse), energy storage, distributed generation re-  
18 sources, and smart grid investments.

19 “(b) DEFINITIONS.—In this section:

20 “(1) HIGH-PRIORITY NATIONAL TRANSMISSION  
21 PROJECT.—The term ‘high-priority national trans-  
22 mission project’ means an overhead or underground  
23 transmission facility, consisting of conductors or ca-  
24 bles, towers, manhole duct systems, phase shifting  
25 transformers, reactors, capacitors, and any ancillary

1 facilities and equipment necessary for the proper op-  
2 eration of the facility, that—

3 “(A)(i) operates at or above a voltage of—

4 “(I) 345 kilovolts alternating current;

5 or

6 “(II) 300 kilovolts direct current;

7 “(ii) is a very high current conductor or

8 superconducting cable that operates at or above

9 a power equivalent to the power of a conven-

10 tional transmission cable operating at or above

11 345 kilovolts alternating current or 300 kilo-

12 volts direct current; or

13 “(iii) is a renewable feeder line that trans-

14 mits electricity directly to a transmission facil-

15 ity under clause (i) or (ii); and

16 “(B) is included in a regional plan pursu-

17 ant to subsection (c).

18 “(2) INDIAN LAND.—The term ‘Indian land’

19 means land—

20 “(A) the title to which is held by the

21 United States in trust for an Indian tribe or in-

22 dividual Indian; or

23 “(B) that is held by an Indian tribe or in-

24 dividual Indian subject to a restriction by the

1 United States against alienation or encum-  
 2 brance.

3 “(3) INDIAN TRIBE.—The term ‘Indian tribe’  
 4 means any Indian tribe, band, nation, or other orga-  
 5 nized group or community, including any Alaska Na-  
 6 tive village or regional or village corporation (as de-  
 7 fined in or established pursuant to the Alaska Na-  
 8 tive Claims Settlement Act (43 U.S.C. 1601 et  
 9 seq.)), which is recognized as eligible for the special  
 10 programs and services provided by the United States  
 11 to Indians because of their status as Indians.

12 “(4) LOAD-SERVING ENTITY.—Except as other-  
 13 wise provided in this section, the term ‘load-serving  
 14 entity’ means any person, Federal, State, or local  
 15 agency or instrumentality, or electric cooperative  
 16 that delivers electric energy to end-use customers.

17 “(5) LOCATION-CONSTRAINED RESOURCE.—

18 “(A) IN GENERAL.—The term ‘location-  
 19 constrained resource’ means a low-carbon re-  
 20 source used to produce electricity that is geo-  
 21 graphically constrained such that the resource  
 22 cannot be relocated to an existing transmission  
 23 line.

24 “(B) INCLUSIONS.—The term ‘location-  
 25 constrained resource’ includes the following

1 types of resources described in subparagraph

2 (A):

3 “(i) Renewable energy, including off-  
4 shore resources.

5 “(ii) A fossil fuel electricity plant  
6 equipped with carbon capture technology  
7 that is located at a site that is appropriate  
8 for carbon storage or beneficial reuse.

9 “(6) RENEWABLE ENERGY.—The term ‘renew-  
10 able energy’ means electric energy generated from—

11 “(A) solar energy;

12 “(B) wind energy;

13 “(C) marine and hydrokinetic renewable  
14 energy;

15 “(D) geothermal energy;

16 “(E) hydropower;

17 “(F) biomass; or

18 “(G) landfill gas.

19 “(7) RENEWABLE FEEDER LINE.—The term  
20 ‘renewable feeder line’ means a transmission line  
21 that—

22 “(A) operates at a voltage of 100 kilovolts  
23 or greater; and

24 “(B) is identified in the applicable Inter-  
25 connection-wide transmission plan or by the

1 Commission as a facility that is to be developed  
2 to facilitate collection of electric energy pro-  
3 duced by renewable energy.

4 “(8) SECRETARY.—The term ‘Secretary’ means  
5 the Secretary of Energy.

6 “(c) PLANS FOR NATIONAL INTERSTATE TRANS-  
7 MISSION SYSTEM.—

8 “(1) IN GENERAL.—The Commission shall co-  
9 ordinate regional planning to ensure that regional  
10 plans are integrated into an Interconnection-wide  
11 transmission plan with respect to high-priority na-  
12 tional transmission projects, that achieves the policy  
13 established under subsection (a).

14 “(2) PLANNING PRINCIPLES.—

15 “(A) IN GENERAL.—Not later than 180  
16 days after the date of enactment of the Amer-  
17 ican Clean Energy Leadership Act of 2009, the  
18 Commission shall issue, by rule, after notice  
19 and opportunity for comment, national elec-  
20 tricity grid planning principles pursuant to the  
21 policy established under subsection (a).

22 “(B) CONTENT.—The principles shall—

23 “(i) address how the utilities should  
24 fully incorporate consideration of the need

1 for high-priority national transmission  
2 projects into planning efforts;

3 “(ii) address how the utilities should  
4 coordinate with each other, States, Indian  
5 tribes, and other planning efforts in the  
6 applicable Interconnection to effectively de-  
7 velop an Interconnection-wide analysis to  
8 identify needed additions or modifications  
9 to high-priority national transmission  
10 projects, with particular attention to iden-  
11 tifying needs that can be most efficiently  
12 and effectively addressed with high-priority  
13 national transmission projects that cross  
14 multiple utilities, Regional Transmission  
15 Organizations, or Independent System Op-  
16 erators;

17 “(iii)(I) address alternatives to high-  
18 priority national transmission projects,  
19 based on the factors described in subpara-  
20 graph (C)(iii); and

21 “(II) determine whether alternative  
22 investments can provide a more expedient  
23 means of improving electricity system ca-  
24 pacity or reliability or reduced costs for  
25 end-users; and



1 “(iv) include mechanisms for soliciting  
2 input from the Secretary, Federal trans-  
3 mitting utilities, the Secretary of the Inte-  
4 rior, States, Indian tribes, electric reli-  
5 ability organizations, regional entities, enti-  
6 ties described in section 201(f), generators,  
7 load-serving entities, other interested par-  
8 ties, and the public.

9 “(C) FACTORS.—Plans for the develop-  
10 ment and improvement of high-priority national  
11 transmission projects into a national high-ca-  
12 pacity transmission grid shall take into consid-  
13 eration—

14 “(i) the location of load centers;

15 “(ii) the location of generation and  
16 potential generation development, including  
17 location-constrained resources;

18 “(iii) existing and potential demand  
19 side management (including energy effi-  
20 ciency and demand response), energy stor-  
21 age, distributed generation resources, and  
22 smart grid investments;

23 “(iv) the plans of Regional Trans-  
24 mission Organizations, Independent Sys-  
25 tem Operators, State authorities, Indian

tribes, transmission owners, load-serving entities, and others in the region;

“(v) the needs and long-term rights described in section 217(b); and

“(vi) costs to consumers of high priority national transmission projects, including considering the cost of reasonable alternatives.

“(3) SUBMISSION OF PLANS.—

“(A) IN GENERAL.—

“(i) IN GENERAL.—One or more public utilities, transmitting utilities, Regional Transmission Organizations, Independent System Operators, regional entities (as defined in section 215(a)), or other multistate organizations or entities (including entities described in section 201(f)) may develop a regional plan relating to 1 or more high-priority national transmission projects that is consistent with the planning principles established by the Commission.

“(ii) OTHER PLANS.—

“(I) IN GENERAL.—Any public utility or transmitting utility that does

1 not participate in 1 of the regional  
 2 plans developed under clause (i) shall  
 3 develop its own plan relating to any  
 4 high priority national transmission  
 5 project planned for the system of the  
 6 utility.

7 “(II) PLANNING PRINCIPLES.—

8 The plan shall be consistent with the  
 9 planning principles established by the  
 10 Commission.

11 “(iii) TIMING.—Any plan developed  
 12 under clause (i) or (ii) shall be submitted  
 13 to the Commission—

14 “(I) as soon as practicable, but  
 15 not later than 2 years, after the date  
 16 of enactment of the American Clean  
 17 Energy Leadership Act of 2009; and

18 “(II) periodically thereafter as  
 19 prescribed by the Commission.

20 “(B) COORDINATION.—

21 “(i) JOINT SUBMISSIONS.—The re-  
 22 quirements of subparagraph (A) may be  
 23 satisfied by a joint submission.

24 “(ii) SINGLE INTERCONNECTION-WIDE  
 25 PLAN.—The Commission shall encourage

1 coordination that would permit submission  
 2 of a single Interconnection-wide plan for  
 3 high priority national transmission  
 4 projects.

5 “(C) MODIFICATIONS.—The Commission  
 6 may require modification of a submitted plan to  
 7 the extent that the Commission determines that  
 8 the modification is necessary—

9 “(i) to reconcile inconsistencies be-  
 10 tween plans submitted; or

11 “(ii) to achieve the policy goals estab-  
 12 lished under subsection (a).

13 “(4) APPLICABILITY.—The transmission plan-  
 14 ning principles and requirements of this subsection  
 15 shall apply to each transmission owner and trans-  
 16 mission planning entity in the United States portion  
 17 of the Eastern and Western Interconnections, in-  
 18 cluding an entity described in section 201(f).

19 “(d) SITING.—

20 “(1) PURPOSES.—The purpose of this sub-  
 21 section is to ensure that high-priority national trans-  
 22 mission projects are in the public interest and ad-  
 23 vance the policy established under subsection (a).

24 “(2) DESIGNATION OF ELIGIBILITY.—The Com-  
 25 mission may grant an applicant that submits an ap-

1        plication for a proposed project a designation of eli-  
 2        gibility for consideration under this subsection if the  
 3        Commission finds that the proposed project is a  
 4        high-priority national transmission project.

5            “(3) STATE REVIEW OF PROJECT SITING.—

6            “(A) IN GENERAL.—No developer of a  
 7        high-priority national transmission project may  
 8        seek a certificate for construction under sub-  
 9        section (e) unless the developer first seeks au-  
 10       thorization to construct the high-priority na-  
 11       tional transmission project under applicable  
 12       State law concerning authorization and routing  
 13       of transmission facilities.

14          “(B) FEDERAL AUTHORITY.—The Com-  
 15       mission may authorize, in accordance with sub-  
 16       section (e), construction of a high-priority na-  
 17       tional transmission project that the Commission  
 18       finds to be in the public interest and in accord-  
 19       ance with this section if a State—

20            “(i) fails to approve construction and  
 21       authorize routing of a high-priority na-  
 22       tional transmission project not later than 1  
 23       year after the date the applicant submits a  
 24       completed application for authorization to  
 25       the State;

1                   “(ii) rejects the application for a high-  
2                   priority national transmission project; or

3                   “(iii) authorizes the high-priority na-  
4                   tional transmission project subject to con-  
5                   ditions that unreasonably interfere with  
6                   the development of a high-priority national  
7                   transmission project contrary to the pur-  
8                   poses of this section.

9           “(e) CONSTRUCTION.—

10           “(1) APPLICATION FOR CERTIFICATE.—

11                   “(A) IN GENERAL.—An applicant for a  
12                   high-priority national transmission project may  
13                   apply to the Commission for a certificate of  
14                   public convenience and necessity with respect to  
15                   construction of the high-priority national trans-  
16                   mission project within a State affected by the  
17                   high-priority national transmission project if  
18                   the State—

19                   “(i) fails to authorize construction of  
20                   the high-priority national transmission  
21                   project under State law not later than 1  
22                   year after the date the developer submits a  
23                   completed application for authorization to  
24                   the State;

1 “(ii) rejects the application for the  
2 high-priority national transmission project;  
3 or

4 “(iii) authorizes the high-priority na-  
5 tional transmission project subject to con-  
6 ditions that unreasonably interfere with  
7 the development of a high-priority national  
8 transmission project contrary to the pur-  
9 poses of this section.

10 “(B) FORM.—The application for a certifi-  
11 cate shall be made in writing in such form and  
12 containing such information as the Commission  
13 may by regulation require.

14 “(C) HEARING.—On receipt of an applica-  
15 tion under this paragraph, the Commission—

16 “(i) shall provide notice to interested  
17 persons and opportunity for hearing; and

18 “(ii) may approve (with or without  
19 conditions) or disapprove the application,  
20 in accordance with paragraph (2).

21 “(2) GRANT OF CERTIFICATE.—

22 “(A) IN GENERAL.—A certificate shall be  
23 issued to a qualified applicant for a certificate  
24 authorizing the whole or partial operation, con-  
25 struction, acquisition, or modification covered

1 by the application, only if the Commission de-  
2 termines that—

3 “(i) the applicant is able and will-  
4 ing—

5 “(I) to do the acts and to per-  
6 form the service proposed; and

7 “(II) to comply with this Act (in-  
8 cluding regulations); and

9 “(ii) the proposed operation, construc-  
10 tion, acquisition, or modification, to the ex-  
11 tent authorized by the certificate, is or will  
12 be required by the present or future public  
13 convenience and necessity.

14 “(B) TERMS AND CONDITIONS.—The Com-  
15 mission shall have the power to attach to the  
16 issuance of a certificate under this paragraph  
17 and to the exercise of the rights granted under  
18 the certificate such reasonable terms and condi-  
19 tions as the public convenience and necessity  
20 may require.

21 “(C) USE OF STATE WORK.—If 1 or more  
22 States reject or fail to act on a high-priority na-  
23 tional transmission project and the Commission  
24 has siting authority for the high-priority na-



1           tional transmission project under this section,  
 2           the Commission shall give due weight to—

3                   “(i) the environmental record and re-  
 4                   sults of the siting process of a State that  
 5                   did complete the siting process of the State  
 6                   under this section; and

7                   “(ii) the information that had been  
 8                   submitted by an applicant to the State  
 9                   under this section.

10           “(D) EVALUATION OF ABILITIES OF APPLI-  
 11           CANT.—

12                   “(i) IN GENERAL.—In evaluating the  
 13                   ability of an applicant described in sub-  
 14                   paragraph (A)(i), the Commission shall  
 15                   consider whether the financial and tech-  
 16                   nical capabilities of the applicant are ade-  
 17                   quate to support construction and oper-  
 18                   ation of the high-priority national trans-  
 19                   mission project proposed in the application.

20                   “(ii) JOINT OWNERSHIP PROJECTS.—  
 21                   In evaluating applications under paragraph  
 22                   (1), the Commission shall consider benefits  
 23                   from the greater diversification of financial  
 24                   risk inherent in the applications involving

1 joint ownership projects by multiple load-  
2 serving entities.

3 “(E) PUBLIC CONVENIENCE AND NECES-  
4 SITY.—In making a determination with respect  
5 to public convenience and necessity described in  
6 subparagraph (A)(ii), the Commission shall—

7 “(i) consider whether the facilities  
8 covered by an application are included in  
9 an Interconnection-wide transmission grid  
10 plan for a high-priority national trans-  
11 mission project developed pursuant to sub-  
12 section (c); and

13 “(ii) determine whether the facilities  
14 covered by the application are in the public  
15 interest.

16 “(3) RIGHT OF EMINENT DOMAIN.—If any  
17 holder of a certificate issued under paragraph (2)  
18 cannot acquire by contract, or is unable to agree  
19 with the owner of property on the compensation to  
20 be paid for, the necessary right-of-way to construct,  
21 operate, and maintain the high-priority national  
22 transmission project to which the certificate relates,  
23 and the necessary land or other property necessary  
24 to the proper operation of the high-priority national  
25 transmission project, the holder may acquire the

1 right-of-way by the exercise of the right of eminent  
 2 domain in—

3 “(A) the United States district court for  
 4 the district in which the property is located; or  
 5 “(B) a State court.

6 “(4) STATE AND TRIBAL RECOMMENDA-  
 7 TIONS.—In granting a certificate under paragraph  
 8 (2), the Commission shall—

9 “(A) permit State regulatory agencies and  
 10 affected Indian tribes to recommend mitigation  
 11 measures, based on habitat protection, environ-  
 12 mental considerations, or cultural site protec-  
 13 tion; and

14 “(B)(i) incorporate those identified mitiga-  
 15 tion measures as conditions on the certificate;  
 16 or

17 “(ii) if the Commission determines that a  
 18 recommended mitigation measure is incon-  
 19 sistent with the purposes of this section, infea-  
 20 sible, or not cost-effective—

21 “(I) consult with State regulatory  
 22 agencies and affected Indian tribes to seek  
 23 to resolve the issue;

24 “(II) incorporate as conditions on the  
 25 certificate such recommended mitigation

measures as are determined to be appropriate by the Commission, based on consultation by the Commission with State regulatory agencies and affected Indian tribes, the purposes of this section, and the record before the Commission; and

“(III) if, after consultation, the Commission does not adopt in whole or in part a recommendation of an agency or affected Indian tribe, publish a statement of a finding that the adoption of the recommendation is infeasible, not cost-effective, or inconsistent with this section or other applicable provisions of law.

“(5) STATE OR LOCAL AUTHORIZATIONS.—An applicant receiving a certificate under this subsection with respect to construction or modification of a high-priority national transmission project in a State shall not require a separate siting authorization from the State or any local authority within the State.

“(6) RIGHTS-OF-WAY OVER INDIAN LAND.—Notwithstanding paragraph (3), in the case of siting, construction, operation, and maintenance of a transmission facility to be located on or over Indian land,

1 a certificate holder under this section shall comply  
2 with the requirements of Federal law for obtaining  
3 rights-of-way on or over Indian land.

4 “(f) COORDINATION OF FEDERAL AUTHORIZATIONS  
5 FOR TRANSMISSION FACILITIES.—

6 “(1) DEFINITION OF FEDERAL AUTHORIZA-  
7 TION.—In this subsection, the term ‘Federal author-  
8 ization’ means any authorization required under  
9 Federal law in order to site a transmission facility  
10 on Federal land, including such permits, special use  
11 authorizations, certifications, opinions, or other ap-  
12 provals as may be required under Federal law in  
13 order to site a transmission facility.

14 “(2) LEAD AGENCY.—If a Federal authoriza-  
15 tion for a high-priority national transmission project  
16 involves land under the jurisdiction of the Depart-  
17 ment of the Interior and any other Federal agency,  
18 the Secretary of the Interior shall act as the lead  
19 agency for purposes of coordinating all applicable  
20 Federal authorizations and related environmental re-  
21 views.

22 “(3) COORDINATION.—To the maximum extent  
23 practicable under applicable Federal law, the Sec-  
24 retary of the Interior shall coordinate the Federal  
25 authorization and review process under this sub-

1 section with the Commission, and with any Indian  
2 tribes, multistate entities, and State agencies that  
3 are responsible for conducting any separate permit-  
4 ting and environmental reviews of the facility, to en-  
5 sure timely and efficient review and permit deci-  
6 sions.

7 “(4) MILESTONES AND DEADLINES.—

8 “(A) IN GENERAL.—As the lead agency,  
9 the Secretary of the Interior, in consultation  
10 with the Commission and any other agency re-  
11 sponsible for Federal authorizations and, as ap-  
12 propriate, with Indian tribes, multistate enti-  
13 ties, and State agencies that are willing to co-  
14 ordinate their own separate permitting and en-  
15 vironmental reviews with the Federal authoriza-  
16 tion and environmental reviews, shall establish  
17 prompt and binding intermediate milestones  
18 and ultimate deadlines for the review of, and  
19 Federal authorization decisions relating to, the  
20 proposed high-priority national transmission  
21 project.

22 “(B) DEADLINE.—The Secretary of the  
23 Interior shall ensure that, once an application  
24 has been submitted with such data as the Com-  
25 mission and the Secretaries with jurisdiction

1 over the affected land consider necessary, all  
2 permit decisions and related environmental re-  
3 views under all applicable Federal laws shall be  
4 completed not later than 1 year after the date  
5 of submission.

6 “(C) PREAPPLICATION INFORMATION.—

7 The Secretary of the Interior, in consultation  
8 with the Commission, shall provide an expedi-  
9 tious preapplication mechanism for prospective  
10 applicants to confer with the agencies involved  
11 to have each such agency determine and com-  
12 municate to the prospective applicant not later  
13 than 60 days after the prospective applicant  
14 submits a request for such information con-  
15 cerning—

16 “(i) the likelihood of approval for a  
17 potential facility; and

18 “(ii) key issues of concern to the  
19 agencies and public.

20 “(5) ENVIRONMENTAL REVIEW DOCUMENT.—

21 “(A) IN GENERAL.—As lead agency, the  
22 Secretary of the Interior, in consultation with  
23 the Commission and any affected agency, shall  
24 prepare a single environmental review docu-  
25 ment, which shall be used as the basis for all

1 decisions on the proposed high-priority national  
 2 transmission project under Federal law.

3 “(B) STREAMLINING.—The Secretary of  
 4 the Interior and the Secretary of Agriculture, in  
 5 consultation with the Commission, shall stream-  
 6 line the review and permitting of transmission  
 7 within corridors designated under section 503  
 8 of the Federal Land Policy and Management  
 9 Act of 1976 (43 U.S.C. 1763) or section 368  
 10 of the Energy Policy Act of 2005 (42 U.S.C.  
 11 15926) by fully taking into account prior anal-  
 12 yses and decisions relating to the corridors.

13 “(C) COMMENTS.—If the high-priority na-  
 14 tional transmission project includes Federal  
 15 land that is not under the jurisdiction of the  
 16 Department of the Interior, the document shall  
 17 include comments made by the Secretary with  
 18 jurisdiction over the affected land on matters  
 19 necessary for the protection of the land or re-  
 20 quired under applicable law.

21 “(6) ISSUANCE OR DENIAL OF AUTHORIZATION

22 BY PRESIDENT.—

23 “(A) IN GENERAL.—Subject to paragraph  
 24 (7), if any agency has denied a Federal author-  
 25 ization required for a transmission facility with-



1 in an energy right-of-way corridor on Federal  
2 land designated pursuant to section 368 of the  
3 Energy Policy Act of 2005 (42 U.S.C. 15926),  
4 or has failed to act by the deadline established  
5 by the Secretary of the Interior pursuant to  
6 this section for deciding whether to issue the  
7 authorization, the applicant or any State in  
8 which the facility would be located may file an  
9 appeal with the President, who shall, in con-  
10 sultation with the affected agency, review the  
11 denial or failure to take action on the pending  
12 application.

13 “(B) OPTIONS.—Based on the overall  
14 record and in consultation with the affected  
15 agency, the President may—

16 “(i) issue the necessary authorization  
17 with any appropriate conditions; or

18 “(ii) deny the application.

19 “(C) DEADLINE.—The President shall  
20 issue a decision not later than 90 days after the  
21 date of the filing of the appeal.

22 “(D) FEDERAL REQUIREMENTS.—In mak-  
23 ing a decision under this paragraph, the Presi-  
24 dent shall comply with applicable requirements  
25 of Federal law, including any requirements of—

1 “(i) the National Forest Management  
2 Act of 1976 (16 U.S.C. 1600 et seq.);

3 “(ii) the Endangered Species Act of  
4 1973 (16 U.S.C. 1531 et seq.);

5 “(iii) the Federal Water Pollution  
6 Control Act (33 U.S.C. 1251 et seq.);

7 “(iv) the National Environmental Pol-  
8 icy Act of 1969 (42 U.S.C. 4321 et seq.);  
9 and

10 “(v) the Federal Land Policy and  
11 Management Act of 1976 (43 U.S.C. 1701  
12 et seq.).

13 “(7) ISSUANCE OR DENIAL OF AUTHORIZATION  
14 BY PRESIDENT.—Paragraph (6) shall not apply to—

15 “(A) a unit of the National Park System;

16 “(B) a unit of the National Wildlife Ref-  
17 uge System;

18 “(C) a component of the National Wild  
19 and Scenic Rivers System;

20 “(D) a component of the National Trails  
21 System;

22 “(E) a component of the National Wilder-  
23 ness Preservation System;

24 “(F) a National Monument;

1           “(G) any part of the National Landscape  
2           Conservation System;

3           “(H) a National Preserve;

4           “(I) a National Scenic Area; or

5           “(J) a National Recreation Area.

6           “(8) ENERGY RIGHT-OF-WAY CORRIDORS ON  
7           FEDERAL LAND.—

8           “(A) IN GENERAL.—In carrying out this  
9           subsection, the Secretary with jurisdiction over  
10          the land shall, to the maximum extent prac-  
11          ticable, use the energy right-of-way corridors  
12          designated in accordance with section 368 of  
13          the Energy Policy Act of 2005 (42 U.S.C.  
14          15926).

15          “(B) ADDITIONAL CORRIDORS.—If the  
16          Secretary is unable to use an energy right-of-  
17          way corridor described in subparagraph (A), the  
18          Secretary shall establish an additional corridor  
19          in accordance with section 368(c) of the Energy  
20          Policy Act of 2005 (42 U.S.C. 15926(c)).

21          “(9) DURATION.—

22          “(A) IN GENERAL.—Each Federal land  
23          use authorization for an electricity transmission  
24          facility shall be issued—

1 “(i) for a duration, as determined by  
2 the Secretary with jurisdiction over the  
3 land, commensurate with the anticipated  
4 use of the facility;

5 “(ii) with appropriate authority to  
6 manage the right-of-way for reliability and  
7 environmental protection; and

8 “(iii) consistent with the Federal  
9 Land Policy and Management Act of 1976  
10 (43 U.S.C. 1701 et seq.) and other appli-  
11 cable law.

12 “(B) RENEWAL.—On the expiration of the  
13 authorization (including an authorization issued  
14 before the date of enactment of the American  
15 Clean Energy Leadership Act of 2009), the au-  
16 thorization shall be reviewed for renewal—

17 “(i) taking fully into account reliance  
18 on the electricity infrastructure; and

19 “(ii) recognizing the importance of the  
20 authorization for public health, safety, and  
21 economic welfare and as a legitimate use of  
22 Federal land.

23 “(10) CONSULTATION.—In exercising the re-  
24 sponsibilities under this section, the Secretary of the

1 Interior and the Commission shall consult regularly  
2 with—

3 “(A) electric reliability organizations (in-  
4 cluding related regional entities) approved by  
5 the Commission;

6 “(B) Transmission Organizations approved  
7 by the Commission; and

8 “(C) transmission owners and users and  
9 other interested parties.

10 “(11) IMPLEMENTATION.—

11 “(A) REGULATIONS.—Not later than 18  
12 months after the date of enactment of the  
13 American Clean Energy Leadership Act of  
14 2009, the Secretary of the Interior and the  
15 Commission shall issue any regulations nec-  
16 essary to carry out this subsection.

17 “(B) FEDERAL STAFF AND RESOURCES.—

18 The head of each Federal agency with authority  
19 to issue a Federal authorization shall designate  
20 a senior official responsible for, and dedicate  
21 sufficient other staff and resources to ensure,  
22 full implementation of the regulations and  
23 memorandum required under this paragraph.

24 “(g) EVALUATION AND RECOMMENDATIONS.—The  
25 Commission shall—

1           “(1) periodically evaluate whether high-priority  
2           national transmission projects are being constructed  
3           in accordance with the Interconnection-wide trans-  
4           mission grid plan for high-priority national trans-  
5           mission projects for both the Western and Eastern  
6           Interconnection areas;

7           “(2) take any necessary actions, pursuant to  
8           applicable law, to address any identified obstacles to  
9           investment, siting, and construction of high-priority  
10          national transmission projects identified as needed  
11          under an Interconnection-wide plan; and

12          “(3) not later than 2 years after the date of en-  
13          actment of the American Clean Energy Leadership  
14          Act of 2009, submit to Congress recommendations  
15          for any further actions or authority needed to ensure  
16          the effective and timely development of—

17                 “(A) high-priority national transmission  
18                 projects; and

19                 “(B) transmission projects to access re-  
20                 gional and offshore renewable energy genera-  
21                 tion.

22          “(h) REPORT OF SECRETARY.—Not later than 2  
23          years after the date of enactment of the American Clean  
24          Energy Leadership Act of 2009, the Secretary shall sub-  
25          mit to Congress recommendations for any further actions

1 or authority needed to ensure the effective and timely de-  
 2 velopment of—

3 “(1) demand response;

4 “(2) energy storage;

5 “(3) distributed generation;

6 “(4) energy efficiency; and

7 “(5) other areas necessary to carry out the pol-  
 8 icy established under subsection (a).

9 “(i) COST ALLOCATION.—

10 “(1) IN GENERAL.—Not later than 270 days  
 11 after the date of enactment of the American Clean  
 12 Energy Leadership Act of 2009, the Commission—

13 “(A) shall establish by rule an appropriate  
 14 methodology for allocation of the costs of high-  
 15 priority national transmission projects, subject  
 16 to the requirement that any cost allocation  
 17 methodology, and any rates affected by the cost  
 18 allocation methodology, shall be just, reason-  
 19 able, and not unduly discriminatory or pref-  
 20 erential;

21 “(B) may permit allocation of costs for  
 22 high-priority national transmission projects to  
 23 load-serving entities within all or a part of a re-  
 24 gion, except that costs shall not be allocated to  
 25 a region, or subregion, unless the costs are rea-

1 sonably proportionate to measurable economic  
2 and reliability benefits;

3 “(C) may permit allocation of costs to gen-  
4 erators of electricity connected by a high-pri-  
5 ority national transmission project; and

6 “(D) shall provide for due deference to  
7 cost allocation proposals supported by broad  
8 agreement among affected States.

9 “(2) MECHANISM FOR COLLECTION OF  
10 COSTS.—The Commission shall adopt such rules and  
11 require inclusion of such provisions in transmission  
12 tariffs as are required to provide for—

13 “(A) the efficient collection of allocated  
14 costs for development and operation of high-pri-  
15 ority national transmission projects; and

16 “(B) the distribution of those revenues to  
17 owners of the high-priority national trans-  
18 mission projects.

19 “(j) RELATIONSHIP TO OTHER LAWS.—

20 “(1) IN GENERAL.—Except as specifically pro-  
21 vided in this section, nothing in this section affects  
22 any requirement of an environmental or historic  
23 preservation law of the United States, including—

24 “(A) the National Environmental Policy  
25 Act of 1969 (42 U.S.C. 4321 et seq.);



1                   “(B) the Wilderness Act (16 U.S.C. 1131  
2                   et seq.); or

3                   “(C) the National Historic Preservation  
4                   Act (16 U.S.C. 470 et seq.).

5                   “(2) STATE LAW.—Nothing in this section pre-  
6                   cludes any person from constructing or modifying  
7                   any transmission facility in accordance with State  
8                   law.

9                   “(k) TRANSMISSION RIGHTS TO SUPPORT NEW GEN-  
10                  ERATION DEVELOPMENT.—Subject to section 217(b)(4),  
11                  it is the policy of the United States that long-term trans-  
12                  mission rights of firmness and duration sufficient to sup-  
13                  port generation investment (or equivalent tradable or fi-  
14                  nancial long-term transmission rights), shall be available  
15                  under appropriate terms and conditions to load-serving en-  
16                  tities (as defined in section 217(a)(2)) for long-term power  
17                  supply arrangements for new generation facilities using  
18                  renewable energy.

19                  “(l) RESOURCE ASSESSMENTS.—

20                  “(1) IN GENERAL.—The Secretary shall con-  
21                  duct nationwide assessments to identify areas with a  
22                  significant potential for the development of location-  
23                  constrained resources.

24                  “(2) FORMATS.—The resource assessments  
25                  shall be made available to the public in multiple for-

1       mats, including in a Geographical Information Sys-  
2       tem compatible format.

3               “(3) TIMING.—The Secretary shall—

4                       “(A) make the initial resource assessment  
5                       required under this subsection not later than  
6                       180 days after the date of enactment of the  
7                       American Clean Energy Leadership Act of  
8                       2009; and

9                       “(B) refine the resource assessment on a  
10                      regular basis that is consistent with regional  
11                      planning cycles.

12               “(4) TECHNICAL ASSISTANCE.—The Secretary  
13       shall provide technical assistance to regional plan-  
14       ning authorities, on request, to assist the authorities  
15       in carrying out this subsection.

16       “(m) CONGESTION STUDIES.—Not later than 1 year  
17       after the date of enactment of the American Clean Energy  
18       Leadership Act of 2009 and every 3 years thereafter, the  
19       Secretary, in consultation with affected States and Indian  
20       tribes, shall—

21               “(1) conduct a study of electric transmission  
22       congestion; and

23               “(2) submit to the appropriate committees of  
24       Congress a report that describes the results of the  
25       study.

1 “(n) APPLICABILITY.—

2 “(1) IN GENERAL.—Except as otherwise pro-  
3 vided in this subsection, the authority of the Com-  
4 mission under this section to approve transmission  
5 plans and to allocate costs incurred pursuant to the  
6 plans applies to all transmission providers, genera-  
7 tors, and users, owners, and operators of the power  
8 system within the Eastern and Western Interconnec-  
9 tions of the United States, including entities de-  
10 scribed in section 201(f).

11 “(2) REGIONAL PLANNING ENTITIES.—The  
12 Commission shall have authority over regional plan-  
13 ning entities to the extent necessary to carry out  
14 this section.

15 “(3) PROJECT DEVELOPERS.—Nothing in this  
16 section precludes the development, subject to appli-  
17 cable regulatory requirements, of transmission  
18 projects that are not included in plans developed  
19 under this section.

20 “(4) COMMISSION-APPROVED PLANNING PROC-  
21 ESSES.—Nothing in this section affects the approval,  
22 siting, or cost allocation for a project that is author-  
23 ized pursuant to planning processes that have been  
24 approved by the Commission.

1           “(5) EXCLUSIONS.—This section does not apply  
 2           in the State of Alaska or Hawaii or to the Electric  
 3           Reliability Council of Texas, unless the State or the  
 4           Council voluntarily elects to participate in a cost al-  
 5           location plan under this section.”.

## 6           **Subtitle C—Federal Renewable** 7           **Electricity Standard**

### 8   **SEC. 131. SENSE OF CONGRESS ON RENEWABLE ENERGY** 9           **AND ENERGY EFFICIENCY.**

10          It is the sense of Congress that the Federal Govern-  
 11          ment should continue to support the use and expansion  
 12          of renewable energy and energy efficiency in—

- 13               (1) the production and use of energy;
- 14               (2) the reduction of greenhouse gas emissions;
- 15          and
- 16               (3) the reduction of dependence on foreign oil.

### 17   **SEC. 132. FEDERAL RENEWABLE ELECTRICITY STANDARD.**

18          (a) IN GENERAL.—Title VI of the Public Utility Reg-  
 19          ulatory Policies Act of 1978 (16 U.S.C. 2601 et seq.) is  
 20          amended by adding at the end the following:

#### 21   **“SEC. 610. FEDERAL RENEWABLE ELECTRICITY STANDARD.**

22          “(a) DEFINITIONS.—In this section:

- 23               “(1) AFFILIATE.—The term ‘affiliate’ when  
 24               used with respect to a person, means another person  
 25               that directly or indirectly owns or controls, is owned

1 or controlled by, or is under common ownership or  
 2 control with, such person, as determined under regu-  
 3 lations issued by the Secretary.

4 “(2) BASE QUANTITY OF ELECTRICITY.—

5 “(A) IN GENERAL.—The term ‘base quan-  
 6 tity of electricity’ means the total quantity of  
 7 electricity sold by an electric utility to electric  
 8 consumers in a calendar year.

9 “(B) EXCLUSIONS.—The term ‘base quan-  
 10 tity of electricity’ does not include—

11 “(i) electricity generated by a hydro-  
 12 electric facility (including a pumped stor-  
 13 age facility but excluding qualified hydro-  
 14 power) owned by an electric utility or sold  
 15 under contract or rate order to an electric  
 16 utility to meet the needs of the retail cus-  
 17 tomers of the utility;

18 “(ii) electricity generated through the  
 19 incineration of municipal solid waste owned  
 20 by an electric utility or sold under contract  
 21 or rate order to an electric utility to meet  
 22 the needs of the retail customers of the  
 23 utility;

24 “(iii) the quantity of electricity gen-  
 25 erated by a fossil-fuel facility that is equal

1 to the proportion of greenhouse gases pro-  
 2 duced by such a unit that are captured  
 3 and geologically sequestered; or

4 “(iv)(I) electricity generated by a nu-  
 5 clear generating unit placed in service after  
 6 the date of enactment of this section; or

7 “(II) additional energy generated by  
 8 an existing nuclear facility as a result of  
 9 efficiency improvements or capacity addi-  
 10 tions made on or after the date of enact-  
 11 ment of this section.

12 “(3) BIOMASS.—The term ‘biomass’ has the  
 13 meaning given the term in section 203(b) of the En-  
 14 ergy Policy Act of 2005 (42 U.S.C. 15852(b)).

15 “(4) DISTRIBUTED GENERATION FACILITY.—  
 16 The term ‘distributed generation facility’ means a  
 17 facility at or near a customer site that provides elec-  
 18 tric energy to 1 or more customers for purposes  
 19 other than resale other than to a utility through a  
 20 net metering arrangement.

21 “(5) GEOTHERMAL ENERGY.—The term ‘geo-  
 22 thermal energy’ means energy derived from a geo-  
 23 thermal deposit (within the meaning of section  
 24 613(e)(2) of the Internal Revenue Code of 1986).

25 “(6) INCREMENTAL COST OF COMPLIANCE.—

“(A) IN GENERAL.—The term ‘incremental cost of compliance’ means—

“(i) the costs attributable to all retail sales of electricity incurred in a year by an electric utility to—

“(I) generate renewable energy eligible for Federal renewable energy credits;

“(II) acquire Federal renewable energy credits; or

“(III) make alternative compliance payments in order to comply with the requirements of subsection (b); less

“(ii)(I) the costs the electric utility would have incurred to serve all of the retail customers of that electric utility in that year to generate or acquire additional electricity not eligible for renewable energy credits if the requirements of subsection (b) did not apply to the electric utility; and

“(II) the costs of compliance with any comparable State renewable requirement.

“(B) COST OF ELECTRICITY.—In calculating the incremental cost of compliance of an

1 electric utility under this section, the Secretary  
 2 shall take into account the reduction, if any, on  
 3 the cost of electricity generated with fossil fuels  
 4 associated with increased reliance on renewable  
 5 electric energy generation.

6 “(7) INCREMENTAL GEOTHERMAL PRODUC-  
 7 TION.—

8 “(A) IN GENERAL.—The term ‘incremental  
 9 geothermal production’ means, for any year, the  
 10 excess of—

11 “(i) the total kilowatt hours of elec-  
 12 tricity produced from a facility (including a  
 13 distributed generation facility) using geo-  
 14 thermal energy; over

15 “(ii) the average number of kilowatt  
 16 hours produced annually at the facility for  
 17 5 of the previous 7 calendar years before  
 18 the date of enactment of this section after  
 19 eliminating the highest and the lowest kilo-  
 20 watt hour production years in that 7-year  
 21 period.

22 “(B) SPECIAL RULE.—A facility described  
 23 in subparagraph (A) that was placed in service  
 24 at least 7 years before the date of enactment of  
 25 this section shall, commencing with the year in



1 which that date of enactment occurs, reduce the  
2 amount calculated under subparagraph (A)(ii)  
3 each year, on a cumulative basis, by the average  
4 percentage decrease in the annual kilowatt hour  
5 production for the 7-year period described in  
6 subparagraph (A)(ii) with such cumulative sum,  
7 but not to exceed 30 percent.

8 “(8) INCREMENTAL HYDROPOWER.—

9 “(A) IN GENERAL.—The term ‘incremental  
10 hydropower’ means additional energy generated  
11 as a result of efficiency improvements or capac-  
12 ity additions made on or after January 1, 1992.

13 “(B) EXCLUSION.—The term ‘incremental  
14 hydropower’ does not include additional energy  
15 generated as a result of operational changes not  
16 directly associated with efficiency improvements  
17 or capacity additions.

18 “(C) MEASUREMENT AND CERTIFI-  
19 CATION.—Efficiency improvements and capacity  
20 additions referred to in subparagraph (A) shall  
21 be—

22 “(i) measured on the basis of the  
23 same water flow information used to deter-  
24 mine a historic average annual generation  
25 baseline for the hydroelectric facility; and

1 “(ii) certified by the Secretary or the  
2 Federal Energy Regulatory Commission.

3 “(9) INDIAN LAND.—The term ‘Indian land’  
4 has the meaning given the term in section 2601 of  
5 the Energy Policy Act of 1992 (25 U.S.C. 3501).

6 “(10) QUALIFIED HYDROPOWER.—

7 “(A) IN GENERAL.—The term ‘qualified  
8 hydropower’ means—

9 “(i) incremental hydropower;

10 “(ii) additions of capacity made on or  
11 after January 1, 2001, or the effective  
12 commencement date of an existing applica-  
13 ble State renewable electricity standard  
14 program at an existing nonhydroelectric  
15 dam, if—

16 “(I) the hydroelectric project in-  
17 stalled on the nonhydroelectric dam—

18 “(aa) is licensed by the Fed-  
19 eral Energy Regulatory Commis-  
20 sion, or is exempt from licensing,  
21 and is in compliance with the  
22 terms and conditions of the li-  
23 cense or exemption; and

24 “(bb) meets all other appli-  
25 cable environmental, licensing,

1 and regulatory requirements, in-  
2 cluding applicable fish passage  
3 requirements;  
4 “(II) the nonhydroelectric dam—  
5 “(aa) was placed in service  
6 before the date of enactment of  
7 this section;  
8 “(bb) was operated for flood  
9 control, navigation, or water sup-  
10 ply purposes; and  
11 “(cc) did not produce hydro-  
12 electric power as of the date of  
13 enactment of this section; and  
14 “(III) the hydroelectric project is  
15 operated so that the water surface ele-  
16 vation at any given location and time  
17 that would have occurred in the ab-  
18 sence of the hydroelectric project is  
19 maintained, subject to any license re-  
20 quirements imposed under applicable  
21 law that change the water surface ele-  
22 vation for the purpose of improving  
23 the environmental quality of the af-  
24 fected waterway, as certified by the

1 Federal Energy Regulatory Commis-  
2 sion; and

3 “(iii) in the case of the State of Alas-  
4 ka—

5 “(I) energy generated by a small  
6 hydroelectric facility that produces  
7 less than 50 megawatts;

8 “(II) energy from pumped stor-  
9 age; and

10 “(III) energy from a lake tap.

11 “(B) STANDARDS.—Nothing in this para-  
12 graph or the application of this paragraph shall  
13 affect the standards under which the Federal  
14 Energy Regulatory Commission issues licenses  
15 for and regulates hydropower projects under  
16 part I of the Federal Power Act (16 U.S.C.  
17 791a et seq.).

18 “(11) QUALIFIED WASTE-TO-ENERGY.—The  
19 term ‘qualified waste-to-energy’ means energy from  
20 the combustion of post-recycled municipal solid  
21 waste, or from the gasification or pyrolysis of  
22 such waste and the combustion of the resulting gas  
23 at the same facility, if the owner or operator of the  
24 facility generating electricity from the energy pro-  
25 vides to the Commission, on an annual basis—

1           “(A) a certification that the facility is in  
2           compliance with all applicable Federal and  
3           State environmental permits;

4           “(B) in the case of a facility that com-  
5           mences operation before the date of enactment  
6           of this section, a certification that the facility  
7           meets emissions standards promulgated under  
8           section 112 or 129 of the Clean Air Act (42  
9           U.S.C. 7412, 7429) that apply as of the date  
10          of enactment of this section to new facilities  
11          within the relevant source category; and

12          “(C) in the case of the combustion,  
13          pyrolization, or gasification of municipal solid  
14          waste, a certification that each local govern-  
15          ment unit from which such waste originates op-  
16          erates, participates in the operation of, con-  
17          tracts for, or otherwise provides for, recycling  
18          services for residents of the local government  
19          unit.

20          “(12) RENEWABLE ENERGY.—The term ‘renew-  
21          able energy’ means electric energy generated at a fa-  
22          cility (including a distributed generation facility)  
23          from—

24                 “(A) solar, wind, or geothermal energy or  
25                 ocean energy;

1 “(B) biomass;

2 “(C) landfill gas;

3 “(D) qualified hydropower;

4 “(E) marine and hydrokinetic renewable  
5 energy (as defined in section 632 of the Energy  
6 Independence and Security Act of 2007 (42  
7 U.S.C. 17211));

8 “(F) incremental geothermal production;

9 “(G) coal-mined methane;

10 “(H) qualified waste-to-energy; or

11 “(I) another renewable energy source  
12 based on innovative technology, as determined  
13 by the Secretary through rulemaking.

14 “(b) RENEWABLE ENERGY AND ENERGY EFFI-  
15 CIENCY REQUIREMENT.—

16 “(1) REQUIREMENT.—

17 “(A) IN GENERAL.—Subject to subpara-  
18 graph (B), each electric utility that sells elec-  
19 tricity to electric consumers for a purpose other  
20 than resale shall obtain a percentage of the  
21 base quantity of electricity the electric utility  
22 sells to electric consumers in any calendar year  
23 from renewable energy or energy efficiency.

24 “(B) PERCENTAGE.—Except as provided  
25 in section 611, the percentage obtained in a cal-

1           endar year under subparagraph (A) shall not be  
 2           less than the amount specified in the following  
 3           table:

<b>“Calendar year: .....</b>	<b>Minimum annual percentage:</b>
2011 through 2013 .....	3.0
2014 through 2016 .....	6.0
2017 through 2018 .....	9.0
2019 through 2020 .....	12.0
2021 through 2039 .....	15.0

4           “(2) MEANS OF COMPLIANCE.—An electric util-  
 5           ity shall meet the requirements of paragraph (1)  
 6           by—

7                   “(A) submitting to the Secretary renewable  
 8           energy credits issued under subsection (c);

9                   “(B) submitting Federal energy efficiency  
 10          credits issued under subsection (i), except that  
 11          those credits may not be used to meet more  
 12          than 26.67 percent of the requirements under  
 13          paragraph (1) in any calendar year;

14                  “(C) making alternative compliance pay-  
 15          ments to the Secretary at the rate of 2.1 cents  
 16          per kilowatt hour (as adjusted for inflation  
 17          under subsection (g)) if the electric utility does  
 18          not elect to petition the Secretary to waive the  
 19          requirements under subsection (d)(3)(C); or

20                  “(D) a combination of activities described  
 21          in subparagraphs (A), (B), and (C).

1           “(3) PHASE-IN.—The Secretary shall prescribe,  
 2           by regulation, a reasonable phase-in of the require-  
 3           ments of paragraph (1) as the requirements apply to  
 4           an electric utility that becomes subject to this sec-  
 5           tion on or after January 1, 2013.

6           “(c) FEDERAL RENEWABLE ENERGY AND ENERGY  
 7           EFFICIENCY CREDIT TRADING PROGRAMS.—

8           “(1) IN GENERAL.—Not later than January 1,  
 9           2011, the Secretary shall establish a Federal renew-  
 10          able energy credit trading program, and a Federal  
 11          energy efficiency credit trading program, under  
 12          which electric utilities shall submit to the Secretary  
 13          Federal renewable energy credits and Federal energy  
 14          efficiency credits to certify the compliance of the  
 15          electric utilities with subsection (b)(1).

16          “(2) ADMINISTRATION.—As part of the pro-  
 17          gram, the Secretary shall—

18                 “(A) issue renewable energy credits to gen-  
 19                 erators of electric energy from renewable en-  
 20                 ergy, regardless of whether the energy is trans-  
 21                 mitted over the national interstate transmission  
 22                 system;

23                 “(B) to the extent that renewable sources  
 24                 of electricity are used in combination with other  
 25                 sources of energy, issue credits only to the ex-



1           tent that the electricity generated is from re-  
2           newable resources;

3           “(C) issue renewable energy credits to elec-  
4           tric utilities associated with State renewable  
5           electricity standard compliance mechanisms  
6           pursuant to subsection (h);

7           “(D) issue energy efficiency credits pursu-  
8           ant to subsection (i);

9           “(E) subject to subparagraph (F), ensure  
10          that a kilowatt hour, including the associated  
11          renewable energy credit or energy efficiency  
12          credit, shall be used only once for purposes of  
13          compliance with this Act;

14          “(F) allow double credits for generation  
15          from facilities on Indian land, and triple credits  
16          for generation from small renewable distributed  
17          generators (meaning those no larger than 1  
18          megawatt), except that no distributed renewable  
19          generation facilities on Indian land shall receive  
20          a greater number of credits than triple credits;

21          “(G) allow triple credits for generation of  
22          energy from algae;

23          “(H) ensure that, with respect to a pur-  
24          chaser that, as of the date of enactment of this  
25          section, has a purchase agreement from a re-

1           newable energy facility placed in service before  
2           that date, the credit associated with the genera-  
3           tion of renewable energy under the contract is  
4           issued to the purchaser of the electric energy to  
5           the extent that the contract does not already  
6           provide for the allocation of the Federal credit;  
7           and

8           “(I) issue tradeable renewable energy cred-  
9           its for the useful electric and thermal output  
10          from a facility that produces the output from  
11          biomass, using a system under which—

12               “(i) in the case of efficiency that is  
13               less than 50 percent, 1 renewable energy  
14               credit is awarded;

15               “(ii) in the case of efficiency that is  
16               50 percent or more but less than 70 per-  
17               cent, 1.1 renewable energy credits are  
18               awarded for the same unit output;

19               “(iii) in the case of efficiency that is  
20               70 percent or more but less than 90 per-  
21               cent, 1.25 renewable energy credits are  
22               awarded for the same unit output; and

23               “(iv) in the case of efficiency that is  
24               90 percent or more, 1.5 renewable energy

1 credits are awarded for the same unit out-  
2 put.

3 “(3) DURATION.—A credit described in sub-  
4 paragraph (A), (B), (C), or (D) of paragraph (2)  
5 may only be used for compliance with this section  
6 during the 3-year period beginning on the date of  
7 issuance of the credit.

8 “(4) TRANSFERS.—An electric utility that holds  
9 credits in excess of the quantity of credits needed to  
10 comply with subsection (b) may transfer the credits  
11 to another electric utility in the same utility holding  
12 company system.

13 “(5) DELEGATION OF MARKET FUNCTION.—

14 “(A) IN GENERAL.—The Secretary may  
15 delegate to—

16 “(i) an appropriate market-making  
17 entity the administration of a national re-  
18 newable energy credit market and a na-  
19 tional energy efficiency credit market for  
20 purposes of creating a transparent national  
21 market for the sale or trade of renewable  
22 energy credits and energy efficiency cred-  
23 its; and

24 “(ii) regional entities the tracking of  
25 dispatch of renewable generation.

1           “(B) ADMINISTRATION.—Any delegation  
 2           under subparagraph (A) shall ensure that the  
 3           tracking and reporting of information con-  
 4           cerning the dispatch of renewable generation is  
 5           transparent, verifiable, and independent of any  
 6           generation or load interests with obligations  
 7           under this section. .

8           “(d) ENFORCEMENT.—

9           “(1) CIVIL PENALTIES.—Any electric utility  
 10          that fails to meet the requirements of subsection (b)  
 11          shall be subject to a civil penalty.

12          “(2) AMOUNT OF PENALTY.—The amount of  
 13          the civil penalty shall be equal to the product ob-  
 14          tained by multiplying—

15               “(A) the number of kilowatt-hours of elec-  
 16               tric energy sold to electric consumers in viola-  
 17               tion of subsection (b); by

18               “(B) 200 percent of the value of the alter-  
 19               native compliance payment, as adjusted for in-  
 20               flation under subsection (g).

21          “(3) MITIGATION OR WAIVER.—

22               “(A) PENALTY.—

23                   “(i) IN GENERAL.—The Secretary  
 24                   may mitigate or waive a civil penalty under  
 25                   this subsection if the electric utility is un-

1           able to comply with subsection (b) due to  
2           a reason outside of the reasonable control  
3           of the electric utility.

4           “(ii) AMOUNT.—The Secretary shall  
5           reduce the amount of any penalty deter-  
6           mined under paragraph (2) by the amount  
7           paid by the electric utility to a State for  
8           failure to comply with the requirement of  
9           a State renewable energy program if the  
10          State requirement is greater than the ap-  
11          plicable requirement of subsection (b).

12          “(B) REQUIREMENT.—The Secretary may  
13          waive the requirements of subsection (b) for a  
14          period of up to 5 years with respect to an elec-  
15          tric utility if the Secretary determines that the  
16          electric utility cannot meet the requirements  
17          due to a hurricane, tornado, fire, flood, earth-  
18          quake, ice storm, or other natural disaster or  
19          act of God beyond the reasonable control of the  
20          utility.

21          “(C) RATEPAYER PROTECTION.—Effective  
22          beginning June 1, 2010, and not later than  
23          June 1 of each year thereafter, an electric util-  
24          ity may petition the Secretary to waive, for the  
25          following compliance year, all or part of the re-

1           quirements of subsection (b) in order to limit  
2           the rate impact of the incremental cost of com-  
3           pliance of the electric utility to not more than  
4           4 percent per retail customer in any year.

5           “(D) VARIANCE.—A State public utility  
6           commission or electric utility may submit an  
7           application to the Secretary that requests a  
8           variance from the requirements of subsection  
9           (b) for 1 or more calendar years (including sus-  
10          pension or reduction of the requirements) on  
11          the basis of transmission constraints preventing  
12          delivery of service.

13          “(4) PROCEDURE FOR ASSESSING PENALTY.—  
14          The Secretary shall assess a civil penalty under this  
15          subsection in accordance with the procedures pre-  
16          scribed by section 333(d) of the Energy Policy and  
17          Conservation Act (42 U.S.C. 6303(d)).

18          “(e) ALTERNATIVE COMPLIANCE PAYMENTS.—

19          “(1) IN GENERAL.—An electric utility may sat-  
20          isfy the requirements of subsection (b), in whole or  
21          in part, by submitting in accordance with this sub-  
22          section, in lieu of each Federal renewable electricity  
23          credit or megawatt hour of demonstrated total an-  
24          nual electricity savings that would otherwise be due,  
25          a payment equal to the amount required under sub-

1 section (b) in accordance with such regulations as  
2 the Secretary may promulgate.

3 “(2) PAYMENT TO STATE FUNDS.—Payments  
4 made under this subsection shall be made directly to  
5 the State in which the electric utility is located, if  
6 the payments are deposited directly into a fund with-  
7 in the treasury of the State for use in accordance  
8 with paragraph (3).

9 “(3) USE OF GRANTS.—The Governor of any  
10 State may expend amounts in a State renewable en-  
11 ergy escrow account solely for purposes of—

12 “(A) increasing the quantity of electric en-  
13 ergy produced from a renewable energy source  
14 in the State, including nuclear and advanced  
15 coal technologies for carbon capture and seques-  
16 tration;

17 “(B) promoting the deployment and use of  
18 electric drive vehicles in the State, including the  
19 development of electric drive vehicles and bat-  
20 teries; and

21 “(C) offsetting the costs of carrying out  
22 this section paid by electric consumers in the  
23 State through—

24 “(i) direct grants to electric con-  
25 sumers; or

1 “(ii) energy efficiency investments.

2 “(4) INFORMATION AND REPORTS.—As a condi-  
3 tion of providing payments to a State under this  
4 subsection, the Secretary may require the Governor  
5 to keep such accounts or records, and furnish such  
6 information and reports, as the Secretary determines  
7 are necessary and appropriate for determining com-  
8 pliance with this subsection.

9 “(f) EXEMPTIONS.—During any calendar year, this  
10 section shall not apply to an electric utility—

11 “(1) that sold less than 4,000,000 megawatt-  
12 hours of electric energy to electric consumers during  
13 the preceding calendar year, except that sales to an  
14 affiliate, lessee, or tenant of the electric utility shall  
15 not be treated as sales to electric consumers under  
16 this paragraph; or

17 “(2) in Hawaii.

18 “(g) INFLATION ADJUSTMENT.—Not later than De-  
19 cember 31 of each year beginning in 2008, the Secretary  
20 shall adjust for inflation the rate of the alternative compli-  
21 ance payment under subsection (b)(2)(C).

22 “(h) STATE PROGRAMS.—

23 “(1) IN GENERAL.—Subject to paragraph (2),  
24 nothing in this section diminishes any authority of  
25 a State or political subdivision of a State to adopt



1 or enforce any law or regulation respecting renew-  
2 able energy or energy efficiency, or the regulation of  
3 electric utilities,.

4 “(2) COMPLIANCE.—Except as provided in sub-  
5 section (d)(3), no such law or regulation shall relieve  
6 any person of any requirement otherwise applicable  
7 under this section.

8 “(3) COORDINATION.—The Secretary, in con-  
9 sultation with States having such renewable energy  
10 and energy efficiency programs, shall, to the max-  
11 imum extent practicable, facilitate coordination be-  
12 tween the Federal program and State programs.

13 “(4) REGULATIONS.—

14 “(A) IN GENERAL.—The Secretary, in con-  
15 sultation with States, shall promulgate regula-  
16 tions to ensure that an electric utility that is  
17 subject to the requirements of this section and  
18 is subject to a State renewable energy standard  
19 receives renewable energy credits if—

20 “(i) the electric utility complies with  
21 the State standard by generating or pur-  
22 chasing renewable electric energy or renew-  
23 able energy certificates or credits rep-  
24 resenting renewable electric energy; or

1 “(ii) the State imposes or allows other  
2 mechanisms for achieving the State stand-  
3 ard, including the payment of taxes, fees,  
4 surcharges, or other financial obligations.

5 “(B) AMOUNT OF CREDITS.—The amount  
6 of credits received by an electric utility under  
7 this subsection shall equal—

8 “(i) in the case of subparagraph  
9 (A)(i), the quantity of renewable energy re-  
10 sulting from the generation or purchase by  
11 the electric utility of renewable energy; and

12 “(ii) in the case of subparagraph  
13 (A)(ii), the pro rata share of the electric  
14 utility, based on the contributions to the  
15 mechanism made by the electric utility or  
16 customers of the electric utility, in the  
17 State, of the quantity of renewable energy  
18 resulting from those mechanisms.

19 “(C) PROHIBITION ON DOUBLE COUNT-  
20 ING.—The regulations promulgated under this  
21 paragraph shall ensure that a kilowatt-hour as-  
22 sociated with a renewable energy credit issued  
23 pursuant to this subsection shall not be used  
24 for compliance with this section more than  
25 once.

1 “(i) ENERGY EFFICIENCY CREDITS.—

2 “(1) DEFINITIONS.—In this subsection:

3 “(A) CUSTOMER FACILITY SAVINGS.—The  
4 term ‘customer facility savings’ means a reduc-  
5 tion in the consumption of end-use electricity at  
6 a facility of an end-use consumer of electricity  
7 served by an electric utility, as compared to—

8 “(i) consumption at the facility during  
9 a base year, taking into account reductions  
10 attributable to causes other than energy ef-  
11 ficiency investments (such as economic  
12 downturns, reductions in customer base,  
13 favorable weather conditions, or other such  
14 causes); or

15 “(ii) in the case of new equipment (re-  
16 gardless of whether the new equipment re-  
17 places existing equipment at the end of the  
18 useful life of the existing equipment), con-  
19 sumption by similar equipment of average  
20 efficiency available for purchase at the  
21 time that new equipment is acquired.

22 “(B) ELECTRICITY SAVINGS.—The term  
23 ‘electricity savings’ means—

24 “(i) customer facility savings of elec-  
25 tricity consumption adjusted to reflect any

1 associated increase in fuel consumption at  
2 the facility;

3 “(ii) reductions in distribution system  
4 losses of electricity achieved by a retail  
5 electricity distributor, as compared to  
6 losses attributable to new or replacement  
7 distribution system equipment of average  
8 efficiency (as defined by the Secretary by  
9 regulation); and

10 “(iii) the output of new combined heat  
11 and power systems, to the extent provided  
12 under paragraph (5).

13 “(C) QUALIFIED ELECTRICITY SAVINGS.—

14 The term ‘qualified electricity savings’ means  
15 electricity saving that meet the measurement  
16 and verification requirements of paragraph (4).

17 “(2) PETITION.—On petition by the Governor  
18 of a State or, in the case of the power service area  
19 of the Tennessee Valley Authority, the Board of Di-  
20 rectors of the Tennessee Valley Authority, the Sec-  
21 retary shall allow up to 26.67 percent of the require-  
22 ments of an electric utility under subsection (b)(1)  
23 associated with the sales of electricity of the utility  
24 in the State to be met by submitting Federal energy  
25 efficiency credits issued pursuant to this subsection.

1           “(3) ISSUANCE OF ENERGY EFFICIENCY CRED-  
2       ITS.—

3           “(A) IN GENERAL.—The Secretary shall  
4       issue energy efficiency credits for qualified elec-  
5       tricity savings achieved in States described in  
6       paragraph (2) in accordance with this sub-  
7       section.

8           “(B) QUALIFIED ELECTRICITY SAVINGS.—  
9       Subject to subparagraph (C), in accordance  
10      with regulations promulgated by the Secretary,  
11      the Secretary shall issue credits for—

12           “(i) qualified electricity savings  
13      achieved by an electric utility on or after  
14      the date of enactment of this section; and

15           “(ii) qualified electricity savings  
16      achieved by other entities (including State  
17      agencies) on or after the date of enactment  
18      of this section if—

19           “(I) the measures used to achieve  
20      the qualified electricity savings were  
21      installed or placed in operation by the  
22      entity seeking the credit; and

23           “(II) an electric utility eligible to  
24      receive efficiency did not pay a sub-  
25      stantial portion of the cost of achiev-

1                   ing the qualified electricity savings  
 2                   (unless the utility has waived any en-  
 3                   titlement to the credit).

4                   “(C) STANDARDS.—No credits shall be  
 5                   issued for electricity savings achieved as a re-  
 6                   sult of compliance with a national, State, or  
 7                   local building, equipment, or appliance effi-  
 8                   ciency standard.

9                   “(4) MEASUREMENT AND VERIFICATION OF  
 10                  ELECTRICITY SAVINGS.—Not later than January  
 11                  2010, the Secretary shall promulgate regulations re-  
 12                  garding the measurement and verification of elec-  
 13                  tricity savings under this subsection, including regu-  
 14                  lations covering—

15                   “(A) procedures and standards for defining  
 16                   and measuring electricity savings that will be  
 17                   eligible to receive credits under paragraph (3),  
 18                   which shall—

19                   “(i) specify the types of energy effi-  
 20                   ciency and energy conservation that will be  
 21                   eligible for the credits;

22                   “(ii) require that energy consumption  
 23                   for customer facilities or portions of facili-  
 24                   ties in the applicable base and current  
 25                   years be adjusted, as appropriate, to ac-

1 count for changes in weather, level of pro-  
2 duction, and building area;

3 “(iii) account for the useful life of  
4 electricity savings measures;

5 “(iv) include specified electricity sav-  
6 ings values for specific, commonly-used ef-  
7 ficiency measures; and

8 “(v) exclude electricity savings that—

9 “(I) are not properly attributable  
10 to measures carried out by the entity  
11 seeking the credit;

12 “(II) have already been credited  
13 under this section to another entity;  
14 or

15 “(III) do not result from actions  
16 not intended to achieve electricity sav-  
17 ings;

18 “(B) procedures and standards for third-  
19 party verification of reported electricity savings;  
20 and

21 “(C) such requirements for information,  
22 reports, and access to facilities as may be nec-  
23 essary to carry out this subsection.

24 “(5) COMBINED HEAT AND POWER.—Under  
25 regulations promulgated by the Secretary, the incre-

1       ment of electricity output of a new combined heat  
 2       and power system that is attributable to the higher  
 3       efficiency of the combined system (as compared to  
 4       the efficiency of separate production of the electric  
 5       and thermal outputs), shall be considered electricity  
 6       savings under this subsection.

7       “(j) BIOMASS HARVESTING AND SUSTAINABILITY.—  
 8       The provisions of this section relating to biomass shall be  
 9       administered in accordance with section 203(e) of the En-  
 10      ergy Policy Act of 2005 (42 U.S.C. 15852(e)).

11      “(k) LOANS FOR PROJECTS TO COMPLY WITH FED-  
 12      ERAL RENEWABLE ELECTRICITY STANDARD.—

13           “(1) PURPOSES.—The purposes of this sub-  
 14      section are—

15                   “(A) to reduce the cost incurred by electric  
 16                   utilities in complying with the requirements of  
 17                   this section; and

18                   “(B) to minimize the impact of the re-  
 19                   quirements on electricity rates for consumers.

20           “(2) LOANS.—The Secretary shall make loans  
 21      available to electric utilities to carry out qualified  
 22      projects approved by the Secretary to comply with  
 23      the requirements of this section.

24           “(3) QUALIFIED PROJECTS.—



1           “(A) IN GENERAL.—A loan may be made  
2           under this subsection for a project—

3                   “(i) to construct a renewable energy  
4                   generation facility;

5                   “(ii) to install an energy efficiency or  
6                   electricity demand reduction technology; or

7                   “(iii) to carry out any other project  
8                   approved by the Secretary that the Sec-  
9                   retary determines is consistent with the  
10                  purposes of this subsection.

11           “(B) DISAPPROVAL.—The Secretary may  
12           disapprove an application for a loan for a  
13           project under this subsection if the Secretary  
14           determines that—

15                   “(i) the revenues generated under the  
16                   project are unlikely to be sufficient to  
17                   cover the repayment obligations of the pro-  
18                   posed loan; or

19                   “(ii) the project is not otherwise con-  
20                   sistent with the purposes of this sub-  
21                   section.

22           “(4) TERMS.—A loan made by the Secretary to  
23           an electric utility under this subsection shall—

24                   “(A) be for a term of not to exceed 30  
25                   years; and

1           “(B) bear an annual interest rate that is  
 2           50 basis points more than the Federal funds  
 3           rate established by the Board of Governors of  
 4           the Federal Reserve System.

5           “(5) PRIORITY.—Notwithstanding any other  
 6           provision of law, the debt to the Federal Government  
 7           under a loan made to an electric utility under this  
 8           subsection shall have priority in any case in which  
 9           the electric utility files for bankruptcy protection  
 10          under title 11, United States Code.

11          “(6) AUTHORIZATION OF APPROPRIATIONS.—  
 12          There are authorized to be appropriated such sums  
 13          as are necessary to carry out this subsection.

14          “(1) RECONSIDERATION.—

15               “(1) REVIEW.—

16                   “(A) IN GENERAL.—Not later than Janu-  
 17                   ary 15, 2017, and every 5 years thereafter, the  
 18                   Secretary shall review and make recommenda-  
 19                   tions to Congress on the program established  
 20                   under this section.

21                   “(B) ANALYSIS.—The review shall analyze  
 22                   whether—

23                           “(i) the program established under  
 24                           this section has contributed to an economi-

1 cally harmful increase in electricity rates in  
2 regions of the United States;

3 “(ii) the program has resulted in net  
4 economic benefits for the United States;  
5 and

6 “(iii) new technologies and clean, re-  
7 newable energy sources will advance the  
8 purposes of this section.

9 “(2) RECOMMENDATIONS.—The Secretary shall  
10 submit to Congress recommendations on whether—

11 “(A) the percentage of energy efficiency  
12 credits eligible to be submitted under subsection  
13 (b)(1) should be increased or decreased;

14 “(B) the percentage of renewable elec-  
15 tricity required under subsection (b)(1) should  
16 be increased or decreased; and

17 “(C) the definition of ‘renewable energy’  
18 should be expanded to reflect advances in tech-  
19 nology or previously unavailable sources of  
20 clean or renewable energy.

21 “(3) REPORT.—Not later than January 15,  
22 2017, the Secretary shall submit to Congress a re-  
23 port that describes any recommendations of the Sec-  
24 retary on changes to the program established under  
25 this section.

1       “(m) REGULATIONS.—Not later than 1 year after the  
2 date of enactment of this section, the Secretary shall pro-  
3 mulgate regulations implementing this section.

4       “(n) TERMINATION OF AUTHORITY.—This section  
5 and the authority provided by this section terminate on  
6 December 31, 2039.”.

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 electricity standard.”.

11 **SEC. 133. FEDERAL PURCHASE REQUIREMENT AMEND-**  
12 **MENTS.**

13       Section 203 of the Energy Policy Act of 2005 (42  
14 U.S.C. 15852) is amended—

15           (1) by striking subsection (b) and inserting the  
16 following:

17       “(b) DEFINITIONS.—In this section:

18           “(1) BIOMASS.—The term ‘biomass’ means the  
19 following types of nonhazardous organic materials:

20                   “(A) Residues and byproducts from milled  
21 logs.

22                   “(B) Wood, paper products that are not  
23 commonly recyclable, and vegetation (including  
24 trees and trimmings, yard waste, pallets, rail-  
25 road ties, crates, and solid-wood manufacturing

1 and construction debris), if diverted from or  
2 separated from other waste out of a municipal  
3 waste stream.

4 “(C) Hazard trees, trimmings, and brush  
5 that are necessary to remove in order to main-  
6 tain a utility right-of-way or a public road (not  
7 including any unpaved road within Federal  
8 land).

9 “(D) Trees, trimmings, and brush har-  
10 vested from the immediate vicinity of any build-  
11 ing, campground, or other structure in wildfire-  
12 prone areas to reduce the risk to the structure  
13 or campground or to human life from wildfires.

14 “(E) Invasive species (as defined in Execu-  
15 tive Order 13112 (42 U.S.C. 4321 note; relat-  
16 ing to invasive species)) removed to control or  
17 eradicate the invasive species.

18 “(F) Animal waste and animal byproducts  
19 (including biogas and any solid produced by  
20 micro-organisms).

21 “(G) Food waste.

22 “(H) Algae.

23 “(I) Slash, brush, trees, and other vegeta-  
24 tion that is harvested from non-Federal land or  
25 Indian land—

1 “(i) that is, at the time of harvest—

2 “(I) naturally regenerated forest  
3 land;

4 “(II) forest land that was planted  
5 for the purpose of restoring land to a  
6 naturally regenerated forest; or

7 “(III) if harvested in quantities  
8 and through practices that maintain  
9 or contribute toward the restoration  
10 of the species, ecological systems, and  
11 ecological communities for which the  
12 conservation forest land was identi-  
13 fied, conservation forest land; or

14 “(ii) that is—

15 “(I) at the time of harvest, plant-  
16 ed forest land; and

17 “(II) on the date of enactment of  
18 this section, cropland (including fallow  
19 land), pastureland, or planted forest  
20 land.

21 “(J) Crops, crop byproducts, and crop resi-  
22 dues from non-Federal land or Indian land that  
23 is—

24 “(i) at the time of harvest, not forest  
25 land; and

1 “(ii) on the date of enactment of this  
2 section—

3 “(I) cropland (including fallow  
4 land and not including planted forest  
5 land); or

6 “(II) pastureland.

7 “(K) If harvested from Federal land in ac-  
8 cordance with applicable law and land manage-  
9 ment plans and in quantities and through prac-  
10 tices that maintain or contribute toward the  
11 restoration of ecological sustainability—

12 “(i) slash; and

13 “(ii) brush and trees that are byprod-  
14 ucts of ecological restoration, disease or in-  
15 sect infestation control, or hazardous fuels  
16 reduction treatments and—

17 “(I) are from stands that—

18 “(aa) were killed by an in-  
19 sect or disease epidemic or a nat-  
20 ural disaster; and

21 “(bb) do not meet the utili-  
22 zation standards for sawtimber;  
23 or

24 “(II) do not exceed the minimum  
25 size standards for sawtimber.

1 “(2) CONSERVATION FOREST LAND.—

2 “(A) IN GENERAL.—The term ‘conserva-  
3 tion forest land’ means forest land that con-  
4 tains a species, or includes all or part of an eco-  
5 logical system or community, that is at risk of  
6 extinction or elimination within a State or glob-  
7 ally.

8 “(B) IDENTIFICATION.—Conservation for-  
9 est land shall be identified based on the best  
10 available science and data by any of—

11 “(i) the State in which the land is lo-  
12 cated, unless the land is under the jurisdic-  
13 tion of an Indian tribe;

14 “(ii) an Indian tribe with jurisdiction  
15 over the land; or

16 “(iii) in consultation with the State in  
17 which the land is located or the Indian  
18 tribe with jurisdiction over the land—

19 “(I) the Secretary of Agriculture;

20 or

21 “(II) the Secretary of the Inte-  
22 rior.

23 “(C) EXCEPTIONS.—A tract of conserva-  
24 tion forest land may not be removed from con-  
25 servation forest land status under this section



as a result of land management practices on the tract that—

“(i) occurred on or after the date of enactment of this subparagraph; and

“(ii) contributed toward the elimination of the species, or all or part of an ecological system or ecological community, for which the land was identified as conservation forest land.

“(3) FEDERAL LAND.—

“(A) IN GENERAL.—The term ‘Federal land’ means—

“(i) National Forest System land; and

“(ii) public lands (as defined in section 103 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1702)).

“(B) EXCLUSIONS.—

“(i) IN GENERAL.—The term ‘Federal land’ does not include—

“(I) any area designated by Congress to be administered for conservation purposes; or

“(II) a National Monument proclaimed by the President.

1                   “(ii) OLD GROWTH OR LATE SUCCES-  
2                   SIONAL FOREST STANDS.—The term ‘Fed-  
3                   eral land’ does not include an old growth  
4                   or late successional forest stand unless bio-  
5                   mass from the stand does not exceed the  
6                   minimum size standards for sawtimber and  
7                   is a byproduct of an ecological restoration  
8                   treatment that fully maintains, or contrib-  
9                   utes toward the restoration of, the struc-  
10                  ture and composition of an old growth for-  
11                  est stand in accordance with the old  
12                  growth conditions characteristic of the for-  
13                  est type and retains the large trees con-  
14                  tributing to old growth structure.

15               “(4) INDIAN LAND.—The term ‘Indian land’  
16               has the meaning given the term ‘Indian country’ in  
17               section 1151 of title 18, United States Code.

18               “(5) INDIAN TRIBE.—The term ‘Indian tribe’  
19               has the meaning given the term in section 4 of the  
20               Indian Self-Determination and Education Assistance  
21               Act (25 U.S.C. 450b).

22               “(6) NON-FEDERAL LAND.—The term ‘non-  
23               Federal land’ means land that is not owned by the  
24               Federal Government.

1           “(7) RENEWABLE ENERGY.—The term ‘renew-  
 2       able energy’ means energy generated from solar,  
 3       wind, biomass, landfill gas, ocean (including tidal,  
 4       wave, current, and thermal), geothermal, municipal  
 5       solid waste, or new hydroelectric generation capacity  
 6       achieved from increased efficiency or additions of  
 7       new capacity at an existing hydroelectric project.

8           “(8) SECRETARY CONCERNED.—The term ‘Sec-  
 9       retary concerned’ means—

10               “(A) the Secretary of Agriculture, with re-  
 11       gard to—

12                       “(i) National Forest System land; and

13                       “(ii) except as provided by subpara-  
 14       graph (B), non-Federal land; and

15               “(B) the Secretary of the Interior, with re-  
 16       gard to—

17                       “(i) public lands (as defined in section  
 18       103 of the Federal Land Policy and Man-  
 19       agement Act of 1976 (43 U.S.C. 1702));  
 20       and

21                       “(ii) Indian land.”; and

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

23       “(e) BIOMASS HARVESTING AND SUSTAINABILITY.—

24               “(1) IN GENERAL.—The Secretaries concerned  
 25       shall administer the provisions covered by subsection

1 (b)(1) relating to the harvesting of biomass from  
2 Federal land and forest land.

3 “(2) INTER-AGENCY BIOMASS SUSTAINABILITY  
4 STUDY.—

5 “(A) IN GENERAL.—The Secretary, in con-  
6 sultation with the Secretary of Agriculture, the  
7 Secretary of the Interior, and the Administrator  
8 of the Environmental Protection Agency, shall  
9 conduct a study that assesses the impacts of  
10 biomass harvesting for energy production on—

11 “(i) landscape-level water quality, soil  
12 productivity, wildlife habitat, and biodiver-  
13 sity; and

14 “(ii) conservation forest land.

15 “(B) TIMING.—The Secretary shall—

16 “(i) complete the study required  
17 under this paragraph not later than 5  
18 years after the date of enactment of this  
19 subsection; and

20 “(ii) update the study not later than  
21 every 5 years thereafter.

22 “(C) BASIS.—The Secretary shall base the  
23 study on the best available data and science.

24 “(D) RECOMMENDATIONS.—The Secretary  
25 shall include in the study such recommenda-

tions as are appropriate to reduce the impacts described in subparagraph (A).

“(E) PUBLIC PARTICIPATION AND AVAILABILITY.—In carrying out this paragraph, the Secretary shall—

“(i) consult with States, Indian tribes, and other interested stakeholders;

“(ii) make available, and seek public comment on, a draft version of the study results; and

“(iii) make the final study results available to the public.”.

## **Subtitle D—Energy and Water Integration**

### **SEC. 141. ENERGY WATER NEXUS STUDY.**

(a) IN GENERAL.—Not later than 90 days after the date of enactment of this Act, the Secretary, in consultation with the Secretary of the Interior and the Administrator of the Environmental Protection Agency, shall enter into an arrangement with the National Academy of Sciences under which the Academy shall conduct an in-depth analysis of the impact of energy development and production on the water resources of the United States.

(b) SCOPE OF STUDY.—

1 (1) IN GENERAL.—The study described in sub-  
2 section (a) shall be comprised of each assessment de-  
3 scribed in paragraphs (2) through (4).

4 (2) TRANSPORTATION SECTOR ASSESSMENT.—

5 (A) IN GENERAL.—The study shall include  
6 a lifecycle assessment of the quantity of water  
7 withdrawn and consumed in the production of  
8 transportation fuels, or electricity used as a fuel  
9 source, to evaluate the ratio that—

10 (i) the quantity of water withdrawn  
11 and consumed in the production of trans-  
12 portation fuels (measured in gallons), or  
13 electricity (measured in kilowatt-hours);  
14 bears to

15 (ii) the total distance (measured in  
16 miles) that may be traveled as a result of  
17 the consumption of transportation fuels, or  
18 electricity.

19 (B) SCOPE OF ASSESSMENT.—

20 (i) IN GENERAL.—The assessment  
21 shall include, as applicable—

22 (I) the exploration for, and ex-  
23 traction or growing of, energy feed-  
24 stock;

1 (II) the processing of energy  
2 feedstock into transportation fuel;

3 (III) the generation, transpor-  
4 tation, and storage of electricity for  
5 transportation; and

6 (IV) the conduct of an analysis of  
7 the efficiency with which the transpor-  
8 tation fuel is consumed.

9 (ii) FUELS.—The assessment shall  
10 contain an analysis of transportation fuel  
11 sources, including—

12 (I) domestically produced crude  
13 oil (including products derived from  
14 domestically produced crude oil);

15 (II) imported crude oil (including  
16 products derived from imported crude  
17 oil);

18 (III) domestically produced nat-  
19 ural gas (including liquid fuels derived  
20 from natural gas);

21 (IV) imported natural gas (in-  
22 cluding liquid fuels derived from nat-  
23 ural gas);

24 (V) oil shale;

25 (VI) tar sands;

1 (VII) domestically produced corn-  
2 based ethanol;

3 (VIII) imported corn-based eth-  
4 anol;

5 (IX) advanced biofuels (including  
6 cellulosic- and algae-based biofuels);

7 (X) coal to liquids (including  
8 aviation fuel, diesel, and gasoline  
9 products);

10 (XI) electricity consumed in—

11 (aa) fully electric drive vehi-  
12 cles; and

13 (bb) plug-in hybrid vehicles;

14 (XII) hydrogen; and

15 (XIII) any reasonably foreseeable  
16 combination of any transportation fuel  
17 source described in subclauses (I)  
18 through (XII).

19 (3) ELECTRICITY SECTOR ASSESSMENT.—

20 (A) IN GENERAL.—The study shall include  
21 a lifecycle assessment of the quantity of water  
22 withdrawn and consumed in the production of  
23 electricity to evaluate the ratio that—



1 (i) the quantity of water used and  
2 consumed in the production of electricity  
3 (measured in gallons); bears to

4 (ii) the quantity of electricity that is  
5 produced (measured in kilowatt-hours).

6 (B) SCOPE OF ASSESSMENT.—The assess-  
7 ment shall include, as applicable—

8 (i) the exploration for, or extraction  
9 or growing of, energy feedstock;

10 (ii) the processing of energy feedstock  
11 for electricity production; and

12 (iii) the production of electricity.

13 (C) GENERATION TYPES.—The assessment  
14 shall contain an evaluation and analysis of elec-  
15 tricity generation facilities that are constructed  
16 in accordance with different plant designs (in-  
17 cluding different cooling technologies such as  
18 water, air, and hybrid systems, and technologies  
19 designed to minimize carbon dioxide releases)  
20 based on the fuel used by the facility, includ-  
21 ing—

22 (i) coal;

23 (ii) natural gas;

24 (iii) oil;

25 (iv) nuclear energy;

- 1 (v) solar energy;
- 2 (vi) wind energy;
- 3 (vii) geothermal energy;
- 4 (viii) biomass;
- 5 (ix) the beneficial use of waste heat;
- 6 and
- 7 (x) any reasonably foreseeable com-
- 8 bination of any fuel described in clauses (i)
- 9 through (ix).

10 (4) ASSESSMENT OF ADDITIONAL IMPACTS.—In  
11 addition to the impacts associated with the direct  
12 use and consumption of water resources in the  
13 transportation and electricity sectors described in  
14 paragraphs (2) and (3), the study shall contain an  
15 identification and analysis of any unique water im-  
16 pact associated with a specific fuel source, including  
17 an impact resulting from—

- 18 (A) any extraction or mining practice;
- 19 (B) the transportation of feedstocks from  
20 the point of extraction to the point of proc-  
21 essing;
- 22 (C) the transportation of fuel and power  
23 from the point of processing to the point of con-  
24 sumption; and

1 (D) the location of a specific fuel source  
2 that is limited to 1 or more specific geo-  
3 graphical regions.

4 (c) REPORT TO SECRETARY.—Not later than 18  
5 months after the date of enactment of this Act, the Na-  
6 tional Academy of Sciences shall submit to the Secretary  
7 a report that contains a summary of the results of the  
8 study conducted under this section.

9 (d) AVAILABILITY OF RESULTS OF STUDY.—On the  
10 date on which the National Academy of Sciences completes  
11 the study under this section, the National Academy of  
12 Sciences shall make available to the public the results of  
13 the study.

14 (e) AUTHORIZATION OF APPROPRIATIONS.—There  
15 are authorized to be appropriated to the Secretary such  
16 sums as are necessary to carry out this section.

17 **SEC. 142. POWER PLANT WATER AND ENERGY EFFICIENCY.**

18 (a) IN GENERAL.—To protect water supplies and  
19 promote the efficient use of water in the electricity produc-  
20 tion sector, the Secretary, in consultation with the Sec-  
21 retary of the Interior and the Administrator of the Envi-  
22 ronmental Protection Agency, shall conduct a study to  
23 identify alternative technologies and related strategies to  
24 optimize water and energy efficiency in the production of  
25 electricity by each type of generation.

1 (b) GENERATION TYPES.—The study shall include an  
2 evaluation of different types of generation facilities, in-  
3 cluding—

4 (1) coal facilities, under which the evaluation  
5 shall account for—

6 (A) different types of coal and associated  
7 generating technologies; and

8 (B) the use of technologies designed to  
9 minimize and sequester carbon dioxide releases;  
10 (2) oil and natural gas facilities, under which  
11 the evaluation shall account for the use of tech-  
12 nologies designed to minimize and sequester carbon  
13 dioxide releases;

14 (3) hydropower, including turbine upgrades, in-  
15 cremental hydropower, in-stream hydropower, and  
16 pump-storage projects;

17 (4) thermal solar facilities; and

18 (5) nuclear facilities.

19 (c) REPORT TO CONGRESS.—Not later than 18  
20 months after the date of enactment of this Act, the Sec-  
21 retary shall submit to the appropriate committees of Con-  
22 gress a report that contains a description of the results  
23 of the study conducted under this section (including an  
24 assessment of any region-specific factor, such as water

1 availability and energy reliability, that should be consid-  
2 ered in evaluating the results).

3 (d) AUTHORIZATION OF APPROPRIATIONS.—There  
4 are authorized to be appropriated to the Secretary such  
5 sums as are necessary to carry out this section, to remain  
6 available until expended.

7 **SEC. 143. RECLAMATION WATER CONSERVATION AND EN-**  
8 **ERGY SAVINGS STUDY.**

9 (a) DEFINITIONS.—In this section:

10 (1) MAJOR RECLAMATION PROJECT.—The term  
11 “major Reclamation project” means a multipurpose  
12 project authorized by the Federal Government and  
13 carried out by the Bureau of Reclamation.

14 (2) SECRETARY.—The term “Secretary” means  
15 the Secretary of the Interior, acting through the  
16 Commissioner of Reclamation.

17 (b) STUDY.—

18 (1) IN GENERAL.—In accordance with para-  
19 graph (2), to promote the efficient use of energy in  
20 water distribution systems, the Secretary shall con-  
21 duct a study to evaluate the quantities of energy  
22 used in water storage and delivery operations in  
23 major Reclamation projects.

24 (2) ELEMENTS.—In conducting the study, the  
25 Secretary shall—

1 (A) with respect to each major Reclama-  
2 tion project—

3 (i) assess and estimate the annual en-  
4 ergy consumption associated with the  
5 major Reclamation project; and

6 (ii) identify—

7 (I) each major Reclamation  
8 project that consumes the greatest  
9 quantity of energy; and

10 (II) the aspect of the operation of  
11 each major Reclamation project de-  
12 scribed in subclause (I) that is the  
13 most energy intensive (including water  
14 storage and releases, water delivery,  
15 and administrative operations); and

16 (B) identify opportunities to significantly  
17 reduce current energy consumption and costs  
18 with respect to each major Reclamation project  
19 described in subparagraph (A), including, as  
20 applicable, through—

21 (i) reduced groundwater pumping;

22 (ii) improved reservoir operations;

23 (iii) infrastructure rehabilitation;

24 (iv) water reuse; and

1 (v) the integration of renewable en-  
 2 ergy generation with project operations.

3 (c) REPORT TO CONGRESS.—Not later than 18  
 4 months after the date of enactment of this Act, the Sec-  
 5 retary shall submit to the appropriate committees of Con-  
 6 gress a report that contains a description of the results  
 7 of the study conducted under this section.

8 (d) AUTHORIZATION OF APPROPRIATIONS.—There  
 9 are authorized to be appropriated to the Secretary such  
 10 sums as are necessary to carry out this section, to remain  
 11 available until expended.

12 **SEC. 144. BRACKISH GROUNDWATER NATIONAL DESALINA-**  
 13 **TION RESEARCH FACILITY.**

14 (a) DEFINITIONS.—In this section:

15 (1) FACILITY.—The term “facility” means the  
 16 Brackish Groundwater National Desalination Re-  
 17 search Facility, located in Otero County, New Mex-  
 18 ico.

19 (2) SECRETARY.—The term “Secretary” means  
 20 the Secretary of the Interior.

21 (b) DUTY OF SECRETARY.—The Secretary shall oper-  
 22 ate, manage, and maintain the facility to carry out re-  
 23 search, development, and demonstration activities to de-  
 24 velop technologies and methods that promote brackish

1 groundwater desalination as a viable method to increase  
2 water supply in a cost-effective manner.

3 (c) OBJECTIVES; ACTIVITIES.—

4 (1) OBJECTIVES.—The Secretary shall operate  
5 and manage the facility as a state-of-the-art desali-  
6 nation research center—

7 (A) to develop new water and energy tech-  
8 nologies with widespread applicability; and

9 (B) to create new supplies of usable water  
10 for municipal, agricultural, industrial, or envi-  
11 ronmental purposes.

12 (2) ACTIVITIES.—In operating, managing, and  
13 maintaining the facility under subsection (b), the  
14 Secretary shall carry out—

15 (A) as a priority, the development of re-  
16 newable energy technologies for integration with  
17 desalination technologies—

18 (i) to reduce the capital and oper-  
19 ational costs of desalination;

20 (ii) to minimize the environmental im-  
21 pacts of desalination; and

22 (iii) to increase public acceptance of  
23 desalination as a viable water supply proc-  
24 ess;



1 (B) research regarding various desalination  
2 processes, including improvements in reverse  
3 and forward osmosis technologies;

4 (C) the development of innovative methods  
5 and technologies to reduce the volume and cost  
6 of desalination concentrated wastes (including  
7 the disposal of desalination concentrated  
8 wastes) in an environmentally sound manner;

9 (D) an outreach program to create part-  
10 nerships with States, academic institutions, pri-  
11 vate entities, and other appropriate organiza-  
12 tions to conduct research, development, and  
13 demonstration activities, including the establish-  
14 ment of rental and other charges to provide rev-  
15 enue to help offset the costs of operating and  
16 maintaining the facility; and

17 (E) an outreach program to educate the  
18 public on—

19 (i) desalination and renewable energy  
20 technologies; and

21 (ii) the benefits of using water in an  
22 efficient manner.

23 (d) AUTHORITY OF SECRETARY.—The Secretary may  
24 enter into contracts or other agreements with, or make  
25 grants to, appropriate entities to manage, operate, or oth-

erwise carry out this section, including an agreement with a local or regional academic institution or a consortium of institutions to manage research activities at the facility.

(e) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated such sums as are necessary to carry out this section, to remain available until expended.

**SEC. 145. ENHANCED INFORMATION ON WATER-RELATED ENERGY CONSUMPTION.**

Section 205 of the Department of Energy Organization Act (42 U.S.C. 7135) is amended by adding at the end the following:

“(n) WATER-RELATED ENERGY CONSUMPTION.—

“(1) IN GENERAL.—Not less than once during each 3-year period, to aid in the understanding and reduction of the quantity of energy used in association with the use of water, the Administrator shall conduct an assessment under which the Administrator shall collect information on energy use in various sectors of the economy that are associated with the procurement, treatment, or delivery of water.

“(2) REQUIRED SECTORS.—An assessment described in paragraph (1) shall contain an analysis of water-related energy use for all relevant sectors of the economy, including water used for—

1 “(A) agricultural purposes;

2 “(B) municipal purposes;

3 “(C) industrial purposes; and

4 “(D) domestic purposes.

5 “(3) EFFECT.—Nothing in this subsection af-  
6 fects the authority of the Administrator to collect  
7 data under section 52 of the Federal Energy Admin-  
8 istration Act of 1974 (15 U.S.C. 790a).”.

9 **SEC. 146. ENERGY-WATER RESEARCH AND DEVELOPMENT**  
10 **ROADMAP.**

11 (a) IN GENERAL.—Not later than 90 days after the  
12 date of enactment of this Act, the Secretary shall develop  
13 a document to be known as the “Energy-Water Research  
14 and Development Roadmap” to define the future research,  
15 development, demonstration, and commercialization ef-  
16 forts that are required to address emerging water-related  
17 challenges to future, cost-effective, reliable, and sustain-  
18 able energy generation and production.

19 (b) REPORT.—Not later than 120 days after the date  
20 of enactment of this Act, the Secretary shall submit to  
21 the appropriate committees of Congress a report describ-  
22 ing the document described in subsection (a), including  
23 recommendations for any future action with respect to the  
24 document.

1 **SEC. 147. ENERGY-WATER CLEAN TECHNOLOGY GRANT**  
2 **PROGRAM.**

3 (a) DEFINITIONS.—In this section:

4 (1) ELIGIBLE ENTITY.—The term “eligible enti-  
5 ty” means—

6 (A) an eligible unit of local government;

7 (B) an Indian tribe; and

8 (C) a water or wastewater agency of a  
9 State or local government.

10 (2) ELIGIBLE UNIT OF LOCAL GOVERNMENT.—  
11 The term “eligible unit of local government” has the  
12 meaning given the term in section 541 of the Energy  
13 Independence and Security Act of 2007 (42 U.S.C.  
14 17151).

15 (3) INDIAN TRIBE.—The term “Indian tribe”  
16 has the meaning given the term in section 4 of the  
17 Indian Self-Determination and Education Assistance  
18 Act (25 U.S.C. 450b).

19 (b) GRANT PROGRAM.—In accordance with sub-  
20 section (c), the Secretary may carry out a competitive  
21 grant program under which the Secretary may provide  
22 grants to eligible entities to demonstrate the deployment  
23 of technologies that reduce the consumption of, or con-  
24 serve, energy supplies through energy savings and water  
25 conservation activities in commercial, residential, and  
26 mixed-use development projects.

1 (c) REQUIREMENTS.—

2 (1) PROVISION OF ASSISTANCE.—In carrying  
3 out the program under subsection (b), the Secretary  
4 shall provide assistance to eligible entities that carry  
5 out projects that—

6 (A) have the potential to be replicated in  
7 other locations;

8 (B) are of sufficient size to demonstrate  
9 deployment of the project at scale; and

10 (C) are likely to accelerate and expand in-  
11 vestment in cost-effective technologies that  
12 demonstrate sustained reductions in energy con-  
13 sumption or conservation of energy supplies, in-  
14 cluding the deployment of renewable energy and  
15 water reuse technologies.

16 (2) PRIORITIZATION.—In selecting eligible enti-  
17 ties under paragraph (1), the Secretary shall give  
18 priority to each eligible entity that carries out a  
19 project that has the potential to create sustained en-  
20 ergy reductions that are greater than 50 percent for  
21 the project development, as compared to similar  
22 project developments that do not include the tech-  
23 nology used by the project that is the subject of the  
24 demonstration.

1           (3) COST-SHARING.—Each demonstration activ-  
2           ity carried out under a project under this program  
3           shall be subject to each cost-sharing requirement de-  
4           scribed in section 988 of the Energy Policy Act of  
5           2005 (42 U.S.C. 16352).

6           (4) PUBLIC-PRIVATE PARTNERSHIPS.—The Sec-  
7           retary shall provide a grant under this section only  
8           to an eligible entity that uses a public-private part-  
9           nership to design and carry-out the project of the el-  
10          igible entity.

11          (5) LIMITATION ON FUNDS.—Funds provided  
12          through a grant made by the Secretary under this  
13          section shall not be used by the recipient eligible en-  
14          tity for any operation or maintenance cost of the eli-  
15          gible entity.

16          (6) REPORT.—The Secretary shall require each  
17          eligible entity that receives a grant from the Sec-  
18          retary under this section to submit to the Secretary  
19          on a date not later than 1 year after the date on  
20          which the eligible entity completes the project of the  
21          eligible entity a report that contains a description  
22          of—

23                 (A) the estimated reductions in water use  
24                 achieved by the project of the entity;

1 (B) the reductions in energy consumption  
 2 achieved by the project of the entity;

3 (C) the comprehensive environmental bene-  
 4 fits achieved by the project of the entity; and

5 (D) the manner by which each reduction or  
 6 benefit described in subparagraphs (A) through  
 7 (C) compare to the original estimates of the eli-  
 8 gible entity.

9 (d) AUTHORIZATION OF APPROPRIATIONS.—There is  
 10 authorized to be appropriated to the Secretary to carry  
 11 out this section \$100,000,000 for each of fiscal years 2010  
 12 through 2015, to remain available until expended.

13 **SEC. 148. RURAL WATER UTILITIES ENERGY AND WATER**  
 14 **EFFICIENCY PROGRAM.**

15 (a) DUTY OF SECRETARY.—As soon as practicable  
 16 after the date of enactment of this Act, the Secretary shall  
 17 establish and carry out a program similar to, and con-  
 18 sistent with, the national rural water and wastewater cir-  
 19 cuit rider program established under section 306(a)(22)  
 20 of the Consolidated Farm and Rural Development Act (7  
 21 U.S.C. 1926(a)(22)) (including the authority to make  
 22 grants)—

23 (1) to provide on-site technical assistance to  
 24 rural drinking water and wastewater utilities (in-  
 25 cluding utilities serving an Indian tribe (as defined

1 in section 4 of the Indian Self-Determination and  
2 Education Assistance Act (25 U.S.C. 450b)); and

3 (2) to improve energy efficiency, identify and  
4 develop alternative and renewable energy supplies,  
5 and conserve water in the operation of rural drink-  
6 ing water and wastewater utilities.

7 (b) AUTHORIZATION OF APPROPRIATIONS.—There is  
8 authorized to be appropriated to the Secretary to carry  
9 out this section \$7,000,000 for each of fiscal years 2010  
10 through 2015.

11 **SEC. 149. COMPREHENSIVE WATER USE AND ENERGY SAV-**  
12 **INGS STUDY.**

13 (a) IN GENERAL.—As soon as practicable after the  
14 date of enactment of this Act, in consultation with other  
15 Federal agencies and appropriate entities, and incor-  
16 porating available governmental and nongovernmental  
17 data as appropriate, the Secretary shall conduct a com-  
18 prehensive study to determine the interrelated nature of  
19 water and energy use (including energy consumption in  
20 water-related processes and the manner by which to re-  
21 duce water-related energy consumption) to promote the ef-  
22 ficient use of water and energy.

23 (b) REQUIRED COMPONENTS.—

24 (1) IN GENERAL.—In conducting the study  
25 under subsection (a), the Secretary shall include



1 each component described in paragraphs (2) through  
2 (5).

3 (2) INDUSTRIAL WATER.—In accordance with  
4 paragraph (1), the Secretary shall—

5 (A) assess the annual industrial water use  
6 of the United States through a comparison, as  
7 the Secretary determines to be appropriate, of  
8 the differences in usage among—

9 (i) various regions of the United  
10 States;

11 (ii) industry types and processes; and

12 (iii) the use of in-plant waste treat-  
13 ment facilities; and

14 (B) identify opportunities to reduce signifi-  
15 cantly industrial energy consumption and asso-  
16 ciated costs through the use of—

17 (i) water management strategies;

18 (ii) water conservation using tech-  
19 nologies in existence as of the date of en-  
20 actment of this Act; and

21 (iii) reused water, particularly with re-  
22 spect to industrial energy applications.

23 (3) PEAK DEMAND.—In accordance with para-  
24 graph (1), the Secretary shall identify options to re-  
25 duce energy use by water treatment and delivery

1 systems during peak electric demand periods, includ-  
2 ing through—

3 (A) the use of increased water storage fa-  
4 cilities;

5 (B) the aggregation of water system utility  
6 accounts;

7 (C) the installation of supervisory control  
8 and data acquisition systems; and

9 (D) improvements made to primary and  
10 secondary water and wastewater treatment.

11 (4) NONPOTABLE WATER SOURCES.—In accord-  
12 ance with paragraph (1), the Secretary shall identify  
13 and assess—

14 (A) the applications and uses for nonfresh-  
15 water sources of water supply in industrial,  
16 commercial, and residential applications; and

17 (B) the potential energy conservation that  
18 may result from the use of nonfreshwater sup-  
19 plies, including—

20 (i) recycled and reclaimed water;

21 (ii) produced water; and

22 (iii) other nontraditional water  
23 sources.

24 (5) EMBEDDED ENERGY.—In accordance with  
25 paragraph (1), to facilitate an understanding of the

1 potential energy savings associated with water con-  
 2 servation and efficiency, the Secretary shall assess  
 3 and estimate the quantity and type of energy con-  
 4 sumed in the procurement, transport, and treatment  
 5 of water supplies and wastewater that serve indus-  
 6 trial, commercial, and residential uses, including  
 7 variations relating to differences in geography and  
 8 types of supply and wastewater processes.

9 (c) REPORT.—Not later than 18 months after the  
 10 date of enactment of this Act, the Secretary shall submit  
 11 to the appropriate committees of Congress a report that  
 12 contains a description of—

13 (1) the results of the study conducted by the  
 14 Secretary under this section; and

15 (2) the means by which to incorporate, and the  
 16 benefits of incorporating, the results of the study  
 17 into related reports prepared by the Secretary.

## 18 **Subtitle E—Vehicle Technology** 19 **Deployment**

### 20 **SEC. 151. TRANSPORTATION ROADMAP STUDY.**

21 (a) IN GENERAL.—The Secretary shall enter into an  
 22 arrangement with the National Academy of Sciences  
 23 under which the Academy shall—

1           (1) conduct a comprehensive analysis of energy  
2       use within the light-duty vehicle transportation sec-  
3       tor; and

4           (2) use the analysis to conduct an integrated  
5       study of the technology options for alternative fuels,  
6       including electricity, natural gas, hydrogen, and ad-  
7       vanced technologies (including battery, hybrid and  
8       fuel cell electric, advanced internal combustion, and  
9       lean burn diesel technologies), that could reduce pe-  
10      troleum consumption and greenhouse gas emissions.

11      (b) COMPONENTS.—The study shall—

12           (1) review the status of technologies and assess  
13      the potential of the technologies to meet goals to re-  
14      duce petroleum consumption and greenhouse gas  
15      emissions, including—

16           (A) potential future fuels and pathways to  
17      commercial deployment;

18           (B) infrastructure needs for future fuels  
19      and other barriers to market penetration;

20           (C) potential timing of market adoption  
21      and opportunities to increase the pace of mar-  
22      ket adoption;

23           (D) a comparison of the potential reduc-  
24      tions of petroleum consumption and greenhouse

1 gas emissions for different technological ap-  
2 proaches; and

3 (E) improvements in and priorities for  
4 Federal research and development program ac-  
5 tivities to accelerate the development of the  
6 most promising technologies;

7 (2) consider issues relating to vehicle duty cy-  
8 cles, regional distinctions, and technology develop-  
9 ment timelines;

10 (3) build on and integrate applicable research  
11 conducted in recent years, including by the Acad-  
12 emy;

13 (4) evaluate technical options and assess the ex-  
14 tent to which the United States can employ the op-  
15 tions to reduce oil intensity by 80 percent by cal-  
16 endar year 2050 and reduce carbon dioxide emis-  
17 sions at a rate that is consistent with national goals;  
18 and

19 (5) recommend policies to help facilitate the  
20 United States meeting national goals.

21 (c) REPORT.—Not later than 21 months after the  
22 date on which funds are first made available to carry out  
23 this section, and every 5 years thereafter, the Secretary  
24 shall submit to the Committee on Energy and Natural Re-  
25 sources of the Senate and the Committee on Energy and

1 Commerce of the House of Representatives a report (or  
 2 updated report) on the results of the study conducted  
 3 under subsection (a), including any recommendations.

4 (d) AUTHORIZATION OF APPROPRIATIONS.—There  
 5 are authorized to be appropriated such sums as are nec-  
 6 essary to carry out this section.

7 **SEC. 152. VEHICLE TECHNOLOGY AND RECHARGING INFRA-**  
 8 **STRUCTURE.**

9 Section 131 of the Energy Independence and Security  
 10 Act of 2007 (42 U.S.C. 17011) is amended by adding at  
 11 the end the following:

12 “(e) MARKET ASSESSMENT AND RECHARGING IN-  
 13 FRASTRUCTURE STUDY.—

14 “(1) DEFINITIONS.—In this subsection:

15 “(A) LOCAL GOVERNMENT.—

16 “(i) IN GENERAL.—The term ‘local  
 17 government’ has the meaning given the  
 18 term in section 3371 of title 5, United  
 19 States Code.

20 “(ii) INCLUSIONS.—The term ‘local  
 21 government’ includes entities described in  
 22 sections 7 and 8 of the Alaska Native  
 23 Claims Settlement Act (43 U.S.C. 1606,  
 24 1607).

1           “(B) RANGE EXTENSION INFRASTRUC-  
 2           TURE.—The term ‘range extension infrastruc-  
 3           ture’ includes equipment, products, or services  
 4           for recharging plug-in electric vehicles that—

5                   “(i) are available to retail consumers  
 6                   of electric drive vehicles on a nonexclusive  
 7                   basis, including payment interoperability  
 8                   with other systems; and

9                   “(ii) provide for extending driving  
 10                  range through battery exchange or rapid  
 11                  recharging.

12           “(C) STATE.—The term ‘State’ has the  
 13           meaning given the term in section 3371 of title  
 14           5, United States Code.

15           “(2) STUDY.—The Secretary, in consultation  
 16           with the Administrator, and the Secretary of Trans-  
 17           portation, shall carry out a program to analyze and  
 18           assess—

19                   “(A) the number and distribution of re-  
 20                   charging facilities, including range extension in-  
 21                   frastructure, that will be required for drivers of  
 22                   plug-in electric drive vehicles and neighborhood  
 23                   electric vehicles to reliably recharge those elec-  
 24                   tric drive vehicles to meet the average needs of  
 25                   the drivers;

1           “(B) minimum technical standards for  
2 public recharging facilities necessary for wide-  
3 spread deployment;

4           “(C) the technical and infrastructure in-  
5 vestments that electric utilities and electricity  
6 providers will be required to make to support  
7 widespread deployment of recharging infra-  
8 structure, including an estimate of the invest-  
9 ments;

10          “(D) existing electric drive transportation  
11 technologies and the state of markets for the  
12 purchase of those technologies;

13          “(E) methods of removing market barriers  
14 for existing and emerging applications of elec-  
15 tric drive transportation technologies;

16          “(F) the potential value to the electric grid  
17 of using the energy stored in on-board storage  
18 systems to improve the efficiency and reliability  
19 of the grid generation system; and

20          “(G) the implications of the introduction of  
21 plug-in electric drive vehicles and other types of  
22 electric transportation on the production of  
23 electricity from renewable resources.



1           “(3) COMPONENTS.—In conducting the study,  
2           the Secretary shall analyze and make recommenda-  
3           tions on—

4                   “(A) the variety and density of recharging  
5           infrastructure options necessary to power plug-  
6           in electric drive vehicles under diverse scenarios,  
7           including—

8                           “(i) the ratio of residential, commer-  
9                           cial, and public recharging infrastructure  
10                          options necessary to support 10 percent-,  
11                          20 percent-, and 50 percent-penetration of  
12                          plug-in electric vehicles on a city fleet  
13                          basis;

14                           “(ii) the ratio of residential, commer-  
15                           cial, and public recharging infrastructure  
16                          options necessary to support 10 percent-,  
17                          20 percent-, and 50 percent-penetration of  
18                          plug-in electric vehicles on a regional fleet  
19                          basis;

20                           “(iii) the ratio of residential, commer-  
21                           cial, and public recharging infrastructure  
22                          options necessary to support 10 percent-,  
23                          20 percent-, and 50 percent-penetration of  
24                          plug-in electric vehicles on a national fleet  
25                          basis; and

1                   “(iv) the potential impact of fast  
2                   charging on market penetration rates for  
3                   electric drive vehicles and the effects on  
4                   electric utilities;

5                   “(B) the effects on market penetration of  
6                   reserved parking spots with access to re-  
7                   charging facilities;

8                   “(C) model codes (including building  
9                   codes) that need to be updated or otherwise  
10                  modified to enable widespread deployment of re-  
11                  charging facilities; and

12                  “(D) such other issues as the Secretary  
13                  considers to be appropriate.

14                  “(4) REPORT.—Not later than 1 year after the  
15                  date of enactment of this subsection, the Secretary  
16                  shall submit to the Committee on Energy and Nat-  
17                  ural Resources of the Senate and the Committee on  
18                  Energy and Commerce of the House of Representa-  
19                  tives a report on the results of the study conducted  
20                  under this subsection, including recommendations.

21                  “(f) FINANCIAL SUPPORT.—

22                  “(1) IN GENERAL.—Not later than 18 months  
23                  after the date of enactment of this subsection, the  
24                  Secretary shall establish a program to support the  
25                  deployment and integration of plug-in electric drive

1 vehicles in multiple regions of the United States  
2 through the provision of financial support to State  
3 and local governments and other entities to assist in  
4 the installation of recharging facilities for electric  
5 drive vehicles.

6 “(2) FINANCIAL ASSISTANCE.—In carrying out  
7 the program, the Secretary may provide financial as-  
8 sistance described in paragraph (7) to promote the  
9 goals described in paragraph (4).

10 “(3) REGIONS.—The Secretary shall select re-  
11 gions for financial assistance under this subsection  
12 based on applications for the assistance received  
13 under paragraph (7), taking into consideration the  
14 findings of the study conducted under subsection (e).

15 “(4) GOALS.—The goals of the program estab-  
16 lished under this subsection shall be—

17 “(A) to demonstrate the viability of a vehi-  
18 cle-based transportation system that reduces—

19 “(i) the use of petroleum as a fuel;

20 and

21 “(ii) the emissions of greenhouse  
22 gases and other pollutants compared to a  
23 system based on conventional transpor-  
24 tation fuels;

1           “(B) to facilitate the integration of ad-  
2           vanced vehicle technologies into electricity dis-  
3           tribution areas to improve system performance  
4           and reliability;

5           “(C) to demonstrate the potential benefits  
6           of coordinated investments in vehicle electrifica-  
7           tion on personal mobility and a regional grid;

8           “(D) to demonstrate protocols and stand-  
9           ards that facilitate vehicle integration into the  
10          grid; and

11          “(E) to investigate differences in each re-  
12          gion and regulatory environment regarding best  
13          practices in implementing vehicle electrification.

14          “(5) USE OF FUNDS.—Subject to paragraph  
15          (6), the Secretary may provide financial assistance  
16          to any applicant that applies for, and receives the  
17          approval of the Secretary, under paragraph (7)—

18               “(A) to assist persons located in a region  
19               (including fleet owners) in the purchase of new  
20               plug-in electric drive vehicles by reducing the  
21               incremental cost of the vehicles above the cost  
22               of comparable conventionally fueled vehicles;

23               “(B) to support the use of plug-in electric  
24               drive vehicles by funding projects for the de-  
25               ployment of—

1           “(i) recharging infrastructure for  
2           plug-in electric drive vehicles (including  
3           range extension infrastructure);

4           “(ii) smart grid equipment and infra-  
5           structure to facilitate the charging and in-  
6           tegration of plug-in electric drive vehicles;  
7           or

8           “(iii) the purchase of advanced bat-  
9           teries for use in plug-in electric drive vehi-  
10          cles; or

11          “(C) to carry out such other projects as  
12          the Secretary determines are appropriate to  
13          support the large-scale deployment of plug-in  
14          electric drive vehicles in regional deployment  
15          areas.

16          “(6) COST SHARE.—The Secretary shall carry  
17          out the programs established under this subsection  
18          in accordance with section 988 of the Energy Policy  
19          Act of 2005 (42 U.S.C. 16352).

20          “(7) FINANCIAL SUPPORT.—

21                 “(A) IN GENERAL.—The Secretary may—

22                         “(i) provide grants to States and local  
23                         governments for demonstration and com-  
24                         mercial application of recharging infra-  
25                         structure in accordance with paragraph (8)

1 in accordance with section 988 of the En-  
2 ergy Policy Act of 2005 (42 U.S.C.  
3 16352); and

4 “(ii) consult with the Administrator of  
5 the Clean Energy Deployment Administra-  
6 tion to further the goals of this section.

7 “(B) APPLICATIONS.—

8 “(i) IN GENERAL.—An applicant that  
9 seeks to receive financial assistance under  
10 this subsection shall submit to the Sec-  
11 retary an application at such time, in such  
12 manner, and containing such information  
13 as the Secretary determines are necessary  
14 through rulemaking.

15 “(ii) JOINT SPONSORSHIP.—An appli-  
16 cation may be jointly sponsored by electric  
17 utilities, automobile manufacturers, tech-  
18 nology providers, car-sharing companies or  
19 organizations, or other persons or entities.

20 “(C) REQUIREMENTS.—The design ele-  
21 ments and requirements of the program estab-  
22 lished under this subsection shall include—

23 “(i) an evaluation of the financial  
24 mechanisms that will most effectively pro-  
25 mote the purposes of this section;

1           “(ii) criteria for evaluating applica-  
 2           tions submitted under this paragraph, tak-  
 3           ing into consideration the findings of the  
 4           study conducted under subsection (e) (in-  
 5           cluding the anticipated ability to promote  
 6           deployment and market penetration of  
 7           plug-in electric drive vehicles that are less  
 8           dependent on petroleum as a fuel source);

9           “(iii) reporting requirements for enti-  
 10          ties that receive financial assistance under  
 11          this subsection, including a comprehensive  
 12          set of performance data that reflect the re-  
 13          sults of the program; and

14          “(iv) provisions that no proprietary  
 15          information, trade secret, or other con-  
 16          fidential information is required to be dis-  
 17          closed.

18          “(8) GRANTS TO STATES AND LOCAL GOVERN-  
 19          MENTS FOR RECHARGING INFRASTRUCTURE.—

20               “(A) IN GENERAL.—The Secretary shall  
 21               establish a program under which the Secretary  
 22               shall provide grants and other financial support  
 23               to States and local governments to assist in the  
 24               installation of recharging infrastructure for

1 plug-in electric drive vehicles in areas under the  
2 jurisdiction of the States or local governments.

3 “(B) ELIGIBILITY.—To be eligible to ob-  
4 tain a grant or other financial support under  
5 this subsection, a State or local government  
6 shall—

7 “(i) demonstrate to the Secretary that  
8 the applicant has taken into consideration  
9 the findings of the report submitted under  
10 subsection (e), unless the State or local  
11 government demonstrates to the Secretary  
12 that an alternative variety and density of  
13 recharging infrastructure options would  
14 better meet the purposes of this section;  
15 and

16 “(ii) agree not to charge a premium  
17 for use of a parking space used to recharge  
18 an electric drive vehicle other than a  
19 charge for electric energy.

20 “(C) GUIDELINES.—The Secretary shall  
21 establish guidelines for carrying out this sub-  
22 section that are consistent with the report sub-  
23 mitted under subsection (e).

24 “(9) AUTHORIZATION OF APPROPRIATIONS.—

25 There are authorized to be appropriated to the Sec-



1       retary such sums as are necessary to carry out this  
2       subsection, to remain available until expended.

3       “(g) INFORMATION CLEARINGHOUSE.—As part of  
4 the program established under this section, the Secretary  
5 shall collect and make available to the public information  
6 regarding the cost, performance, and other technical data  
7 regarding the deployment and integration of plug-in hy-  
8 brid electric drive vehicles.

9       “(i) AUTHORIZATION OF APPROPRIATIONS.—There  
10 are authorized to be appropriated such sums as are nec-  
11 essary to carry out this subsections (e) and (g).”.

12 **SEC. 153. ELECTRIC DRIVE TRANSPORTATION STANDARD-**  
13 **IZATION.**

14       (a) REPORT TO CONGRESS.—

15           (1) IN GENERAL.—Not later than 180 days  
16 after the date of enactment of this Act, the Sec-  
17 retary, in consultation with the National Institute of  
18 Standards and Technology, the National Labora-  
19 tories, utilities, vehicle manufacturers, battery man-  
20 ufacturers, industry trade associations, and such  
21 other entities as the Secretary determines to be ap-  
22 propriate, shall submit to Congress a report con-  
23 taining recommendations for establishing and adopt-  
24 ing consensus or industry standards for electric  
25 drive transportation.

1 (2) CONTENTS.—The report shall—

2 (A) identify consensus standards that exist  
3 or are under development, such as—

4 (i) standardized electronic protocols  
5 for use in communicating with the elec-  
6 trical power grid;

7 (ii) safety and interoperability stand-  
8 ards for the plug and socket for plug-in  
9 electric drive vehicles;

10 (iii) battery-to-vehicle high voltage  
11 power connectors;

12 (iv) battery-to-vehicle communications  
13 signal interface hardware and operational  
14 protocols;

15 (v) safety interlock devices;

16 (vi) battery safety; and

17 (vii) other items identified by the Sec-  
18 retary as priority items;

19 (B) identify priority standards for the  
20 widespread deployment of electric drive tech-  
21 nology; and

22 (C) recommend a collaborative process for  
23 public and private entities that will accelerate  
24 the development of priority standards, includ-  
25 ing—

- 1 (i) making maximum use of existing  
2 relevant work; and  
3 (ii) identifying areas in which new re-  
4 search is required.

5 (b) AUTHORIZATION OF APPROPRIATIONS.—There  
6 are authorized to be appropriated such sums as are nec-  
7 essary to carry out this section.

8 **SEC. 154. PILOT PROGRAM FOR PLUG-IN ELECTRIC DRIVE**  
9 **VEHICLES FOR FEDERAL FLEET.**

10 Section 131 of the Energy Independence and Security  
11 Act of 2007 (42 U.S.C. 17011) (as amended by section  
12 152) is amended by adding at the end the following:

13 “(h) PILOT PROGRAM FOR PLUG-IN ELECTRIC  
14 DRIVE VEHICLES.—

15 “(1) IN GENERAL.—The Secretary shall estab-  
16 lish, as part of the Federal Energy Management  
17 Program, a pilot program under which the Secretary  
18 shall provide grants for—

19 “(A) the incremental cost of precommercial  
20 plug-in electric drive vehicles for purchase or  
21 lease in an amount not to exceed \$10,000 per  
22 vehicle purchased or \$1,500 per year per vehicle  
23 leased; and

24 “(B) recharging infrastructure at Federal  
25 facilities in conjunction with the vehicles.

1           “(2) GUIDELINES.—Not later than 90 days  
2           after the date of enactment of this subsection, the  
3           Secretary shall issue guidelines for the pilot program  
4           established under this subsection.

5           “(3) AUTHORIZATION OF APPROPRIATIONS.—  
6           There are authorized to be appropriated such sums  
7           as are necessary to carry out this subsection for the  
8           period of fiscal years 2010 through 2015.”.

9   **SEC. 155. STUDY OF END-OF-USEFUL LIFE OPTIONS FOR**  
10                   **MOTOR VEHICLE BATTERIES.**

11          (a) IN GENERAL.—In combination with the research,  
12          demonstration, and deployment activities conducted under  
13          section 641(k) of the Energy Independence and Security  
14          Act of 2007 (42 U.S.C. 17231(k)), the Secretary shall  
15          conduct a study on the end-of-useful life options for motor  
16          vehicle batteries, including batteries used in electric drive  
17          vehicles.

18          (b) REPORT.—Not later than 1 year after the date  
19          of enactment of this Act, the Secretary shall submit to  
20          the appropriate committees of Congress a report on the  
21          results of the study conducted under subsection (a), in-  
22          cluding recommendations for stationary storage applica-  
23          tions and recyclability design specifications.

1     **TITLE II—ENHANCED ENERGY**  
 2                   **EFFICIENCY**  
 3     **Subtitle A—Manufacturing Energy**  
 4                   **Efficiency**

5     **SEC. 201. STATE PARTNERSHIP INDUSTRIAL ENERGY EFFI-**  
 6                   **CIENCY REVOLVING LOAN PROGRAM.**

7           Section 399A of the Energy Policy and Conservation  
 8     Act (42 U.S.C. 6371h–1) is amended—

9           (1) in the section heading, by inserting “**AND**  
 10     **INDUSTRY**” before the period at the end;

11          (2) by redesignating subsections (h) and (i) as  
 12     subsections (i) and (j), respectively; and

13          (3) by inserting after subsection (g) the fol-  
 14     lowing:

15     “(h) STATE PARTNERSHIP INDUSTRIAL ENERGY EF-  
 16     FICIENCY REVOLVING LOAN PROGRAM.—

17           “(1) IN GENERAL.—The Secretary shall carry  
 18     out a program under which the Secretary shall pro-  
 19     vide grants to eligible lenders to pay the Federal  
 20     share of creating a revolving loan program under  
 21     which loans are provided to commercial and indus-  
 22     trial manufacturers to implement commercially avail-  
 23     able technologies or processes that significantly—

1           “(A) reduce systems energy intensity, in-  
2           cluding the use of energy intensive feedstocks;  
3           and

4           “(B) improve the industrial competitive-  
5           ness of the United States.

6           “(2) ELIGIBLE LENDERS.—To be eligible to re-  
7           ceive cost-matched Federal funds under this sub-  
8           section, a lender shall—

9           “(A) be a community and economic devel-  
10          opment lender that the Secretary certifies meets  
11          the requirements of this subsection;

12          “(B) lead a partnership that includes par-  
13          ticipation by, at a minimum—

14               “(i) a State government agency; and

15               “(ii) a private financial institution or  
16               other provider of loan capital;

17          “(C) submit an application to the Sec-  
18          retary, and receive the approval of the Sec-  
19          retary, for cost-matched Federal funds to carry  
20          out a loan program described in paragraph (1);  
21          and

22          “(D) ensure that non-Federal funds are  
23          provided to match, on at least a dollar-for-dol-  
24          lar basis, the amount of Federal funds that are

1 provided to carry out a revolving loan program  
2 described in paragraph (1).

3 “(3) AWARD.—The amount of cost-matched  
4 Federal funds provided to an eligible lender shall not  
5 exceed \$100,000,000 for any fiscal year.

6 “(4) RECAPTURE OF AWARDS.—

7 “(A) IN GENERAL.—An eligible lender that  
8 receives an award under paragraph (1) shall be  
9 required to repay to the Secretary an amount  
10 of cost-match Federal funds, as determined by  
11 the Secretary under subparagraph (B), if the  
12 eligible lender is unable or unwilling to operate  
13 a program described in this subsection for a pe-  
14 riod of not less than 10 years beginning on the  
15 date on which the eligible lender first receives  
16 funds made available through the award.

17 “(B) DETERMINATION BY SECRETARY.—

18 The Secretary shall determine the amount of  
19 cost-match Federal funds that an eligible lender  
20 shall be required to repay to the Secretary  
21 under subparagraph (A) based on the consider-  
22 ation by the Secretary of—

23 “(i) the amount of non-Federal funds  
24 matched by the eligible lender;

1                   “(ii) the amount of loan losses in-  
 2                   curred by the revolving loan program de-  
 3                   scribed in paragraph (1); and

4                   “(iii) any other appropriate factor, as  
 5                   determined by the Secretary.

6                   “(C) USE OF RECAPTURED COST-MATCH  
 7                   FEDERAL FUNDS.—The Secretary may dis-  
 8                   tribute to eligible lenders under this subsection  
 9                   each amount received by the Secretary under  
 10                  this paragraph.

11                  “(5) ELIGIBLE PROJECTS.—A program for  
 12                  which cost-matched Federal funds are provided  
 13                  under this subsection shall be designed to accelerate  
 14                  the implementation of industrial and commercial ap-  
 15                  plications of technologies or processes that—

16                         “(A) improve energy efficiency;

17                         “(B) enhance the industrial competitive-  
 18                         ness of the United States; and

19                         “(C) achieve such other goals as the Sec-  
 20                         retary determines to be appropriate.

21                  “(6) EVALUATION.—The Secretary shall evalu-  
 22                  ate applications for cost-matched Federal funds  
 23                  under this subsection on the basis of—



1           “(A) the description of the program to be  
2           carried out with the cost-matched Federal  
3           funds;

4           “(B) the commitment to provide non-Fed-  
5           eral funds in accordance with paragraph  
6           (2)(D);

7           “(C) program sustainability over a 10-year  
8           period;

9           “(D) the capability of the applicant;

10          “(E) the quantity of energy savings or en-  
11          ergy feedstock minimization;

12          “(F) the advancement of the goal under  
13          this Act of 25-percent energy avoidance;

14          “(G) the ability to fund energy efficient  
15          projects not later than 120 days after the date  
16          of the grant award; and

17          “(H) such other factors as the Secretary  
18          determines appropriate.

19          “(7) AUTHORIZATION OF APPROPRIATIONS.—

20          There is authorized to be appropriated to carry out  
21          this subsection \$500,000,000 for each of fiscal years  
22          2010 through 2012.”.

1 **SEC. 202. COORDINATION OF RESEARCH AND DEVELOP-**  
2 **MENT OF ENERGY EFFICIENT TECH-**  
3 **NOLOGIES FOR INDUSTRY.**

4 (a) IN GENERAL.—As part of the research and devel-  
5 opment activities of the Industrial Technologies Program  
6 of the Department of Energy, the Secretary shall estab-  
7 lish, as appropriate, collaborative research and develop-  
8 ment partnerships with other programs within the Office  
9 of Energy Efficiency and Renewable Energy, including the  
10 Building Technologies Program, the Office of Electricity  
11 Delivery and Energy Reliability, and programs of the Of-  
12 fice of Science—

13 (1) to leverage the research and development  
14 expertise of those programs to promote early stage  
15 energy efficiency technology development; and

16 (2) to apply the knowledge and expertise of the  
17 Industrial Technologies Program to help achieve the  
18 program goals of the other programs.

19 (b) REPORTS.—Not later than 2 years after the date  
20 of enactment of this Act and biennially thereafter, the Sec-  
21 retary shall submit to Congress a report that describes  
22 actions taken to carry out subsection (a) and the results  
23 of those actions.

1 **SEC. 203. ENERGY EFFICIENT TECHNOLOGIES ASSESS-**  
2 **MENT.**

3 (a) IN GENERAL.—Not later than 60 days after the  
4 date of enactment of this Act, the Secretary shall com-  
5 mence an assessment of commercially available, cost com-  
6 petitive energy efficiency technologies that are not widely  
7 implemented within the United States for the energy in-  
8 tensive industries of—

- 9 (1) steel;
- 10 (2) aluminum;
- 11 (3) forest and paper products;
- 12 (4) food processing;
- 13 (5) metal casting;
- 14 (6) glass;
- 15 (7) chemicals;
- 16 (8) petroleum refining;
- 17 (9) cement;
- 18 (10) information and communication tech-  
19 nologies; and
- 20 (11) other industries that (as determined by the  
21 Secretary)—
  - 22 (A) use large quantities of energy;
  - 23 (B) emit large quantities of greenhouse  
24 gases; or
  - 25 (C) use a rapidly increasing quantity of en-  
26 ergy.

1 (b) REPORT.—Not later than 1 year after the date  
2 of enactment of this Act, the Secretary shall publish a re-  
3 port, based on the assessment conducted under subsection  
4 (a), that contains—

5 (1) a detailed inventory describing the cost, en-  
6 ergy, and greenhouse gas emission savings of each  
7 technology described in subsection (a);

8 (2) for each technology, the total cost, energy,  
9 and greenhouse gas emissions savings if the tech-  
10 nology is implemented throughout the industry of  
11 the United States;

12 (3) for each industry, an assessment of total  
13 possible cost, energy, and greenhouse gas emissions  
14 savings possible if state-of-the art, cost-competitive,  
15 commercial energy efficiency technologies were  
16 adopted; and

17 (4) for each industry, a comparison to the Eu-  
18 ropean Union, Japan, and other appropriate coun-  
19 tries of energy efficiency technology adoption rates,  
20 as determined by the Secretary.

21 **SEC. 204. FUTURE OF INDUSTRY PROGRAM.**

22 (a) IN GENERAL.—Section 452(c)(2) of the Energy  
23 Independence and Security Act of 2007 (42 U.S.C.  
24 17111(c)(2)) is amended by striking the section heading

1 and inserting the following: “**FUTURE OF INDUSTRY**  
2 **PROGRAM**”.

3 (b) INDUSTRY-SPECIFIC ROAD MAPS.—Section  
4 452(c)(2) of the Energy Independence and Security Act  
5 of 2007 (42 U.S.C. 17111(c)(2)) is amended—

6 (1) in subparagraph (E), by striking “and” at  
7 the end;

8 (2) by redesignating subparagraph (F) as sub-  
9 paragraph (G); and

10 (3) by inserting after subparagraph (E) the fol-  
11 lowing:

12 “(F) research to establish (through the In-  
13 dustrial Technologies Program and in collabora-  
14 tion with energy-intensive industries) a road  
15 map process under which—

16 “(i) industry-specific studies are con-  
17 ducted to determine the intensity of energy  
18 use, greenhouse gas emissions, and waste  
19 and operating costs, by process and sub-  
20 process;

21 “(ii) near-, mid-, and long-term tar-  
22 gets of opportunity are established for syn-  
23 ergistic improvements in efficiency, sus-  
24 tainability, and resilience; and

1 “(iii) public/private actionable plans  
 2 are created to achieve roadmap goals;  
 3 and”.

4 (c) INDUSTRIAL RESEARCH AND ASSESSMENT CEN-  
 5 TERS.—

6 (1) IN GENERAL.—Section 452(e) of the En-  
 7 ergy Independence and Security Act of 2007 (42  
 8 U.S.C. 17111(e)) is amended—

9 (A) by redesignating paragraphs (1)  
 10 through (5) as subparagraphs (A) through (E),  
 11 respectively, and indenting appropriately;

12 (B) by striking “The Secretary” and in-  
 13 serting the following:

14 “(1) IN GENERAL.—The Secretary”;

15 (C) in subparagraph (A) (as redesignated  
 16 by subparagraph (A)), by inserting before the  
 17 semicolon at the end the following: “, including  
 18 assessments of sustainable manufacturing goals  
 19 and the implementation of information tech-  
 20 nology advancements for supply chain analysis,  
 21 logistics, industrial and manufacturing proc-  
 22 esses, and other purposes”; and

23 (D) by adding at the end the following:

24 “(2) CENTERS OF EXCELLENCE.—

1           “(A) IN GENERAL.—The Secretary shall  
2           establish a Center of Excellence at up to 10 of  
3           the highest performing industrial research and  
4           assessment centers, as determined by the Sec-  
5           retary.

6           “(B) DUTIES.—A Center of Excellence  
7           shall coordinate with and advise the industrial  
8           research and assessment centers located in the  
9           region of the Center of Excellence.

10          “(C) FUNDING.—Subject to the availability  
11          of appropriations, of the funds made available  
12          under subsection (f), the Secretary shall use to  
13          support each Center of Excellence not less than  
14          \$500,000 for fiscal year 2010 and each fiscal  
15          year thereafter, as determined by the Secretary.

16          “(3) EXPANSION OF CENTERS.—The Secretary  
17          shall provide funding to establish additional indus-  
18          trial research and assessment centers at institutions  
19          of higher education that do not have industrial re-  
20          search and assessment centers established under  
21          paragraph (1), taking into account the size of, and  
22          potential energy efficiency savings for, the manufac-  
23          turing base within the region of the proposed center.

24          “(4) COORDINATION.—

1           “(A) IN GENERAL.—To increase the value  
2           and capabilities of the industrial research and  
3           assessment centers, the centers shall—

4                   “(i) coordinate with Manufacturing  
5                   Extension Partnership Centers of the Na-  
6                   tional Institute of Science and Technology;

7                   “(ii) coordinate with the Building  
8                   Technologies Program of the Department  
9                   of Energy to provide building assessment  
10                  services to manufacturers;

11                  “(iii) increase partnerships with the  
12                  National Laboratories of the Department  
13                  of Energy to leverage the expertise and  
14                  technologies of the National Laboratories  
15                  for national industrial and manufacturing  
16                  needs;

17                  “(iv) identify opportunities for reduc-  
18                  ing greenhouse gas emissions; and

19                  “(v) promote sustainable manufac-  
20                  turing practices for small- and medium-  
21                  sized manufacturers.

22           “(5) OUTREACH.—The Secretary shall provide  
23           funding for—

24                   “(A) outreach activities by the industrial  
25                   research and assessment centers to inform



1 small- and medium-sized manufacturers of the  
2 information, technologies, and services avail-  
3 able; and

4 “(B) a full-time equivalent employee at  
5 each center of excellence whose primary mission  
6 shall be to coordinate and leverage the efforts  
7 of the center with—

8 “(i) Federal and State efforts;

9 “(ii) the efforts of utilities; and

10 “(iii) the efforts of other centers in  
11 the region of the center of excellence.

12 “(6) WORKFORCE TRAINING.—

13 “(A) IN GENERAL.—The Secretary shall  
14 pay the Federal share of associated internship  
15 programs under which students work with in-  
16 dustries and manufactures to implement the  
17 recommendations of industrial research and as-  
18 sessment centers.

19 “(B) FEDERAL SHARE.—The Federal  
20 share of the cost of carrying out internship pro-  
21 grams described in subparagraph (A) shall be  
22 50 percent.

23 “(C) FUNDING.—Subject to the availability  
24 of appropriations, of the funds made available  
25 under subsection (f), the Secretary shall use to

1           carry out this paragraph not less than  
 2           \$5,000,000 for fiscal year 2010 and each fiscal  
 3           year thereafter.

4           “(7) SMALL BUSINESS LOANS.—The Adminis-  
 5           trator of the Small Business Administration shall, to  
 6           the maximum practicable, expedite consideration of  
 7           applications from eligible small business concerns for  
 8           loans under the Small Business Act (15 U.S.C. 631  
 9           et seq.) to implement recommendations of industrial  
 10          research and assessment centers established under  
 11          paragraph (1).”.

12          (d) FUTURE OF INDUSTRY PROGRAM.—Section  
 13          452(f) of the Energy Independence and Security Act of  
 14          2007 (42 U.S.C. 17111(f)) is amended—

15               (1) in paragraph (1)—

16                   (A) in subparagraph (C), by striking  
 17                   “\$196,000,000” and inserting “\$216,000,000”;

18                   (B) in subparagraph (D), by striking  
 19                   “\$202,000,000” and inserting “\$232,000,000”;

20                   and

21                   (C) in subparagraph (E), by striking  
 22                   “\$208,000,000” and inserting “\$248,000,000”;

23                   and

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

1           “(4) INDUSTRIAL RESEARCH AND ASSESSMENT  
 2           CENTERS.—Of the amounts made available under  
 3           paragraph (1), the Secretary shall use to provide  
 4           funding to industrial research and assessment cen-  
 5           ters under subsection (e) not less than—

6                   “(A) \$20,000,000 for fiscal year 2010;

7                   “(B) \$30,000,000 for fiscal year 2011; and

8                   “(C) \$40,000,000 for fiscal year 2012 and  
 9           each fiscal year thereafter.”.

10 **SEC. 205. SUSTAINABLE MANUFACTURING INITIATIVE.**

11           (a) IN GENERAL.—Part E of title III of the Energy  
 12           Policy and Conservation Act (42 U.S.C. 6341) is amended  
 13           by adding at the end the following:

14 **“SEC. 376. SUSTAINABLE MANUFACTURING INITIATIVE.**

15           “(a) IN GENERAL.—As part of the Industrial Tech-  
 16           nologies Program of the Department of Energy, the Sec-  
 17           retary shall carry out a sustainable manufacturing initia-  
 18           tive under which the Secretary, on the request of a manu-  
 19           facturer, shall conduct onsite technical assessments to  
 20           identify opportunities for—

21                   “(1) maximizing the energy efficiency of sys-  
 22           tems;

23                   “(2) preventing pollution and minimizing waste;

24                   “(3) reducing the use of water in manufac-  
 25           turing processes;

1 “(4) conserving natural resources; and

2 “(5) achieving such other goals as the Secretary  
3 determines to be appropriate.

4 “(b) COORDINATION.—The Secretary shall carry out  
5 the initiative in coordination with appropriate agencies, in-  
6 cluding the National Institute of Standards and Tech-  
7 nology.

8 “(c) RESEARCH AND DEVELOPMENT PROGRAM FOR  
9 SUSTAINABLE MANUFACTURING AND INDUSTRIAL TECH-  
10 NOLOGIES AND PROCESSES.—As part of the Industrial  
11 Technologies Program of the Department of Energy, the  
12 Secretary shall carry out a joint industry-government  
13 partnership program to conduct research and development  
14 of new sustainable manufacturing and industrial tech-  
15 nologies and processes that maximize the energy efficiency  
16 of systems, reduce pollution, and conserve natural re-  
17 sources.

18 “(d) AUTHORIZATION OF APPROPRIATIONS.—There  
19 are authorized to be appropriated such sums as are nec-  
20 essary to carry out this section.”.

21 (b) TABLE OF CONTENTS.—The table of contents of  
22 the Energy Policy and Conservation Act (42 U.S.C. prec.  
23 6201) is amended by adding at the end of the items relat-  
24 ing to part E of title III the following:

“Sec. 376. Sustainable manufacturing initiative.”.

1 **SEC. 206. INNOVATION IN INDUSTRY GRANTS.**

2 Section 1008 of the Energy Policy Act of 2005 (42  
3 U.S.C. 16396) is amended by adding at the end the fol-  
4 lowing:

5 “(g) INNOVATION IN INDUSTRY GRANTS.—

6 “(1) IN GENERAL.—As part of the program  
7 under this section, the Secretary shall carry out a  
8 program to pay the Federal share of competitively  
9 awarding grants to State-industry partnerships in  
10 accordance with this subsection to develop, dem-  
11 onstrate, and commercialize new technologies or  
12 processes for industries that significantly—

13 “(A) reduce energy use and energy inten-  
14 sive feedstocks;

15 “(B) reduce pollution and greenhouse gas  
16 emissions;

17 “(C) reduce industrial waste; and

18 “(D) improve domestic industrial cost com-  
19 petitiveness.

20 “(2) ADMINISTRATION.—

21 “(A) APPLICATIONS.—A State-industry  
22 partnership seeking a grant under this sub-  
23 section shall submit to the Secretary an applica-  
24 tion for a grant to carry out a project to dem-  
25 onstrate an innovative energy efficiency tech-  
26 nology or process described in paragraph (1).

1           “(B) COST SHARING.—To be eligible to re-  
2           ceive a grant under this subsection, a State-in-  
3           dustry partnership shall agree to match, on at  
4           least a dollar-for-dollar basis, the amount of  
5           Federal funds that are provided to carry out  
6           the project.

7           “(C) GRANT.—The Secretary shall provide  
8           to a State-industry partnership selected under  
9           this subsection a 1-time grant of not more than  
10          \$500,000 to initiate the project.

11          “(3) ELIGIBLE PROJECTS.—A project for which  
12          a grant is received under this subsection shall be de-  
13          signed to demonstrate successful—

14               “(A) industrial applications of energy effi-  
15               cient technologies or processes that reduce costs  
16               to industry and prevent pollution and green-  
17               house gas releases; or

18               “(B) energy efficiency improvements in  
19               material inputs, processes, or waste streams to  
20               enhance the industrial competitiveness of the  
21               United States.

22          “(4) EVALUATION.—The Secretary shall evalu-  
23          ate applications for grants under this subsection on  
24          the basis of—

25               “(A) the description of the concept;

- 1           “(B) cost-efficiency;
- 2           “(C) the capability of the applicant;
- 3           “(D) the quantity of energy savings;
- 4           “(E) the commercialization or marketing
- 5           plan; and
- 6           “(F) such other factors as the Secretary
- 7           determines to be appropriate.”.

8   **SEC. 207. STUDY OF ADVANCED ENERGY TECHNOLOGY**

9                   **MANUFACTURING CAPABILITIES IN THE**

10                   **UNITED STATES.**

11       (a) IN GENERAL.—Not later than 60 days after the

12       date of enactment of this Act, the Secretary shall enter

13       into an arrangement with the National Academy of

14       Sciences under which the Academy shall conduct a study

15       of the development of advanced manufacturing capabilities

16       for various energy technologies, including—

17           (1) an assessment of the manufacturing supply

18       chains of established and emerging industries;

19           (2) an analysis of—

20                (A) the manner in which supply chains

21       have changed over the 25-year period ending on

22       the date of enactment of this Act;

23                (B) current trends in supply chains; and

1 (C) the energy intensity of each part of the  
2 supply chain and opportunities for improve-  
3 ment;

4 (3) for each technology or manufacturing sec-  
5 tor, an analysis of which sections of the supply chain  
6 are critical for the United States to retain or develop  
7 to be competitive in the manufacturing of the tech-  
8 nology;

9 (4) an assessment of which emerging energy  
10 technologies the United States should focus on to  
11 create or enhance manufacturing capabilities; and

12 (5) recommendations on leveraging the exper-  
13 tise of energy efficiency and renewable energy user  
14 facilities so that best materials and manufacturing  
15 practices are designed and implemented.

16 (b) REPORT.—Not later than 2 years after the date  
17 on which the Secretary enters into the agreement with the  
18 Academy described in subsection (a), the Academy shall  
19 submit to the Committee on Energy and Natural Re-  
20 sources of the Senate, the Committee on Energy and Com-  
21 merce of the House of Representatives, and the Secretary  
22 a report describing the results of the study required under  
23 this section, including any findings and recommendations.



1 **SEC. 208. INDUSTRIAL TECHNOLOGIES STEERING COM-**  
 2 **MITTEE.**

3 The Secretary shall establish an advisory steering  
 4 committee to provide recommendations to the Secretary  
 5 on planning and implementation of the Industrial Tech-  
 6 nologies Program of the Department of Energy.

7 **SEC. 209. AUTHORIZATION OF APPROPRIATIONS.**

8 There are authorized to be appropriated to the Sec-  
 9 retary such sums as are necessary to carry out this sub-  
 10 title.

11 **Subtitle B—Improved Efficiency in**  
 12 **Appliances and Equipment**

13 **SEC. 221. TEST PROCEDURE PETITION PROCESS.**

14 (a) CONSUMER PRODUCTS OTHER THAN AUTO-  
 15 MOBILES.—Section 323(b)(1) of the Energy Policy and  
 16 Conservation Act (42 U.S.C. 6293(b)(1)) is amended—

17 (1) in subparagraph (A)(i), by striking  
 18 “amend” and inserting “publish in the Federal Reg-  
 19 ister amended”; and

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

21 “(B) PETITIONS.—

22 “(i) IN GENERAL.—In the case of any  
 23 covered product, any person may petition  
 24 the Secretary to conduct a rulemaking—

25 “(I) to prescribe a test procedure  
 26 for the covered product; or

1 “(II) to amend the test proce-  
2 dures applicable to the covered prod-  
3 uct to more accurately or fully comply  
4 with paragraph (3).

5 “(ii) DETERMINATION.—The Sec-  
6 retary shall—

7 “(I) not later than 90 days after  
8 the date of receipt of the petition,  
9 publish the petition in the Federal  
10 Register; and

11 “(II) not later than 180 days  
12 after the date of receipt of the peti-  
13 tion, grant or deny the petition.

14 “(iii) BASIS.—The Secretary shall  
15 grant a petition if the Secretary finds that  
16 the petition contains evidence that, assum-  
17 ing no other evidence was considered, pro-  
18 vides an adequate basis for determining  
19 that an amended test method would more  
20 accurately or fully comply with paragraph  
21 (3).

22 “(iv) EFFECT ON OTHER REQUIRE-  
23 MENTS.—The granting of a petition by the  
24 Secretary under this subparagraph shall  
25 create no presumption with respect to the

1 determination of the Secretary that the  
2 proposed test procedure meets the require-  
3 ments of paragraph (3).

4 “(v) RULEMAKING.—

5 “(I) IN GENERAL.—Except as  
6 provided in subclause (II), not later  
7 than the end of the 18-month period  
8 beginning on the date of granting a  
9 petition, the Secretary shall publish  
10 an amended test method or a deter-  
11 mination not to amend the test meth-  
12 od.

13 “(II) EXTENSION.—The Sec-  
14 retary may extend the period de-  
15 scribed in subclause (I) for 1 addi-  
16 tional year.

17 “(III) DIRECT FINAL RULE.—  
18 The Secretary may adopt a consensus  
19 test procedure in accordance with the  
20 direct final rule procedure established  
21 under section 325(p)(4).”.

22 (b) CERTAIN INDUSTRIAL EQUIPMENT.—Section 343  
23 of the Energy Policy and Conservation Act (42 U.S.C.  
24 6314) is amended—

1 (1) in subsection (a), by striking paragraph (1)  
2 and inserting the following:

3 “(1) AMENDMENT AND PETITION PROCESS.—

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

7 “(i) publish in the Federal Register  
8 amended test procedures with respect to  
9 any covered equipment, if the Secretary  
10 determines that amended test procedures  
11 would more accurately or fully comply with  
12 paragraphs (2) and (3); or

13 “(ii) publish notice in the Federal  
14 Register of any determination not to  
15 amend a test procedure.

16 “(B) PETITIONS.—

17 “(i) IN GENERAL.—In the case of any  
18 class or category of covered equipment,  
19 any person may petition the Secretary to  
20 conduct a rulemaking—

21 “(I) to prescribe a test procedure  
22 for the covered equipment; or

23 “(II) to amend the test proce-  
24 dures applicable to the covered equip-

1                   ment to more accurately or fully com-  
2                   ply with paragraphs (2) and (3).

3                   “(ii) DETERMINATION.—The Sec-  
4                   retary shall—

5                   “(I) not later than 90 days after  
6                   the date of receipt of the petition,  
7                   publish the petition in the Federal  
8                   Register; and

9                   “(II) not later than 180 days  
10                  after the date of receipt of the peti-  
11                  tion, grant or deny the petition.

12                  “(iii) BASIS.—The Secretary shall  
13                  grant a petition if the Secretary finds that  
14                  the petition contains evidence that, assum-  
15                  ing no other evidence was considered, pro-  
16                  vides an adequate basis for determining  
17                  that an amended test method would more  
18                  accurately promote energy or water use ef-  
19                  ficiency.

20                  “(iv) EFFECT ON OTHER REQUIRE-  
21                  MENTS.—The granting of a petition by the  
22                  Secretary under this paragraph shall cre-  
23                  ate no presumption with respect to the de-  
24                  termination of the Secretary that the pro-

posed test procedure meets the requirements of paragraphs (2) and (3).

“(v) RULEMAKING.—

“(I) IN GENERAL.—Except as provided in subclause (II), not later than the end of the 18-month period beginning on the date of granting a petition, the Secretary shall publish an amended test method or a determination not to amend the test method.

“(II) EXTENSION.—The Secretary may extend the period described in subclause (I) for 1 additional year.

“(III) DIRECT FINAL RULE.—The Secretary may adopt a consensus test procedure in accordance with the direct final rule procedure established under section 325(p).”;

(2) by striking subsection (c); and

(3) by redesignating subsections (d) and (e) as subsections (c) and (d), respectively.

1 **SEC. 222. ENERGY STAR PROGRAM.**

2 (a) DIVISION OF RESPONSIBILITIES.—Section  
3 324A(b) of the Energy Policy and Conservation Act (42  
4 U.S.C. 6294a(b)) is amended—

5 (1) by striking “Responsibilities” and inserting  
6 the following:

7 “(1) IN GENERAL.—Responsibilities”; and

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

9 “(2) UPDATE.—Not later than 180 days after  
10 the date of enactment of this paragraph, the Sec-  
11 retary and the Administrator shall update the agree-  
12 ments described in paragraph (1), including agree-  
13 ments on provisions that provide—

14 “(A) a clear delineation of the roles and  
15 responsibilities of each agency that is based on  
16 the resources and areas of expertise of each  
17 agency;

18 “(B) a formal process for high-level deci-  
19 sionmaking that allows each agency to make  
20 specific programmatic decisions based on the  
21 program approaches of each agency;

22 “(C) a facilitated annual planning meeting  
23 that establishes strategic priorities and goals  
24 for the coming year;

25 “(D) a prescribed course of action to work  
26 through differences and disagreements;

1           “(E) a facilitated biannual program review  
2           conducted by a third-party that—

3                   “(i) incorporates an assessment of  
4                   program progress, partner acceptance, the  
5                   achievement of program goals, and future  
6                   strategic planning; and

7                   “(ii) is evaluated by the Council on  
8                   Environmental Quality, which shall ap-  
9                   praise the findings in the review and work  
10                  with the agencies to resolve any negative  
11                  findings; and

12                  “(F) a sunset date for the new agreement  
13                  and a timetable for establishing future agree-  
14                  ments based on priorities at that time.”.

15           (b) DUTIES.—Section 324A(c) of the Energy Policy  
16 and Conservation Act (42 U.S.C. 6294a(c)) is amended—

17                   (1) in paragraph (6), by striking “and” after  
18                   the semicolon at the end;

19                   (2) in paragraph (7), by striking the period at  
20                   the end and inserting a semicolon; and

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

22                   “(8)(A) review each product category—

23                           “(i) at least once every 3 years; or

24                           “(ii) when market share for an Energy  
25                   Star product category reaches 35 percent;



1 “(B) based on the review—

2 “(i) update and publish the Energy Star  
3 product criteria for the category; or

4 “(ii) publish a finding that no update is  
5 justified with the explanation for the finding;

6 “(C) require that—

7 “(i) industry consensus test methods estab-  
8 lished by the Department of Energy shall—

9 “(I) take into consideration test pro-  
10 cedures or rating procedures developed by  
11 industry standards organizations; and

12 “(II) be used for all solid-state light-  
13 ing products, including—

14 “(aa) integral luminaries;

15 “(bb) integral replacement lamps;

16 “(cc) light engines; and

17 “(ii) in accordance with the commercializa-  
18 tion support provisions of section 912 of the  
19 Energy Policy Act of 2005 (42 U.S.C. 16192),  
20 the Department of Energy shall assume all re-  
21 sponsibility for the implementation of an En-  
22 ergy Star program for solid-state lighting; and

23 “(D) during the initial review for each product  
24 category, establish an alternative market share to

1 trigger subsequent reviews, based on product-specific  
2 technology and market attributes;

3 “(9) require a demonstration of compliance  
4 with the Energy Star criteria by qualified products,  
5 except that—

6 “(A) the demonstration shall be conducted  
7 in accordance with appropriate methods deter-  
8 mined for each product type by the Secretary or  
9 the Administrator of the Environmental Protec-  
10 tion Agency (as appropriate), including—

11 “(i) third-party verification;

12 “(ii) third-party certification;

13 “(iii) purchase and testing of products  
14 from the market; or

15 “(iv) other verified testing and compli-  
16 ance approaches; and

17 “(B) the Secretary or Administrator may  
18 exempt specific types of products from the re-  
19 quirements of this subparagraph if the Sec-  
20 retary or Administrator finds that—

21 “(i) the benefits to the Energy Star  
22 program of verifying product performance  
23 are substantially exceeded by the burdens;  
24 or

1 “(ii) there are no benefits to the En-  
2 ergy Star program; and

3 “(10) develop and publish standardized building  
4 energy audit methods.”.

5 (c) FUNDING.—Section 324A of the Energy Policy  
6 and Conservation Act (42 U.S.C. 6294a) is amended by  
7 adding at the end the following:

8 “(f) AUTHORIZATION OF APPROPRIATIONS.—There  
9 are authorized to be appropriated to carry out this sec-  
10 tion—

11 “(1) to the Department of Energy \$25,000,000  
12 for each fiscal year; and

13 “(2) to the Environmental Protection Agency  
14 \$100,000,000 for each fiscal year.”.

15 **SEC. 223. PETITION FOR AMENDED STANDARDS.**

16 Section 325(n) of the Energy Policy and Conserva-  
17 tion Act (42 U.S.C. 6295(n)) is amended—

18 (1) by redesignating paragraph (3) as para-  
19 graph (5); and

20 (2) by inserting after paragraph (2) the fol-  
21 lowing:

22 “(3) NOTICE OF DECISION.—Not later than  
23 180 days after the date of receiving a petition, the  
24 Secretary shall publish in the Federal Register a no-

1       tice of, and explanation for, the decision of the Sec-  
2       retary to grant or deny the petition.

3               “(4) NEW OR AMENDED STANDARDS.—Not  
4       later than 3 years after the date of granting a peti-  
5       tion for new or amended standards, the Secretary  
6       shall publish in the Federal Register—

7                       “(A) a final rule that contains the new or  
8                       amended standards; or

9                       “(B) a determination that no new or  
10                      amended standards are necessary.”.

11 **SEC. 224. PORTABLE LIGHT FIXTURES.**

12       (a) DEFINITIONS.—Section 321 of the Energy Policy  
13       and Conservation Act (42 U.S.C. 6291) is amended by  
14       adding at the end the following:

15               “(67) ART WORK LIGHT FIXTURE.—The term  
16       ‘art work light fixture’ means a light fixture de-  
17       signed only to be mounted directly to an art work  
18       and for the purpose of illuminating that art work.

19               “(68) LED LIGHT ENGINE.—The term ‘LED  
20       light engine’ or ‘LED light engine with integral heat  
21       sink’ means a subsystem of an LED light fixture  
22       that—

23                       “(A) includes 1 or more LED components,  
24                      including—

1 “(i) an LED driver power source with  
2 electrical and mechanical interfaces; and

3 “(ii) an integral heat sink to provide  
4 thermal dissipation; and

5 “(B) may be designed to accept additional  
6 components that provide aesthetic, optical, and  
7 environmental control.

8 “(69) LED LIGHT FIXTURE.—The term ‘LED  
9 light fixture’ means a complete lighting unit con-  
10 sisting of—

11 “(A) an LED light source with 1 or more  
12 LED lamps or LED light engines; and

13 “(B) parts—

14 “(i) to distribute the light;

15 “(ii) to position and protect the light  
16 source; and

17 “(iii) to connect the light source to  
18 electrical power.

19 “(70) LIGHT FIXTURE.—The term ‘light fix-  
20 ture’ means a product designed to provide light that  
21 includes—

22 “(A) at least 1 lamp socket; and

23 “(B) parts—

24 “(i) to distribute the light;

1 “(ii) position and protect 1 or more  
2 lamps; and

3 “(iii) to connect 1 or more lamps to a  
4 power supply.

5 “(71) PORTABLE LIGHT FIXTURE.—

6 “(A) IN GENERAL.—The term ‘portable  
7 light fixture’ means a light fixture that has a  
8 flexible cord and an attachment plug for con-  
9 nection to a nominal 120-volt circuit that—

10 “(i) allows the user to relocate the  
11 product without any rewiring; and

12 “(ii) typically can be controlled with a  
13 switch located on the product or the power  
14 cord of the product.

15 “(B) EXCLUSIONS.—The term ‘portable  
16 light fixture’ does not include—

17 “(i) direct plug-in night lights, sun or  
18 heat lamps, medical or dental lights, port-  
19 able electric hand lamps, signs or commer-  
20 cial advertising displays, photographic  
21 lamps, germicidal lamps, or light fixtures  
22 for marine use or for use in hazardous lo-  
23 cations (as those terms are defined in  
24 ANSI/NFPA 70 of the National Electrical  
25 Code); or

1 “(ii) decorative lighting strings, deco-  
 2 rative lighting outfits, or electric candles or  
 3 candelabra without lamp shades that are  
 4 covered by Underwriter Laboratories (UL)  
 5 standard 588, ‘Seasonal and Holiday Dec-  
 6 orative Products’.”.

7 (b) COVERAGE.—

8 (1) IN GENERAL.—Section 322(a) of the En-  
 9 ergy Policy and Conservation Act (42 U.S.C.  
 10 6292(a)) is amended—

11 (A) by redesignating paragraph (20) as  
 12 paragraph (21); and

13 (B) by inserting after paragraph (19) the  
 14 following:

15 “(20) Portable light fixtures.”.

16 (2) CONFORMING AMENDMENTS.—Section  
 17 325(l) of the Energy Policy and Conservation Act  
 18 (42 U.S.C. 6295(l)) is amended by striking “para-  
 19 graph (19)” each place it appears in paragraphs (1)  
 20 and (2) and inserting “paragraph (21)”.

21 (c) TEST PROCEDURES.—Section 323(b) of the En-  
 22 ergy Policy and Conservation Act (42 U.S.C. 6293(b)) is  
 23 amended by adding at the end the following:

24 “(19) LED FIXTURES AND LED LIGHT EN-  
 25 GINES.—Test procedures for LED fixtures and LED

1 light engines shall be based on Illuminating Engi-  
 2 neering Society of North America test procedure  
 3 LM-79, Approved Method for Electrical and Photo-  
 4 metric Testing of Solid-State Lighting Devices and  
 5 an IES-approved test procedure for testing LED  
 6 light engines.”.

7 (d) STANDARDS.—Section 325 of the Energy Policy  
 8 and Conservation Act (42 U.S.C. 6295) is amended—

9 (1) by redesignating subsection (ii) as sub-  
 10 section (kk); and

11 (2) by inserting after subsection (hh) the fol-  
 12 lowing:

13 “(ii) PORTABLE LIGHT FIXTURES.—

14 “(1) IN GENERAL.—Subject to paragraphs (2)  
 15 and (3), portable light fixtures manufactured on or  
 16 after January 1, 2012, shall meet 1 or more of the  
 17 following requirements:

18 “(A) Be a fluorescent light fixture that  
 19 meets the requirements of the Energy Star Pro-  
 20 gram for Residential Light Fixtures, Version  
 21 4.2.

22 “(B) Be equipped with only 1 or more  
 23 GU-24 line-voltage sockets, not be rated for  
 24 use with incandescent lamps of any type (as de-  
 25 fined in ANSI standards), and meet the re-



1           quirements of version 4.2 of the Energy Star  
2           program for residential light fixtures.

3           “(C) Be an LED light fixture or a light  
4           fixture with an LED light engine and comply  
5           with the following minimum requirements:

6                   “(i) Minimum light output: 200  
7                   lumens (initial).

8                   “(ii) Minimum LED light engine effi-  
9                   cacy: 40 lumens/watt installed in fixtures  
10                  that meet the minimum light fixture effi-  
11                  cacy of 29 lumens/watt or, alternatively, a  
12                  minimum LED light engine efficacy of 60  
13                  lumens/watt for fixtures that do not meet  
14                  the minimum light fixture efficacy of 29  
15                  lumens/watt.

16                  “(iii) All portable fixtures shall have a  
17                  minimum LED light fixture efficacy of 29  
18                  lumens/watt and a minimum LED light  
19                  engine efficacy of 60 lumens/watt by Janu-  
20                  ary 1, 2016.

21                  “(iv) Color Correlated Temperature  
22                  (CCT): 2700K through 4000K.

23                  “(v) Minimum Color Rendering Index  
24                  (CRI): 75.

1                   “(vi) Power factor equal to or greater  
2                   than 0.70.

3                   “(vii) Portable luminaries that have  
4                   internal power supplies shall have zero  
5                   standby power when the luminaire is  
6                   turned off.

7                   “(viii) LED light sources shall deliver  
8                   at least 70 percent of initial lumens for at  
9                   least 25,000 hours.

10                  “(D)(i) Be equipped with an ANSI-des-  
11                  ignated E12, E17, or E26 screw-based socket  
12                  and be prepackaged and sold together with 1  
13                  screw-based compact fluorescent lamp or screw-  
14                  based LED lamp for each screw-based socket  
15                  on the portable light fixture.

16                  “(ii) The compact fluorescent or LED  
17                  lamps prepackaged with the light fixture shall  
18                  be fully compatible with any light fixture con-  
19                  trols incorporated into the light fixture (for ex-  
20                  ample, light fixtures with dimmers shall be  
21                  packed with dimmable lamps).

22                  “(iii) Compact fluorescent lamps pre-  
23                  packaged with light fixtures shall meet the re-  
24                  quirements of the Energy Star Program for  
25                  CFLs Version 4.0.

1           “(iv) Screw-based LED lamps shall comply  
2 with the minimum requirements described in  
3 subparagraph (C).

4           “(E) Be equipped with 1 or more single-  
5 ended, non-screw based halogen lamp sockets  
6 (line or low voltage), a dimmer control or high-  
7 low control, and be rated for a maximum of 100  
8 watts.

9           “(2) REVIEW.—

10           “(A) REVIEW.—The Secretary shall review  
11 the criteria and standards established under  
12 paragraph (1) to determine if revised standards  
13 are technologically feasible and economically  
14 justified.

15           “(B) COMPONENTS.—The review shall in-  
16 clude consideration of—

17           “(i) whether a separate compliance  
18 procedure is still needed for halogen fix-  
19 tures described in subparagraph (E) and,  
20 if necessary, what an appropriate standard  
21 for halogen fixtures shall be;

22           “(ii) which of the specific technical  
23 criteria described in subparagraphs (A),  
24 (C), and (D)(iii) should be modified; and

1 “(iii) which fixtures should be exempt-  
 2 ed from the light fixture efficacy standard  
 3 as of January 1, 2016, because the fix-  
 4 tures are primarily decorative in nature (as  
 5 defined by the Secretary) and, even if ex-  
 6 empted, are likely to be sold in limited  
 7 quantities.

8 “(C) TIMING.—

9 “(i) DETERMINATION.—Not later  
 10 than January 1, 2014, the Secretary shall  
 11 publish amended standards, or a deter-  
 12 mination that no amended standards are  
 13 justified, under this subsection.

14 “(ii) STANDARDS.—Any standards  
 15 under this subsection take effect on Janu-  
 16 ary 1, 2016.

17 “(3) ART WORK LIGHT FIXTURES.—Art work  
 18 light fixtures manufactured on or after January 1,  
 19 2012, shall—

20 “(A) comply with paragraph (1); or

21 “(B)(i) contain only ANSI-designated E12  
 22 screw-based line-voltage sockets;

23 “(ii) have not more than 3 sockets;

24 “(iii) be controlled with an integral high/  
 25 low switch;

1           “(iv) be rated for not more than 25 watts  
2           if fitted with 1 socket; and

3           “(v) be rated for not more than 15 watts  
4           per socket if fitted with 2 or 3 sockets.

5           “(4) EXCEPTION FROM PREEMPTION.—Not-  
6           withstanding section 327, Federal preemption shall  
7           not apply to a regulation concerning portable light  
8           fixtures adopted by the California Energy Commis-  
9           sion on or before January 1, 2014.”.

10 **SEC. 225. GU-24 BASE LAMPS.**

11           (a) DEFINITIONS.—Section 321 of the Energy Policy  
12           and Conservation Act (42 U.S.C. 6291) (as amended by  
13           section 224(a)) is amended by adding at the end the fol-  
14           lowing:

15           “(72) GU-24.—The term ‘GU-24’ ” means the  
16           designation of a lamp socket, based on a coding sys-  
17           tem by the International Electrotechnical Commis-  
18           sion, under which—

19           “(A) ‘G’ indicates a holder and socket type  
20           with 2 or more projecting contacts, such as pins  
21           or posts;

22           “(B) ‘U’ distinguishes between lamp and  
23           holder designs of similar type that are not  
24           interchangeable due to electrical or mechanical  
25           requirements; and

1           “(C) 24 indicates the distance in millime-  
2           ters between the electrical contact posts.

3           “(73) GU-24 ADAPTOR.—

4           “(A) IN GENERAL.—The term ‘GU-24  
5           Adaptor’ means a 1-piece device, pig-tail, wiring  
6           harness, or other such socket or base attach-  
7           ment that—

8           “(i) connects to a GU-24 socket on 1  
9           end and provides a different type of socket  
10          or connection on the other end; and

11          “(ii) does not alter the voltage.

12          “(B) EXCLUSION.—The term ‘GU-24  
13          Adaptor’ does not include a fluorescent ballast  
14          with a GU-24 base.

15          “(74) GU-24 BASE LAMP.—‘GU-24 base lamp’  
16          means a light bulb designed to fit in a GU-24 sock-  
17          et.”.

18          (b) STANDARDS.—Section 325 of the Energy Policy  
19          and Conservation Act (42 U.S.C. 6295) (as amended by  
20          section 224(d)) is amended by inserting after subsection  
21          (ii) the following:

22          “(jj) GU-24 BASE LAMPS.—

23          “(1) IN GENERAL.—A GU-24 base lamp shall  
24          not be an incandescent lamp as defined by ANSI.

1           “(2) GU-24 ADAPTORS.—GU-24 adaptors shall  
2           not adapt a GU-24 socket to any other line voltage  
3           socket.”.

4   **SEC. 226. STANDARDS FOR CERTAIN INCANDESCENT RE-**  
5           **FLECTOR LAMPS AND REFLECTOR LAMPS.**

6           Section 325(i) of the Energy Policy and Conservation  
7   Act (42 U.S.C. 6295(i)) is amended by adding at the end  
8   the following:

9           “(9) CERTAIN INCANDESCENT REFLECTOR  
10          LAMPS.—

11           “(A) IN GENERAL.—Not later than July 1,  
12          2011, the Secretary shall publish a final rule  
13          establishing standards for incandescent reflector  
14          lamp types described in paragraph (1)(C).

15           “(B) EFFECTIVE DATE.—The standards  
16          described in subparagraph (A) shall take effect  
17          on July 1, 2013.

18           “(C) STANDARDS.—In conducting a rule-  
19          making for incandescent reflector lamps under  
20          this paragraph after the date of enactment of  
21          this paragraph, the Secretary shall consider the  
22          standards for all incandescent reflector lamps,  
23          including lamp types described in paragraph  
24          (1)(C).

25           “(10) REFLECTOR LAMPS.—

1           “(A) IN GENERAL.—Not later than Janu-  
 2           ary 1, 2015, the Secretary shall publish a final  
 3           rule establishing and amending standards for  
 4           reflector lamps, including incandescent reflector  
 5           lamps.

6           “(B) ADMINISTRATION.—In conducting  
 7           the rulemaking for reflector lamps under this  
 8           paragraph, the Secretary shall consider—

9                   “(i) incandescent and nonincandescent  
 10                  technologies; and

11                   “(ii) a new metric, other than lumens  
 12                  per watt, that is based on the photometric  
 13                  distribution of those lamps.

14           “(C) EFFECTIVE DATE.—The standards  
 15           described in subparagraph (A) shall take effect  
 16           not earlier than the date that is 3 years after  
 17           the date of publication of the final rule, as de-  
 18           termined by the Secretary.”.

19 **SEC. 227. STANDARDS FOR COMMERCIAL FURNACES.**

20           Section 342(a) of the Energy Policy and Conserva-  
 21           tion Act (42 U.S.C. 6313(a)) is amended by adding at  
 22           the end the following:

23                   “(11) Warm air furnaces with an input rating  
 24                  of 225,000 Btu per hour or more and manufactured



1 after January 1, 2011, shall meet the following  
 2 standard levels:

3 “(A) Gas-fired units shall—

4 “(i) have a minimum combustion effi-  
 5 ciency of 80 percent;

6 “(ii) include an interrupted or inter-  
 7 mittent ignition device;

8 “(iii) have jacket losses not exceeding  
 9 0.75 percent of the input rating; and

10 “(iv) have power venting or a flue  
 11 damper.

12 “(B) Oil-fired units shall have—

13 “(i) a minimum thermal efficiency of  
 14 81 percent;

15 “(ii) jacket losses not exceeding 0.75  
 16 percent of the input rating; and

17 “(iii) power venting or a flue damp-  
 18 er.”.

19 **SEC. 228. MOTOR EFFICIENCY REBATE PROGRAM.**

20 (a) IN GENERAL.—Part C of title III of the Energy  
 21 Policy and Conservation Act (42 U.S.C. 6311 et seq.) is  
 22 amended by adding at the end the following:

23 **“SEC. 347. MOTOR EFFICIENCY REBATE PROGRAM.**

24 “(a) ESTABLISHMENT.—By not later than January  
 25 1, 2010, in accordance with subsection (b), the Secretary

1 shall establish a program to provide rebates for expendi-  
2 tures made by entities—

3 “(1) for the purchase and installation of a new  
4 electric motor that has a nominal full load efficiency  
5 that is not less than the nominal full load efficiency  
6 as defined in—

7 “(A) table 12–12 of NEMA Standards  
8 Publication MG 1–2006 for random wound mo-  
9 tors rated 600 volts or lower; or

10 “(B) table 12–13 of NEMA Standards  
11 Publication MG 1–2006 for form wound motors  
12 rated 5000 volts or lower; and

13 “(2) to replace an installed motor of the entity  
14 the specifications of which are established by the  
15 Secretary by a date that is not later than 90 days  
16 after the date of enactment of this section.

17 “(b) REQUIREMENTS.—

18 “(1) APPLICATION.—To be eligible to receive a  
19 rebate under this section, an entity shall submit to  
20 the Secretary an application in such form, at such  
21 time, and containing such information as the Sec-  
22 retary may require, including—

23 “(A) demonstrated evidence that the entity  
24 purchased an electric motor described in sub-

1 section (a)(1) to replace an installed motor de-  
2 scribed in subsection (a)(2);

3 “(B) demonstrated evidence that the enti-  
4 ty—

5 “(i) removed the installed motor of  
6 the entity from service; and

7 “(ii) properly disposed the installed  
8 motor of the entity; and

9 “(C) the physical nameplate of the in-  
10 stalled motor of the entity.

11 “(2) AUTHORIZED AMOUNT OF REBATE.—The  
12 Secretary may provide to an entity that meets each  
13 requirement under paragraph (1) a rebate the  
14 amount of which shall be equal to the product ob-  
15 tained by multiplying—

16 “(A) the nameplate horsepower of the elec-  
17 tric motor purchased by the entity in accord-  
18 ance with subsection (a)(1); and

19 “(B) \$25.00.

20 “(3) PAYMENTS TO DISTRIBUTORS OF QUALI-  
21 FYING ELECTRIC MOTORS.—To assist in the pay-  
22 ment for expenses relating to processing and motor  
23 core disposal costs, the Secretary shall provide to the  
24 distributor of an electric motor described in sub-  
25 section (a)(1), the purchaser of which received a re-

1       bate under this section, an amount equal to the  
2       product obtained by multiplying—

3               “(A) the nameplate horsepower of the elec-  
4               tric motor; and

5               “(B) \$5.00.

6       “(c) AUTHORIZATION OF APPROPRIATIONS.—There  
7       are authorized to be appropriated to carry out this section,  
8       to remain available until expended—

9               “(1) \$80,000,000 for fiscal year 2010;

10              “(2) \$75,000,000 for fiscal year 2011;

11              “(3) \$70,000,000 for fiscal year 2012;

12              “(4) \$65,000,000 for fiscal year 2013; and

13              “(5) \$60,000,000 for fiscal year 2014.”.

14       (b) TABLE OF CONTENTS.—The table of contents of  
15       the Energy Policy and Conservation Act (42 U.S.C. prec.  
16       6201) is amended by adding at the end of the items relat-  
17       ing to part C of title III the following:

“Sec. 347. Motor efficiency rebate program.”.

18       **SEC. 229. STUDY OF COMPLIANCE WITH ENERGY STAND-**  
19       **ARDS FOR APPLIANCES.**

20       (a) IN GENERAL.—The Secretary shall conduct a  
21       study of the degree of compliance with energy standards  
22       for appliances, including an investigation of compliance  
23       rates and options for improving compliance, including en-  
24       forcement.

1 (b) REPORT.—Not later than 18 months after the  
2 date of enactment of this Act, the Secretary shall submit  
3 to the appropriate committees of Congress a report de-  
4 scribing the results of the study, including any rec-  
5 ommendations.

6 **SEC. 230. STUDY OF DIRECT CURRENT ELECTRICITY SUP-**  
7 **PLY IN CERTAIN BUILDINGS.**

8 (a) IN GENERAL.—The Secretary shall conduct a  
9 study—

10 (1) of the costs and benefits (including signifi-  
11 cant energy efficiency, power quality, and other  
12 power grid, safety, and environmental benefits) of  
13 requiring high-quality, direct current electricity sup-  
14 ply in certain buildings; and

15 (2) to determine, if the requirement described  
16 in paragraph (1) is imposed, what the policy and  
17 role of the Federal Government should be in real-  
18 izing those benefits.

19 (b) REPORT.—Not later than 1 year after the date  
20 of enactment of this Act, the Secretary shall submit to  
21 the appropriate committees of Congress a report describ-  
22 ing the results of the study, including any recommenda-  
23 tions.

1 **SEC. 231. MOTOR MARKET ASSESSMENT AND COMMERCIAL**  
2 **AWARENESS PROGRAM.**

3 (a) FINDINGS.—Congress finds that—

4 (1) electric motor systems account for about  
5 half of the electricity used in the United States;

6 (2) electric motor energy use is determined by  
7 both the efficiency of the motor and the system in  
8 which the motor operates;

9 (3) Federal Government research on motor end  
10 use and efficiency opportunities is more than a dec-  
11 ade old; and

12 (4) the Census Bureau has discontinued collec-  
13 tion of data on motor and generator importation,  
14 manufacture, shipment, and sales.

15 (b) DEFINITIONS.—In this section:

16 (1) DEPARTMENT.—The term “Department”  
17 means the Department of Energy.

18 (2) INTERESTED PARTIES.—The term “inter-  
19 ested parties” includes—

20 (A) trade associations;

21 (B) motor manufacturers;

22 (C) motor end users;

23 (D) electric utilities; and

24 (E) individuals and entities that conduct  
25 energy efficiency programs.

1           (3) SECRETARY.—The term “Secretary” means  
2       the Secretary of Energy, in consultation with inter-  
3       ested parties.

4           (c) ASSESSMENT.—The Secretary shall conduct an  
5       assessment of electric motors and the electric motor mar-  
6       ket in the United States that shall—

7           (1) include important subsectors of the indus-  
8       trial and commercial electric motor market (as de-  
9       termined by the Secretary), including—

10           (A) the stock of motors and motor-driven  
11       equipment;

12           (B) efficiency categories of the motor pop-  
13       ulation; and

14           (C) motor systems that use drives, servos,  
15       and other control technologies;

16           (2) characterize and estimate the opportunities  
17       for improvement in the energy efficiency of motor  
18       systems by market segment, including opportunities  
19       for—

20           (A) expanded use of drives, servos, and  
21       other control technologies;

22           (B) expanded use of process control,  
23       pumps, compressors, fans or blowers, and mate-  
24       rial handling components; and

1 (C) substitution of existing motor designs  
2 with existing and future advanced motor de-  
3 signs, including electronically commutated per-  
4 manent magnet, interior permanent magnet,  
5 and switched reluctance motors; and

6 (3) develop an updated profile of motor system  
7 purchase and maintenance practices, including sur-  
8 veying the number of companies that have motor  
9 purchase and repair specifications, by company size,  
10 number of employees, and sales.

11 (d) RECOMMENDATIONS; UPDATE.—Based on the as-  
12 sessment conducted under subsection (c), the Secretary  
13 shall—

14 (1) develop—

15 (A) recommendations to update the de-  
16 tailed motor profile on a periodic basis;

17 (B) methods to estimate the energy sav-  
18 ings and market penetration that is attributable  
19 to the Save Energy Now Program of the De-  
20 partment; and

21 (C) recommendations for the Director of  
22 the Census Bureau on market surveys that  
23 should be undertaken in support of the motor  
24 system activities of the Department; and



1           (2) prepare an update to the Motor Master+  
2       program of the Department.

3       (e) PROGRAM.—Based on the assessment, rec-  
4       ommendations, and update required under subsections (c)  
5       and (d), the Secretary shall establish a proactive, national  
6       program targeted at motor end-users and delivered in co-  
7       operation with interested parties to increase awareness  
8       of—

9           (1) the energy and cost-saving opportunities in  
10       commercial and industrial facilities using higher effi-  
11       ciency electric motors;

12          (2) improvements in motor system procurement  
13       and management procedures in the selection of high-  
14       er efficiency electric motors and motor-system com-  
15       ponents, including drives, controls, and driven equip-  
16       ment; and

17          (3) criteria for making decisions for new, re-  
18       placement, or repair motor and motor system com-  
19       ponents.

20 **SEC. 232. STUDY REGARDING ENERGY SUPERSTAR CON-**  
21 **CEPT.**

22       Section 324A of the Energy Policy and Conservation  
23       Act (42 U.S.C. 6294a) is amended by inserting after sub-  
24       section (d) the following:

1       “(e) STUDY REGARDING ENERGY SUPERSTAR CON-  
2 CEPT.—

3       “(1) STUDY.—

4               “(A) IN GENERAL.—As soon as practicable  
5 after the date of enactment of this subsection,  
6 in accordance with subparagraph (B), the Sec-  
7 retary and the Administrator of the Environ-  
8 mental Protection Agency (referred to in this  
9 subsection as the ‘heads of the Federal agencies  
10 concerned’) shall carry out jointly a study to  
11 determine the feasibility and advisability of add-  
12 ing to the Energy Star program of the Environ-  
13 mental Protection Agency and the Department  
14 of Energy a component to be known as the ‘En-  
15 ergy Superstar tier’ under which—

16               “(i) the tier would recognize the top-  
17 performing products and buildings (which  
18 would include the top approximately 5 per-  
19 cent of the market) that are determined to  
20 be products that are cost-effective to con-  
21 sumers; and

22               “(ii) at least a portion of the Energy  
23 Star product categories would be included  
24 under the tier.

1           “(B) REQUIREMENTS.—In carrying out  
2           the study under subparagraph (A), the heads of  
3           the Federal agencies concerned shall—

4                   “(i) examine the costs and benefits,  
5                   and advantages and disadvantages, of es-  
6                   tablishing the Energy Superstar tier;

7                   “(ii) survey a sample of program par-  
8                   ticipants (including builders, manufactur-  
9                   ers, energy efficiency program operators,  
10                  and other interested parties) to determine  
11                  the opinions of the program participants  
12                  regarding the potential usefulness of the  
13                  Energy Superstar tier; and

14                  “(iii) conduct an examination to de-  
15                  termine whether the Energy Superstar tier  
16                  will cause an undesirable dilution of the  
17                  Energy Star brand.

18           “(2) REPORT.—Not later than 1 year after the  
19           date of enactment of this subsection, the heads of  
20           the Federal agencies concerned shall jointly submit  
21           to the appropriate committees of Congress a report  
22           that contains each recommendation of the heads of  
23           the Federal agencies concerned regarding—

24                   “(A) whether the Energy Superstar tier  
25                   should be established; and

1           “(B) if the heads of the Federal agencies  
 2           concerned recommend the establishment of the  
 3           Energy Superstar tier under subparagraph (A),  
 4           a proposed schedule and budget for the estab-  
 5           lishment and implementation of the Energy Su-  
 6           perstar tier.”.

7   **SEC. 233. TECHNICAL AMENDMENT.**

8           Section 343(a) of the Energy Policy and Conserva-  
 9   tion Act (42 U.S.C. 6314(a)) is amended by striking “Air-  
 10   Conditioning and Refrigeration Institute” each place it ap-  
 11   pears in paragraphs (4)(A) and (7) and inserting “Air-  
 12   Conditioning, Heating, and Refrigeration Institute”.

13       **Subtitle C—Building Efficiency**

14           **PART I—BUILDING CODES**

15   **SEC. 241. GREATER ENERGY EFFICIENCY IN BUILDING**  
 16           **CODES.**

17           (a) IN GENERAL.—Section 304 of the Energy Con-  
 18   servation and Production Act (42 U.S.C. 6833) is amend-  
 19   ed to read as follows:

20   **“SEC. 304. UPDATING STATE BUILDING ENERGY EFFI-**  
 21           **CIENCY CODES.**

22           “(a) UPDATING NATIONAL MODEL BUILDING EN-  
 23   ERGY CODES.—

24           “(1) TARGETS.—

1           “(A) IN GENERAL.—The Secretary shall  
2           support updating the national model building  
3           energy codes and standards at least every 3  
4           years to achieve overall energy savings, com-  
5           pared to the 2006 IECC for residential build-  
6           ings and ASHRAE Standard 90.1–2004 for  
7           commercial buildings, of at least—

8                   “(i) 30 percent in editions of each  
9                   model code or standard released during or  
10                  after 2010; and

11                  “(ii) 50 percent in editions of each  
12                  model code or standard released during or  
13                  after 2016.

14           “(B) SPECIFIC YEARS.—

15                   “(i) IN GENERAL.—Targets for spe-  
16                   cific years shall be set by the Secretary at  
17                   least 3 years in advance of each target  
18                   year, coordinated with the IECC and  
19                   ASHRAE Standard 90.1 cycles, at the  
20                   maximum level of energy efficiency that is  
21                   technologically feasible and life-cycle cost  
22                   effective and on a path to achieving net-  
23                   zero-energy buildings.

24                   “(ii) DIFFERENT TARGET YEARS.—  
25                  Subject to paragraph (2)(D), prior to

1           2013, the Secretary may set a different  
2           target year for 1 or both model codes de-  
3           scribed in subparagraph (A) if the Sec-  
4           retary determines that a 50 percent target  
5           cannot be met in 2016.

6           “(C) TECHNICAL ASSISTANCE TO MODEL  
7           CODE-SETTING AND STANDARD DEVELOPMENT  
8           ORGANIZATIONS.—

9           “(i) IN GENERAL.—The Secretary  
10          shall, on a timely basis, provide technical  
11          assistance to model code-setting and stand-  
12          ard development organizations.

13          “(ii) ASSISTANCE.—The assistance  
14          shall include technical assistance as re-  
15          quested by the organizations in—

16               “(I) evaluating code or standards  
17               proposals or revisions;

18               “(II) building energy analysis  
19               and design tools;

20               “(III) building demonstrations;  
21               and

22               “(IV) design assistance and  
23               training.

24          “(D) AMENDMENT PROPOSALS.—The Sec-  
25          retary shall submit code and standard amend-

1           ment proposals, with supporting evidence, suffi-  
 2           cient to enable the national model building en-  
 3           ergy codes and standards to meet the targets  
 4           established under subparagraph (A).

5           “(2) REVISION OF BUILDING ENERGY USE  
 6           STANDARDS.—

7                   “(A) IN GENERAL.—If the provisions of  
 8           the IECC or ASHRAE Standard 90.1 regard-  
 9           ing building energy use are revised, the Sec-  
 10          retary shall make a determination not later  
 11          than 1 year after the date of the revision, on  
 12          whether the revision will—

13                   “(i) improve energy efficiency in  
 14           buildings; and

15                   “(ii) meet the targets under para-  
 16           graph (1).

17           “(B) CODES OR STANDARDS NOT MEETING  
 18           TARGETS.—

19                   “(i) IN GENERAL.—If the Secretary  
 20           makes a determination under subpara-  
 21           graph (A)(ii) that a code or standard does  
 22           not meet the targets established under  
 23           paragraph (1), not later than 1 year after  
 24           the date of the determination, the Sec-  
 25           retary shall provide the model code or

1 standard developer with proposed changes  
2 that would result in a model code that  
3 meets the targets.

4 “(ii) INCORPORATION OF CHANGES.—  
5 On receipt of the proposed changes, the  
6 model code or standard developer shall  
7 have an additional 180 days to incorporate  
8 the proposed changes into the model code  
9 or standard.

10 “(iii) ESTABLISHMENT BY SEC-  
11 RETARY.—If the proposed changes are not  
12 incorporated into the model code or stand-  
13 ard, the Secretary shall establish a modi-  
14 fied code or standard that meets the estab-  
15 lished targets.

16 “(iv) ADMINISTRATION.—Any code or  
17 standard modified under this subparagraph  
18 shall—

19 “(I) achieve the maximum level  
20 of energy savings that is techno-  
21 logically feasible and life-cycle cost-ef-  
22 fective;

23 “(II) be based on the latest edi-  
24 tion of the IECC or ASHRAE Stand-  
25 ard 90.1, including any subsequent



1 amendments, addenda, or additions,  
2 but may also consider other model  
3 codes or standards; and

4 “(III) serve as the baseline for  
5 the next determination under sub-  
6 paragraph (A)(i).

7 “(C) CODES OR STANDARDS NOT UPDATED  
8 FOR 3 YEARS.—

9 “(i) IN GENERAL.—If a national  
10 model code or standard is not updated for  
11 more than 3 years, the Secretary shall, not  
12 later than 1 year after the date of the de-  
13 termination, establish a modified code or  
14 standard that meets the targets.

15 “(ii) REQUIREMENTS.—Any modified  
16 code or standard shall—

17 “(I) achieve the maximum level  
18 of energy savings that is techno-  
19 logically feasible and life-cycle cost-ef-  
20 fective;

21 “(II) be based on the latest revi-  
22 sion of the IECC or ASHRAE Stand-  
23 ard 90.1, including any amendments  
24 or additions to the code or standard,

1 but may also consider other model  
2 codes or standards; and

3 “(III) serve as the baseline for  
4 the next determination under sub-  
5 paragraph (A)(i).

6 “(D) ADMINISTRATION.—The Secretary  
7 shall—

8 “(i) provide an opportunity for public  
9 comment on targets, determinations, and  
10 modified codes and standards under this  
11 subsection; and

12 “(ii) publish notice of targets, deter-  
13 minations, and modified codes and stand-  
14 ards under this subsection in the Federal  
15 Register.

16 “(b) STATE CERTIFICATION OF BUILDING ENERGY  
17 CODE UPDATES.—

18 “(1) REVIEW AND UPDATING OF CODES BY  
19 EACH STATE.—

20 “(A) IN GENERAL.—Not later than 2 years  
21 after the date of enactment of the American  
22 Clean Energy Leadership Act of 2009, each  
23 State shall certify to the Secretary whether or  
24 not the State has reviewed and updated the  
25 provisions of the residential and commercial

1 building codes of the State regarding energy ef-  
 2 ficiency.

3 “(B) DEMONSTRATION.—The certification  
 4 shall include a demonstration that the code pro-  
 5 visions of the State—

6 “(i) meet or exceed the 2009 IECC  
 7 for residential buildings and the ASHRAE  
 8 Standard 90.1–2007 for commercial build-  
 9 ings; or

10 “(ii) achieve equivalent or greater en-  
 11 ergy savings.

12 “(2) REVIEW AND UPDATING OF CODES BASED  
 13 ON DETERMINATION OF SECRETARY.—

14 “(A) DETERMINATION OF IMPROVEMENT  
 15 OF ENERGY EFFICIENCY IN BUILDINGS; MODI-  
 16 FIED CODES OR STANDARDS.—

17 “(i) IN GENERAL.—If the Secretary  
 18 makes an affirmative determination under  
 19 subsection (a)(2)(A)(i) or establishes a  
 20 modified code or standard under sub-  
 21 section (a)(2)(B), each State shall, not  
 22 later than 2 years after the date of the de-  
 23 termination or establishment, certify  
 24 whether or not the State has reviewed and

1 updated the provisions of the building code  
2 of the State regarding energy efficiency.

3 “(ii) DEMONSTRATION.—The certifi-  
4 cation shall include a demonstration that  
5 the code provisions of the State meet or  
6 exceed the revised code or standard, or  
7 achieve equivalent or greater energy sav-  
8 ings.

9 “(B) NO DETERMINATION OF IMPROVE-  
10 MENT OF ENERGY EFFICIENCY IN BUILD-  
11 INGS.—If the Secretary fails to make a deter-  
12 mination under subsection (a)(2)(A)(i) by the  
13 date specified in subsection (a)(2), or makes a  
14 negative determination, each State shall not  
15 later than 2 years after the specified date or  
16 the date of the determination, certify whether  
17 or not the State has reviewed the revised code  
18 or standard, and updated the provisions of the  
19 building code of the State regarding energy effi-  
20 ciency to meet or exceed any provisions found  
21 to improve energy efficiency in buildings, or to  
22 achieve equivalent or greater energy savings in  
23 other ways.

24 “(c) STATE CERTIFICATION OF COMPLIANCE WITH  
25 BUILDING CODES.—

1 “(1) REQUIREMENT.—

2 “(A) IN GENERAL.—Not later than 3 years  
3 after the date of a certification under sub-  
4 section (b), each State shall certify whether or  
5 not the State has—

6 “(i) achieved compliance under para-  
7 graph (3) with the certified State building  
8 energy code or with the associated model  
9 code or standard; or

10 “(ii) made significant progress under  
11 paragraph (4) toward achieving compliance  
12 with the certified State building energy  
13 code or with the associated model code or  
14 standard.

15 “(B) REPEAT CERTIFICATIONS.—If the  
16 State certifies progress toward achieving com-  
17 pliance, the State shall repeat the certification  
18 each year until the State certifies that the State  
19 has achieved compliance.

20 “(2) MEASUREMENT OF COMPLIANCE.—A cer-  
21 tification under paragraph (1) shall include docu-  
22 mentation of the rate of compliance based on—

23 “(A) independent inspections of a random  
24 sample of the new and renovated buildings cov-  
25 ered by the code in the preceding year; or

1 “(B) an alternative method that yields an  
2 accurate measure of compliance.

3 “(3) ACHIEVEMENT OF COMPLIANCE.—

4 “(A) IN GENERAL.—A State shall be con-  
5 sidered to achieve compliance under paragraph  
6 (1) if—

7 “(i) at least 90 percent of new and  
8 renovated building space covered by the  
9 code in the preceding year substantially  
10 meets all the requirements of the code re-  
11 garding energy efficiency, or achieves an  
12 equivalent energy savings level; or

13 “(ii) the estimated excess energy use  
14 of new and renovated buildings that did  
15 not meet the code in the preceding year,  
16 compared to a baseline of comparable  
17 buildings that meet the code, is not more  
18 than 5 percent of the estimated energy use  
19 of all new and renovated buildings covered  
20 by the code during the preceding year.

21 “(B) RENOVATED BUILDINGS.—If the Sec-  
22 retary determines that the percentage targets  
23 under subparagraph (A) are not reasonably  
24 achievable for renovated residential or commer-  
25 cial buildings, the Secretary may reduce the

1 targets for the renovated buildings to the high-  
2 est achievable level.

3 “(4) SIGNIFICANT PROGRESS TOWARD  
4 ACHIEVEMENT OF COMPLIANCE.—

5 “(A) IN GENERAL.—A State shall be con-  
6 sidered to have made significant progress to-  
7 ward achieving compliance for purposes of para-  
8 graph (1) if the State—

9 “(i) has developed and is imple-  
10 menting a plan for achieving compliance  
11 within 8 years, assuming continued ade-  
12 quate funding, including active training  
13 and enforcement programs;

14 “(ii) after 1 or more years of ade-  
15 quate funding, has demonstrated progress,  
16 in conformance with the plan described in  
17 clause (i), toward compliance;

18 “(iii) after 5 or more years of ade-  
19 quate funding, meets the requirements of  
20 paragraph (3) if ‘80 percent’ is substituted  
21 for ‘90 percent’ or ‘10 percent’ is sub-  
22 stituted for ‘5 percent’; and

23 “(iv) has not had more than 8 years  
24 of adequate funding.

1           “(B) ADEQUATE FUNDING.—For purposes  
2 of this paragraph, funding shall be considered  
3 adequate if the Federal Government provides to  
4 the States at least \$50,000,000 for a fiscal year  
5 in funding and support for development and im-  
6 plementation of State building energy codes, in-  
7 cluding for training and enforcement.

8           “(C) TECHNICAL ASSISTANCE TO  
9 STATES.—The Secretary shall provide technical  
10 assistance to States to implement the require-  
11 ments of this section, including procedures for  
12 States—

13               “(i) to demonstrate that the code pro-  
14 visions of the States achieve equivalent or  
15 greater energy savings than the national  
16 model codes and standards; and

17               “(ii) to improve and implement State  
18 residential and commercial building energy  
19 efficiency codes or to otherwise promote  
20 the design and construction of energy effi-  
21 cient buildings.

22           “(D) VOLUNTARY ADVANCED CODES.—

23               “(i) IN GENERAL.—The Secretary  
24 shall support the development of voluntary  
25 advanced model codes and standards for



1 residential and commercial buildings that  
2 achieve energy savings of at least 30 per-  
3 cent compared to the national model build-  
4 ing codes and standards.

5 “(ii) UPDATES.—The voluntary ad-  
6 vanced model codes and standards shall be  
7 updated at least once every 3 years, for  
8 use in—

9 “(I) green building design;

10 “(II) voluntary and market  
11 transformation programs;

12 “(III) incentive criteria; and

13 “(IV) voluntary adoption by  
14 States.

15 “(iii) PREFERENCE.—In carrying out  
16 this subparagraph, the Secretary shall give  
17 preference to voluntary advanced model  
18 codes and standards developed by the  
19 International Code Council and by  
20 ASHRAE.

21 “(d) FAILURE TO MEET DEADLINES.—

22 “(1) IN GENERAL.—A State that has not made  
23 a certification required under subsection (b) or (c)  
24 by the applicable deadline shall submit to the Sec-  
25 retary a report on—

1           “(A) the status of the State with respect  
2           to meeting the requirements and submitting the  
3           certification; and

4           “(B) a plan for meeting the requirements  
5           and submitting the certification.

6           “(2) NONACCEPTANCE OF CERTIFICATION.—  
7           Any State for which the Secretary has not accepted  
8           a certification by a deadline under subsection (b) or  
9           (c) shall be considered out of compliance with this  
10          section.

11          “(3) LOCAL GOVERNMENT.—In any State that  
12          is out of compliance with this section, a local govern-  
13          ment may be considered in compliance with this sec-  
14          tion by meeting the certification requirements under  
15          subsections (b) and (c).

16          “(4) ANNUAL REPORTS BY SECRETARY.—

17                 “(A) IN GENERAL.—The Secretary shall  
18                 annually submit to Congress, and publish in the  
19                 Federal Register, a report on—

20                         “(i) the status of national model  
21                         building energy codes and standards;

22                         “(ii) the status of code adoption and  
23                         compliance in the States; and

24                         “(iii) implementation of this section.

1           “(B) IMPACTS.—The report shall include  
2           estimates of impacts of past action under this  
3           section, and potential impacts of further action,  
4           on lifetime energy use by buildings and result-  
5           ing energy costs to individuals and businesses.

6           “(e) AVAILABILITY OF INCENTIVE FUNDING.—

7           “(1) IN GENERAL.—

8           “(A) REQUIREMENT.—The Secretary shall  
9           provide incentive funding to States to imple-  
10          ment the requirements of this section, and to  
11          improve and implement State residential and  
12          commercial building energy efficiency codes, in-  
13          cluding increasing and verifying compliance  
14          with the codes.

15          “(B) STATE ACTIONS.—In determining  
16          whether, and in what amount, to provide incen-  
17          tive funding under this subsection, the Sec-  
18          retary shall consider the actions proposed by  
19          the State—

20                 “(i) to implement the requirements of  
21                 this section;

22                 “(ii) to improve and implement resi-  
23                 dential and commercial building energy ef-  
24                 ficiency codes; and

1 “(iii) to promote building energy effi-  
2 ciency through the use of the codes.

3 “(2) ADDITIONAL FUNDING.—Additional fund-  
4 ing shall be provided under this subsection for im-  
5 plementation of a plan to achieve and document at  
6 least a 90 percent rate of compliance with residential  
7 and commercial building energy efficiency codes,  
8 based on energy performance—

9 “(A) to a State that has adopted and is  
10 implementing, on a Statewide basis—

11 “(i) a residential building energy effi-  
12 ciency code that meets or exceeds the re-  
13 quirements of the 2009 IECC, or any suc-  
14 ceeding version of that code that has re-  
15 ceived an affirmative determination from  
16 the Secretary under subsection  
17 (a)(2)(A)(i); and

18 “(ii) a commercial building energy ef-  
19 ficiency code that meets or exceeds the re-  
20 quirements of the ASHRAE Standard  
21 90.1–2007, or any succeeding version of  
22 that standard that has received an affirma-  
23 tive determination from the Secretary  
24 under subsection (a)(2)(A)(i); or

1           “(B) in a State in which there is no State-  
 2           wide energy code for either residential buildings  
 3           or commercial buildings, or in which State  
 4           codes fail to comply with subparagraph (A), to  
 5           a local government that has adopted and is im-  
 6           plementing residential and commercial building  
 7           energy efficiency codes, as described in subpara-  
 8           graph (A).

9           “(3) TRAINING.—Of the amounts made avail-  
 10          able under this subsection, the State may use  
 11          amounts required, but not to exceed \$500,000 for a  
 12          State, to train State and local building code officials  
 13          to implement and enforce codes described in para-  
 14          graph (2).

15          “(4) AUTHORIZATION OF APPROPRIATIONS.—  
 16          There are authorized to be appropriated to carry out  
 17          this subsection—

18                 “(A) \$100,000,000 for each of fiscal years  
 19                 2009 through 2013; and

20                 “(B) such sums as are necessary for fiscal  
 21                 year 2014 and each fiscal year thereafter.”.

22          (b) DEFINITION OF IECC.—Section 303 of the En-  
 23          ergy Conservation and Production Act (42 U.S.C. 6832)  
 24          is amended by adding at the end the following:

1           “(17) IECC.—The term ‘IECC’ means the  
2       International Energy Conservation Code.”.

3   **SEC. 242. MULTIFAMILY AND MANUFACTURED HOUSING**  
4                   **ENERGY EFFICIENCY GRANT PROGRAM.**

5       (a) DEFINITIONS.—In this section:

6           (1) ELIGIBLE ENTITY.—The term “eligible enti-  
7       ty” means a State or local government agency or  
8       nonprofit organization that implements energy effi-  
9       ciency programs to increase energy efficiency in mul-  
10      tifamily buildings or manufactured housing.

11          (2) ENERGY EFFICIENCY PROGRAM.—The term  
12      “energy efficiency program” means a program de-  
13      signed to increase energy efficiency in multifamily  
14      buildings and manufactured housing through finan-  
15      cial incentives, building renovation and construction,  
16      appliance retrofits, or other means, as determined by  
17      an eligible entity.

18          (3) ENERGY STAR PROGRAM.—The term “En-  
19      ergy Star program” means the program established  
20      by section 324A of the Energy Policy and Conserva-  
21      tion Act (42 U.S.C. 6294a).

22          (4) MANUFACTURED HOUSING.—The term  
23      “manufactured housing” means a manufactured  
24      home (as defined in section 603 of the National

1       Manufactured Housing Construction and Safety  
2       Standards Act of 1974 (42 U.S.C. 5402)).

3           (5) MULTIFAMILY BUILDING.—The term “mul-  
4       tifamily building” means a structure with 5 or more  
5       dwelling units.

6           (6) SECRETARY.—The term “Secretary” means  
7       the Secretary of Energy.

8       (b) ESTABLISHMENT.—The Secretary shall establish  
9       a program, to be known as the “Multifamily and Manufac-  
10      tured Housing Energy Efficiency Grant Program”, under  
11      which the Secretary shall provide grants to eligible entities  
12      to carry out energy efficiency programs in accordance with  
13      this section.

14      (c) PURPOSE.—The purpose of the program estab-  
15      lished under this section is to provide financial assistance  
16      to eligible entities to carry out energy efficiency programs  
17      to increase energy efficiency in multifamily buildings and  
18      manufactured housing in a manner that—

19           (1) demonstrates an innovative approach to en-  
20      ergy efficiency;

21           (2) maximizes the cost effectiveness of Federal  
22      and non-Federal expenditures;

23           (3) maximizes energy efficiency potential for re-  
24      cipients;

1           (4) prioritizes recipients with the greatest fi-  
2       nancial need;

3           (5) prioritizes efficiency programs with high lev-  
4       els of matching funds;

5           (6) maintains geographical diversity in allo-  
6       cating grants; and

7           (7) is replicable.

8       (d) GRANTS.—The Secretary shall make grants to el-  
9       igible entities to implement energy efficiency program  
10      under this section through—

11           (1) in the case of multifamily buildings—

12                (A) renovation of multifamily buildings;  
13           and

14                (B) encouragement and recommendations  
15           for replacement of appliances, equipment, and  
16           systems with low energy efficiency with appli-  
17           ances, equipment, and systems that meet cri-  
18           teria established under the Energy Star pro-  
19           gram;

20           (2) in the case of manufactured housing, re-  
21       bates to owners of manufactured housing con-  
22       structed before calendar year 1976 to assist the  
23       owners in replacing the manufactured housing with  
24       manufactured housing that meets criteria estab-  
25       lished under the Energy Star program; and



1           (3) other innovative approaches, as determined  
2       by the eligible entities and approved by the Sec-  
3       retary.

4       (e) ADMINISTRATION.—An eligible entity that re-  
5       ceives a grant under this section shall—

6           (1) maintain such records and evidence of com-  
7       pliance as the Secretary may require;

8           (2) develop and distribute information and ma-  
9       terials and conduct programs to provide technical  
10      services and assistance to encourage planning, fi-  
11      nancing, and design of energy-efficient multifamily  
12      buildings or manufactured housing; and

13          (3) report publicly the results of a project con-  
14      ducted under this section to enable other eligible en-  
15      tities to learn from each project.

16      (f) AUTHORIZATION OF APPROPRIATIONS.—There  
17      are authorized to be appropriated such sums as are nec-  
18      essary to carry out this section.

19      **SEC. 243. BUILDING TRAINING AND ASSESSMENT CENTERS.**

20      (a) IN GENERAL.—The Secretary of Energy shall  
21      provide grants to institutions of higher education (as de-  
22      fined in section 101 of the Higher Education Act of 1965  
23      (20 U.S.C. 1001)) to establish building training and as-  
24      sessment centers—

1           (1) to identify opportunities for optimizing en-  
2           ergy efficiency and environmental performance in  
3           buildings;

4           (2) to promote the application of emerging con-  
5           cepts and technologies in commercial and institu-  
6           tional buildings;

7           (3) to train engineers, architects, building sci-  
8           entists, building energy permitting and enforcement  
9           officials, and building technicians in energy-efficient  
10          design and operation;

11          (4) to assist institutions of higher education in  
12          training building technicians;

13          (5) to promote research and development for  
14          the use of alternative energy sources to supply heat  
15          and power for buildings, particularly energy-inten-  
16          sive buildings; and

17          (6) to coordinate with and assist State-accred-  
18          ited technical training centers, community colleges,  
19          and local offices of the National Institute of Food  
20          and Agriculture and ensure appropriate services are  
21          provided under this section to each region of the  
22          United States.

23          (b) COORDINATION AND NONDUPLICATION.—

24                (1) IN GENERAL.—The Secretary shall coordi-  
25          nate the program with the Industrial Assessment

1       Centers program established under this Act and with  
 2       other Federal programs to avoid duplication of ef-  
 3       fort.

4           (2) COLLOCATION.—To the maximum extent  
 5       practicable, building, training, and assessment cen-  
 6       ters established under this section shall be collocated  
 7       with Industrial Assessment Centers.

8       (c) AUTHORIZATION OF APPROPRIATIONS.—There  
 9       are authorized to be appropriated such sums as are nec-  
 10      essary to carry out this section.

11      **PART II—WEATHERIZATION ASSISTANCE FOR**  
 12                           **LOW-INCOME PERSONS**

13      **SEC. 251. WEATHERIZATION ASSISTANCE FOR LOW-INCOME**  
 14                           **PERSONS.**

15       Section 422 of the Energy Conservation and Produc-  
 16      tion Act (42 U.S.C. 6872) is amended—

17           (1) in paragraph (4), by striking “and” at the  
 18       end;

19           (2) in paragraph (5), by striking the double pe-  
 20       riods at the end and inserting “; and”; and

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

22           “(6) \$1,700,000,000 for each of fiscal years  
 23       2011 through 2015.”.

1           **PART III—STATE ENERGY PROGRAM**

2   **SEC. 255. STATE ENERGY PROGRAM.**

3           Section 365 of the Energy Policy and Conservation  
4 Act (42 U.S.C. 6325) is amended by striking subsection  
5 (f) and inserting the following:

6           “(f) AUTHORIZATION OF APPROPRIATIONS.—There  
7 is authorized to be appropriated to the Secretary to carry  
8 out this part \$250,000,000 for each of fiscal years 2011  
9 through 2015, to remain available until expended.”.

10   **PART IV—STATE ENERGY EFFICIENCY GRANTS**  
11                                   **PROGRAM**

12   **SEC. 261. DEFINITIONS.**

13           In this part:

14           (1) ADMINISTRATOR.—The term “Adminis-  
15 trator” means the Administrator of the Environ-  
16 mental Protection Agency, acting in consultation  
17 with the Secretary.

18           (2) ANSI.—The term “ANSI” means the  
19 American National Standards Institute.

20           (3) ASHRAE.—The term “ASHRAE” means  
21 the American Society of Heating, Refrigerating and  
22 Air Conditioning Engineers.

23           (4) BUILDING ENERGY CODE POLICY.—The  
24 term “building energy code policy” means a policy  
25 that provides—

1 (A) a building energy code for residential  
2 buildings throughout a State that meets or ex-  
3 ceeds the 2009 International Energy Conserva-  
4 tion Code;

5 (B) a building energy code for commercial  
6 buildings throughout the State that meets or  
7 exceeds the ANSI/ASHRAE/IES Standard 90.1  
8 (2007); and

9 (C) a plan for the jurisdiction achieving  
10 compliance with subparagraphs (A) and (B) not  
11 later than 8 years after the date of enactment  
12 of this Act in at least 90 percent of new and  
13 renovated residential and commercial building  
14 space, including compliance through—

15 (i) active training and enforcement  
16 programs; and

17 (ii) measurement of the rate of com-  
18 pliance each year.

19 (5) COMMERCIAL BUILDING.—The term “com-  
20 mercial building” means a building that is—

21 (A) covered by ASHRAE/IES Standard  
22 90.1 (2007);

23 (B) located in the United States; and

24 (C) constructed before the date of enact-  
25 ment of this Act.

1           (6) ELECTRIC UTILITY.—The term “electric  
2           utility” means any individual, entity, or State agen-  
3           cy that distributes electricity directly to retail con-  
4           sumers pursuant to a legal, regulatory, or contrac-  
5           tual obligation.

6           (7) ENERGY EFFICIENCY MEASURE.—The term  
7           “energy efficiency measure” means an installed  
8           measure (including products, equipment, systems,  
9           services, and practices) that result in reductions in  
10          end-use demand for externally supplied energy, or  
11          fuel, by a consumer, facility, or user.

12          (8) HOME.—The term “home” means a prin-  
13          cipal residential dwelling unit that is—

14                (A) located in the United States; and

15                (B) constructed before the date of enact-  
16          ment of this Act.

17          (9) IESNA.—The term “IESNA” means the Il-  
18          luminating Engineering Society of North America.

19          (10) NATURAL GAS UTILITY.—The term “nat-  
20          ural gas utility” means any individual, entity, or  
21          State agency engaged in the local distribution of  
22          natural gas to any ultimate consumer of natural gas.

23          (11) SECRETARY.—The term “Secretary”  
24          means the Secretary of Energy, acting in consulta-  
25          tion with the Administrator.

1 (12) STATE.—The term “State” means—

2 (A) a State;

3 (B) the District of Columbia;

4 (C) the Commonwealth of Puerto Rico;

5 (D) Guam;

6 (E) American Samoa; and

7 (F) the United States Virgin Islands.

8 **SEC. 262. STATE ENERGY EFFICIENCY RETROFIT PRO-**  
9 **GRAMS.**

10 (a) IN GENERAL.—The Secretary shall make grants  
11 to States to carry out energy efficiency retrofit programs  
12 in accordance with this section.

13 (b) GRANT AWARDS.—The Secretary shall apply per-  
14 formance-based criteria in awarding grants to States  
15 under this section, which shall give priority for funding  
16 of energy efficiency retrofit programs based on—

17 (1) the cost-effectiveness of the energy effi-  
18 ciency programs;

19 (2) the number and quality of jobs created;

20 (3) the quantity of energy and water saved;

21 (4) the development of an effective plan for  
22 evaluation, measurement, and verification of energy  
23 savings;

24 (5) the inclusion of measures—

25 (A) to reach underserved populations;

1 (B) to provide for independent evaluation  
2 and adequate incentives for successful program  
3 management; and

4 (C) to leverage private sector funds and  
5 use innovative financing methods to implement  
6 more comprehensive energy efficiency projects,  
7 including the methods described in section 266;

8 (6) the effective use of grant funds provided  
9 under the American Recovery and Reinvestment Act  
10 of 2009 (Public Law 111–5); and

11 (7) progress on the adoption and implementa-  
12 tion of the building energy code policies.

13 (c) IMPLEMENTATION.—A State that receives a grant  
14 to carry out an energy efficiency program under this sec-  
15 tion may implement the program through the State or a  
16 third party designated by the State, including an energy  
17 service company, an electric utility, a natural gas utility,  
18 a third party administrator designated by the State, or  
19 a unit of local government.

20 (d) HOME EFFICIENCY RETROFITS PROGRAM.—

21 (1) IN GENERAL.—A State may use a grant  
22 provided under this section to provide a grant to an  
23 owner of a home for an energy efficiency retrofit of  
24 the home, on completion of the retrofit, if the ret-  
25 rofit is carried out in accordance with—



1 (A) the prescriptive option described in  
2 paragraph (2); or

3 (B) the performance-based option de-  
4 scribed in paragraph (3).

5 (2) PRESCRIPTIVE OPTION.—

6 (A) IN GENERAL.—A grant provided for  
7 the energy retrofit of a home under the pre-  
8 scriptive option described in this paragraph  
9 shall be made for achieving energy savings from  
10 measures—

11 (i) selected from a prescriptive list es-  
12 tablished under subparagraph (B); and

13 (ii) installed in the home.

14 (B) LIST.—Not later than 90 days after  
15 the date of enactment of this Act, the Secretary  
16 shall establish a list of combinations of energy  
17 savings measures that can be implemented by  
18 the owner of a home to save at least—

19 (i) 10 percent on whole home energy  
20 consumption; and

21 (ii) 20 percent on whole home energy  
22 consumption.

23 (C) AMOUNT OF GRANT.—Subject to sub-  
24 paragraph (E)(ii), the amount of a grant pro-

vided to the owner of a home under this paragraph shall be—

(i) \$1,000 for energy savings of 10 percent described in subparagraph (B)(i); and

(ii) \$2,000 for energy savings of not less than 20 percent, but not more than 50 percent, described in subparagraph (B)(ii).

(D) VERIFICATION.—To be eligible for a grant for the energy retrofit of a home in a State under this paragraph, the owner of a home shall submit to the State a certification by the contractor or installer that carried out the retrofit that the measures undertaken for the retrofit—

(i) are described on the list established under subparagraph (B); and

(ii) were installed properly.

(E) ADMINISTRATION.—The Secretary may—

(i) discontinue the prescriptive option established under this paragraph at any time after the date that is 1 year after the date of enactment of this Act; and

1                   (ii) adjust the amount of grants pro-  
2                   vided under this paragraph.

3           (3) PERFORMANCE-BASED OPTION.—

4                   (A) IN GENERAL.—A grant provided for  
5                   the energy retrofit of a home under the per-  
6                   formance-based option described in this para-  
7                   graph shall be made for retrofits that achieve  
8                   whole home energy savings.

9                   (B) AMOUNT OF GRANT.—Subject to sub-  
10                  paragraph (E), the amount of a grant provided  
11                  to the owner of a home under this paragraph  
12                  shall be—

13                       (i) \$3,000 for a 20-percent reduction  
14                       in whole home energy consumption; and

15                       (ii) an additional \$150 for each addi-  
16                       tional 1-percent reduction up to the lower  
17                       of—

18                                       (I) \$12,000; or

19                                       (II) 50 percent of the total ret-  
20                       rofit cost.

21           (C) ENERGY SAVINGS.—

22                       (i) IN GENERAL.—Energy savings  
23                       under this paragraph shall be determined  
24                       by a comparison of the energy consump-

tion of the home before the retrofit to the consumption of the home after the retrofit.

(ii) DOCUMENTATION.—The percent improvement in energy consumption under this paragraph shall be documented through—

(I) the use of whole home simulation software programs approved by the Administrator; or

(II) a comparison of the difference before and after the retrofit as measured by home energy ratings on the Home Energy Rating System Index as specified in the Residential Energy Services Network Publication No. 06-001 (or a successor publication).

(D) VERIFICATION.—

(i) IN GENERAL.—Subject to clause (ii), the Administrator shall ensure that at least 15 percent of the retrofits performed under this paragraph are randomly subject to a third party verification of all work associated with the retrofit.

1 (ii) ADJUSTMENT.—On or after the  
2 date that is 1 year after the date of enact-  
3 ment of this Act, the Administrator may  
4 adjust the percentage specified under  
5 clause (i) based on program experience.

6 (iii) CONTRACTOR CERTIFICATION.—  
7 Subject to clause (iv), the Administrator—

8 (I) shall determine the level of  
9 contractor certification appropriate  
10 for retrofits performed under this  
11 paragraph; and

12 (II) may adjust the level in re-  
13 sponse to program data.

14 (iv) ADVANCED CONTRACTOR CERTIFI-  
15 CATIONS.—The Secretary may develop an  
16 additional incentive for advanced con-  
17 tractor certifications under clause (iii).

18 (E) ADMINISTRATION.—On or after the  
19 date that is 1 year after the date of enactment  
20 of this Act, the Secretary may adjust the grant  
21 amounts provided under this paragraph based  
22 on program data.

23 (e) COMMERCIAL BUILDINGS EFFICIENCY RETRO-  
24 FITS PROGRAM.—

1           (1) IN GENERAL.—A State may use a grant  
2       provided under this section to provide incentives for  
3       energy efficiency retrofits to the owner of 1 or more  
4       commercial buildings, including submetered areas or  
5       individual tenant spaces within a commercial build-  
6       ing or an aggregation of commercial buildings.

7           (2) ENERGY SAVINGS.—

8           (A) IN GENERAL.—A State may provide  
9       incentives to the owner of 1 or more commercial  
10      buildings for energy efficiency retrofits under  
11      this subsection if the retrofits improve energy  
12      performance by at least 20 percent compared to  
13      energy consumption during the previous year of  
14      the 1 or more commercial buildings, while ad-  
15      justing for other relevant factors including  
16      changes in occupancy loads and process energy.

17          (B) BENCHMARKING TOOL.—The energy  
18      savings shall be determined by using an estab-  
19      lished energy benchmarking tool designated by  
20      the Administrator.

21          (3) INCENTIVES.—

22          (A) IN GENERAL.—The Secretary shall es-  
23      tablish the amount and form of the incentives  
24      provided under this subsection in a manner that  
25      encourages implementation of retrofits that

1 achieve the largest and most durable improve-  
2 ments in energy performance.

3 (B) AMOUNT.—

4 (i) IN GENERAL.—Subject to clause  
5 (ii), the amount of the incentives provided  
6 under this subsection shall be equal to—

7 (I) \$0.15 per square foot of ret-  
8 rofit floor area for 20 to 24 percent  
9 savings;

10 (II) \$0.75 per square foot of ret-  
11 rofit floor area for 25 to 29 percent  
12 savings;

13 (III) \$1.20 per square foot of  
14 retrofit floor area for 30 to 34 percent  
15 savings;

16 (IV) \$1.60 per square foot of ret-  
17 rofit floor area for 35 to 39 percent  
18 savings;

19 (V) \$2.05 per square foot of ret-  
20 rofit floor area for 40 to 44 percent  
21 savings;

22 (VI) \$2.50 per square foot of ret-  
23 rofit floor area for 45 to 49 percent  
24 savings; and

1 (VII) \$3.00 per square foot of  
2 retrofit floor area for 50 or more per-  
3 cent savings.

4 (ii) MODIFICATION.—The Secretary  
5 may modify the amount and form of incen-  
6 tives provided under this subsection based  
7 on data gathered during program imple-  
8 mentation, including the development of  
9 incentives for particular building types.

10 (C) TIMING.—

11 (i) PAYMENT ON COMPLETION.—On  
12 the completion of the energy retrofit of 1  
13 or more commercial buildings and the  
14 verification of at least a 20-percent energy  
15 savings from the retrofit, the State shall  
16 provide to the owner or agent of the 1 or  
17 more commercial buildings 60 percent of  
18 the qualified incentive amount for the ret-  
19 rofit determined under subparagraph (B).

20 (ii) REMAINING PAYMENTS.—During  
21 the 3-year period beginning on the date of  
22 the initial payment under clause (i), the  
23 State shall provide to the owner or agent  
24 of the commercial building the remaining  
25 40 percent of the qualified incentive



1 amount for the retrofit determined under  
2 subparagraph (B) for any energy savings  
3 of 20 percent or more, with the amount  
4 awarded proportionate to the level of sus-  
5 tained performance improvement.

6 (iii) MINIMUM IMPROVEMENTS.—No  
7 incentives shall be provided under this sub-  
8 section for sustained performance improve-  
9 ments of less than 20 percent, as deter-  
10 mined by annual audits.

11 (iv) DISCLOSURE.—The Secretary  
12 may require such information as is nec-  
13 essary to determine energy performance  
14 under this subsection.

15 (f) HISTORIC BUILDINGS.—Notwithstanding sub-  
16 sections (d) and (e), a building that is eligible for or listed  
17 in the National Register of Historic Places shall be eligible  
18 for incentives under this section in amounts of up to 120  
19 percent of the applicable amounts described in subsections  
20 (d) and (e).

21 (g) REPORT.—

22 (1) IN GENERAL.—Not later than 300 days  
23 after the date that the Secretary initially provides  
24 funds to a State under this section, the State shall

1 submit to the Secretary a report on the use of the  
2 funds.

3 (2) CONTENTS.—The report shall include a de-  
4 scription of—

5 (A) the measured and verified energy sav-  
6 ings produced under this section;

7 (B) the projected energy savings under  
8 this section during the subsequent 1-year pe-  
9 riod;

10 (C) the specific entities implementing the  
11 energy efficiency programs;

12 (D) the beneficiaries who received the effi-  
13 ciency improvements;

14 (E) the manner in which funds provided  
15 under this section were used;

16 (F) the sources (such as mortgage lenders,  
17 utility companies, and local governments) and  
18 types of financing used by the beneficiaries to  
19 finance the retrofit expenses that were not cov-  
20 ered by grants provided in this part;

21 (G) the direct and indirect employment  
22 created as a result of the programs supported  
23 by the funds;

24 (H) the results of verification require-  
25 ments; and

1 (I) any other information the Secretary  
2 considers appropriate.

3 (3) NONCOMPLIANCE.—If the Secretary deter-  
4 mines that a State has not provided the information  
5 required under this subsection, the Secretary shall  
6 provide to the State a period of at least 90 days to  
7 provide any necessary information.

8 **SEC. 263. ADMINISTRATIVE AND TECHNICAL SUPPORT.**

9 Subject to section 265(b)(2), not later than 90 days  
10 after the date of enactment of this Act, the Secretary may  
11 provide such administrative and technical support to  
12 States as is necessary to carry out this part.

13 **SEC. 264. REGULATIONS.**

14 Not later than 180 days after the date of enactment  
15 of this Act, the Secretary shall promulgate such regula-  
16 tions as are necessary to carry out this part.

17 **SEC. 265. FUNDING.**

18 (a) IN GENERAL.—There are authorized to be appro-  
19 priated such sums as are necessary to carry out this part  
20 for each of fiscal years 2010 through 2015.

21 (b) USE.—Funds provided for a fiscal year under  
22 subsection (a) shall be allocated as follows:

23 (1) In the case of State energy efficiency grants  
24 programs under section 262:

1 (A) 45 percent for the home efficiency ret-  
2 rofits program under section 262(d).

3 (B) 45 percent for the commercial build-  
4 ings efficiency retrofits program under section  
5 262(e).

6 (C) 10 percent to provide administrative  
7 and technical support to the States to carry out  
8 this part.

9 (c) LIMITATION ON THE USE OF FUNDS.—A State  
10 shall use not more than—

11 (1) 10 percent of the funds provided for a fiscal  
12 year under this part for administration of programs  
13 under this part; and

14 (2) 5 percent of the funds provided for a fiscal  
15 year under part for measurement and verification.

16 **SEC. 266. HOME ENERGY RETROFIT FINANCE PROGRAM.**

17 (a) DEFINITIONS.—In this section:

18 (1) ELIGIBLE PARTICIPANT.—The term “eligi-  
19 ble participant” means a homeowner, apartment  
20 complex owner, residential cooperative association,  
21 or condominium association that finances energy ef-  
22 ficiency improvements to homes and residential  
23 buildings under this section.

1           (2) PROGRAM.—The term “program” means  
2       the Home Energy Retrofit Finance Program estab-  
3       lished under subsection (b).

4           (3) QUALIFIED PROGRAM DELIVERY ENTITY.—  
5       The term “qualified program delivery entity” means  
6       a local government, energy utility, or any other enti-  
7       ty designated by the Secretary that administers the  
8       program for a State under this section.

9       (b) ESTABLISHMENT.—The Secretary shall provide  
10   Home Energy Retrofit Finance Program grants to States  
11   for the purpose of establishing or expanding a State re-  
12   volving finance fund to support financing offered by quali-  
13   fied program delivery entities for energy efficiency meas-  
14   ures and renewable energy improvements to existing  
15   homes and residential buildings (including apartment  
16   complexes, residential cooperative associations, and condo-  
17   minium buildings under 5 stories).

18       (c) FUNDING MECHANISM.—In carrying out the pro-  
19   gram, the Secretary shall provide funds to States, for use  
20   by qualified program delivery entities that administer fi-  
21   nance programs directly or under agreements with collabo-  
22   rating third party entities, to capitalize revolving finance  
23   funds and increase participation in associated financing  
24   programs.

1 (d) ELIGIBILITY OF QUALIFIED PROGRAM DELIVERY

2 ENTITIES.—To be eligible to participate in the program,  
3 a qualified program delivery entity shall establish a meth-  
4 od by which eligible participants may pay over time for  
5 the financed cost of allowable energy efficiency measures  
6 and renewable energy improvements.

7 (e) ALLOCATION.—In making funds available to  
8 States for each fiscal year under this section, the Sec-  
9 retary shall use the allocation formula used to allocate  
10 funds to States to carry out State energy conservation  
11 plans under part D of title III of the Energy Policy and  
12 Conservation Act (42 U.S.C. 6321 et seq.).

13 (f) USE OF FUNDS.—Of the amounts in a State re-  
14 volving finance fund—

15 (1) not more than 20 percent may be used by  
16 qualified program delivery entities for interest rate  
17 reductions for eligible participants; and

18 (2) the remainder shall be available to provide  
19 direct funding or other financial support to qualified  
20 program delivery entities.

21 (g) STATE REVOLVING FINANCE FUNDS.—On repay-  
22 ment of any funds made available by qualified program  
23 delivery entities under the program, the funds shall be de-  
24 posited in the applicable State revolving finance fund to  
25 support additional financing to qualified program delivery

1 entities for energy efficiency measures and renewable en-  
2 ergy improvements.

3 (h) COORDINATION WITH STATE ENERGY EFFI-  
4 CIENCY RETROFIT PROGRAMS.—Home energy retrofit  
5 programs that receive financing through the program shall  
6 be carried out in accordance with all authorized measures,  
7 performance criteria, and other requirements of section  
8 262(d).

9 (i) PROGRAM EVALUATION.—

10 (1) IN GENERAL.—The Secretary shall conduct  
11 a program evaluation to determine—

12 (A) how the program is being used by eli-  
13 gible participants, including what improvements  
14 have been most typical and what regional dis-  
15 tinctions exist, if any;

16 (B) what improvements could be made to  
17 increase the effectiveness of the program; and

18 (C) the quantity of verifiable energy sav-  
19 ings and renewable energy deployment achieved  
20 through the program.

21 (2) REPORTS.—

22 (A) IN GENERAL.—Not later than 3 years  
23 after the date of enactment of this Act, the Sec-  
24 retary shall submit to the Committee on Energy  
25 and Natural Resources of the Senate and the

1 Committee on Energy and Commerce of the  
2 House of Representatives a report that de-  
3 scribes the results of the program evaluation re-  
4 quired under this subsection, including any rec-  
5 ommendations.

6 (B) STATE REPORTS.—Not less than once  
7 every 2 years, States participating in the pro-  
8 gram shall submit to the Secretary reports on  
9 the use of funds through the program that in-  
10 clude any information that the Secretary may  
11 require.

12 (j) AUTHORIZATION OF APPROPRIATIONS.—

13 (1) IN GENERAL.—There are authorized to be  
14 appropriated such sums as are necessary to carry  
15 out this section for each of fiscal years 2010 through  
16 2015.

17 (2) ADMINISTRATIVE EXPENSES.—An amount  
18 not exceeding 5 percent of the amounts made avail-  
19 able under paragraph (1) shall be available for each  
20 fiscal year to pay the administrative expenses nec-  
21 essary to carry out this section.



**PART V—FEDERAL EFFICIENCY AND  
RENEWABLES**

**SEC. 271. FEDERAL PURCHASE REQUIREMENT.**

Section 203 of the Energy Policy Act of 2005 (42 U.S.C. 15852) (as amended by section 133) is amended—

(1) in subsection (a), in the matter preceding paragraph (1), by striking “electric”;

(2) by redesignating subsection (d) as subsection (f) and moving that subsection to appear after subsection (e);

(3) by inserting after subsection (c) the following:

“(d) SEPARATE CALCULATION.—Renewable energy produced at a Federal facility, on Federal land, or on Indian land (as defined in section 2601 of the Energy Policy Act of 1992 (25 U.S.C. 3501))—

“(1) shall be calculated separately from renewable energy used; and

“(2) may be used individually or in combination to comply with subsection (a).”; and

(4) by adding at the end the following:

“(g) CONTRACT PERIOD.—

“(1) IN GENERAL.—Notwithstanding section 501(b)(1)(B) of title 40, United States Code, a contract entered into by a Federal agency to acquire re-

1       newable energy may be made for a period of not  
2       more than 30 years.

3               “(2) TECHNICAL ASSISTANCE.—The Secretary  
4       shall provide technical assistance to Federal agencies  
5       to enter into contracts under this subsection.

6               “(3) STANDARDIZED RENEWABLE ENERGY PUR-  
7       CHASE AGREEMENT.—Not later than 90 days after  
8       the date of enactment of this subsection, the Sec-  
9       retary, acting through the Federal Energy Manage-  
10      ment Program, shall publish a standardized renew-  
11      able energy purchase agreement setting forth com-  
12      mercial terms and conditions that can be used by  
13      Federal agencies to acquire renewable energy.”.

14   **SEC. 272. COMPETITION REQUIREMENTS FOR TASK OR DE-**  
15                   **LIVERY ORDERS UNDER ENERGY SAVINGS**  
16                   **PERFORMANCE CONTRACTS.**

17       (a) IN GENERAL.—Section 801(a) of the National  
18   Energy Conservation Policy Act (42 U.S.C. 8287(a)) is  
19   amended by adding at the end the following

20               “(3) TASK OR DELIVERY ORDERS.—

21                   “(A) IN GENERAL.—The head of a Federal  
22               agency may issue a task or delivery order under  
23               an energy savings performance contract by—

24                               “(i)(I) notifying all contractors that  
25                               have received an award under the contract

1           that the agency proposes to consider using  
2           energy savings performance services for all  
3           or part of the facilities of the agency;

4           “(II) soliciting an expression of inter-  
5           est in the performance of site surveys or  
6           investigations and feasibility designs and  
7           studies and the submission of qualifica-  
8           tions from the contractors; and

9           “(III) including in the notice sum-  
10          mary information concerning energy use  
11          for any facilities that the agency has spe-  
12          cific interest in including in the contract;

13          “(ii) reviewing all expressions of inter-  
14          est and qualifications submitted pursuant  
15          to the notice provided under clause (i);

16          “(iii) selecting 2 or more contractors  
17          (from among the contractors reviewed  
18          under clause (ii)) to analyze the respective  
19          qualifications of the contractors to imple-  
20          ment potential energy conservation meas-  
21          ures, including requesting references dem-  
22          onstrating experience on similar efforts  
23          and the resulting energy savings of the  
24          similar efforts;

25          “(iv) selecting and authorizing—

1                   “(I) more than 1 contractor  
2                   (from among the contractors selected  
3                   under clause (iii)) to conduct site sur-  
4                   veys, investigations, feasibility designs  
5                   and studies, or similar assessments  
6                   for the energy savings performance  
7                   contract services (or for discrete por-  
8                   tions of the services), for the purpose  
9                   of allowing each such contractor to  
10                  submit a firm, fixed-price proposal to  
11                  implement specific energy conserva-  
12                  tion measures; or

13                  “(II) 1 contractor (from among  
14                  the contractors selected under clause  
15                  (iii)) to conduct a site survey, inves-  
16                  tigation, feasibility design and study,  
17                  or similar assessment for the purpose  
18                  of allowing the contractor to submit a  
19                  firm, fixed-price proposal to imple-  
20                  ment specific energy conservation  
21                  measures;

22                  “(v) negotiating a task or delivery  
23                  order for energy savings performance con-  
24                  tracting services with the 1 or more con-  
25                  tractors selected under clause (iv) based on

1 the energy conservation measures identi-  
2 fied; and

3 “(vi) issuing a task or delivery order  
4 for energy savings performance contracting  
5 services to the 1 or more contractors.

6 “(B) COMPETITION REQUIREMENTS.—The  
7 issuance of a task or delivery order for energy  
8 savings performance contracting services pursu-  
9 ant to subparagraph (A) shall be consider to  
10 satisfy the task and delivery order competition  
11 requirements of section 2304e(d) of title 10,  
12 United States Code, and section 303J(d) of the  
13 Federal Property and Administrative Services  
14 Act of 1949 (41 U.S.C. 253j(d)).

15 “(C) GUIDANCE.—The Secretary may  
16 issue guidance as necessary to Federal agencies  
17 issuing task or delivery orders pursuant to sub-  
18 paragraph (A).”.

19 (b) NONAPPLICABILITY.—The amendment made by  
20 subsection (a) does not apply to a task or delivery order  
21 issued before the date of enactment of this Act.

22 **SEC. 273. FUNDING FLEXIBILITY.**

23 Section 801(a)(2) of the National Energy Conserva-  
24 tion Policy Act (42 U.S.C. 8287(a)(2)) is amended by  
25 striking subparagraph (E) and inserting the following:

1                   “(E)     FUNDING     OPTIONS.—Notwith-  
 2                   standing any other provision of law, in carrying  
 3                   out a contract under this title, a Federal agency  
 4                   may use any combination of—

5                   “(i) appropriated funds; and

6                   “(ii) private financing under energy  
 7                   savings performance contracts or other pri-  
 8                   vate financing of energy savings meas-  
 9                   ures.”.

10 **SEC. 274. DEFINITION OF ENERGY SAVINGS.**

11           Section 804(2)(B) of the National Energy Conserva-  
 12           tion Policy Act (42 U.S.C. 8287c(2)(B)) is amended by  
 13           inserting “and installation of renewable energy systems”  
 14           after “cogeneration or heat recovery”.

15 **SEC. 275. NATIONAL ENERGY EFFICIENCY IMPROVEMENT**  
 16 **GOALS.**

17           (a) GOALS.—The goals of the United States are—

18                   (1) to achieve an improvement in the overall en-  
 19                   ergy productivity of the United States (measured in  
 20                   gross domestic product per unit of energy input) of  
 21                   at least 2.5 percent per year by the year 2012; and

22                   (2) to maintain that annual rate of improve-  
 23                   ment each year through 2030.

24           (b) STRATEGIC PLAN.—

1           (1) IN GENERAL.—Not later than 1 year after  
2           the date of enactment of this Act, the Secretary of  
3           Energy (referred to in this section as the “Sec-  
4           retary”), in cooperation with the Administrator of  
5           the Environmental Protection Agency and the heads  
6           of other appropriate Federal agencies, shall develop  
7           a strategic plan to achieve the national goals for im-  
8           provement in energy productivity established under  
9           subsection (a).

10           (2) PUBLIC INPUT AND COMMENT.—The Sec-  
11           retary shall develop the plan in a manner that pro-  
12           vides appropriate opportunities for public input and  
13           comment.

14           (c) PLAN CONTENTS.—The strategic plan shall—

15           (1) establish future regulatory, funding, and  
16           policy priorities to ensure compliance with the na-  
17           tional goals;

18           (2) include energy savings estimates for each  
19           sector; and

20           (3) include data collection methodologies and  
21           compilations used to establish baseline and energy  
22           savings data.

23           (d) PLAN UPDATES.—

24           (1) IN GENERAL.—The Secretary shall—

1 (A) update the strategic plan biennially;  
2 and

3 (B) include the updated strategic plan in  
4 the national energy policy plan required by sec-  
5 tion 801 of the Department of Energy Organi-  
6 zation Act (42 U.S.C. 7321).

7 (2) CONTENTS.—In updating the plan, the Sec-  
8 retary shall—

9 (A) report on progress made toward imple-  
10 menting efficiency policies to achieve the na-  
11 tional goals established under subsection (a);  
12 and

13 (B) verify, to the maximum extent prac-  
14 ticable, energy savings resulting from the poli-  
15 cies.

16 (e) REPORT TO CONGRESS AND PUBLIC.—The Sec-  
17 retary shall submit to Congress, and make available to the  
18 public, the initial strategic plan developed under sub-  
19 section (b) and each updated plan.

20 **SEC. 276. ENERGY SUSTAINABILITY AND EFFICIENCY**  
21 **GRANTS AND LOANS FOR INSTITUTIONS.**

22 Section 399A of the Energy Policy and Conservation  
23 Act (42 U.S.C. 6371h–1) (as amended by section 201(2))  
24 is amended—



1 (1) in subsection (a)(5), by striking “‘or a des-  
 2 ignee’” and inserting “‘a not-for-profit hospital, a  
 3 not-for-profit inpatient health care facility, or a des-  
 4 ignated agent’”;

5 (2) in subsection (c)(1), by striking subpara-  
 6 graph (C);

7 (3) in subsection (f)(3)(A), by striking  
 8 “\$1,000,000” and inserting “\$2,500,000”; and

9 (4) in subsection (j)(1), by striking  
 10 “\$250,000,000 for each of fiscal years 2009  
 11 through 2013’” and inserting “‘such sums as are  
 12 necessary for each of fiscal years 2010 through  
 13 2015’”.

14 **SEC. 277. FEDERAL IMPLEMENTATION STRATEGY FOR EN-**  
 15 **ERGY-EFFICIENT INFORMATION AND COM-**  
 16 **MUNICATIONS TECHNOLOGIES.**

17 Section 543 of the National Energy Conservation  
 18 Policy Act (42 U.S.C. 8253) is amended—

19 (1) by redesignating the second subsection (f)  
 20 (relating to large capital energy investments) as sub-  
 21 section (g); and

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

23 “(h) **FEDERAL IMPLEMENTATION STRATEGY FOR**  
 24 **ENERGY-EFFICIENT INFORMATION AND COMMUNICA-**  
 25 **TIONS TECHNOLOGIES.—**

1           “(1) IN GENERAL.—Not later than 1 year after  
 2           the date of enactment of this subsection, each Fed-  
 3           eral agency shall collaborate with the Director of the  
 4           Office of Management and Budget (referred to in  
 5           this subsection as the ‘Director’) to create an imple-  
 6           mentation strategy (including best-practices and  
 7           measurement and verification techniques) for the  
 8           maintenance, purchase, and use of energy efficient  
 9           and energy-reducing information and communica-  
 10          tions technologies and practices.

11           “(2) ADMINISTRATION.—In developing an im-  
 12          plementation strategy, each Federal agency shall—

13                   “(A) consider information and communica-  
 14                   tions technologies and infrastructure, includ-  
 15                   ing—

16                           “(i) advanced metering infrastructure;

17                           “(ii) information and communications  
 18                   technology services and products;

19                           “(iii) efficient data center strategies;

20                           “(iv) computer power management;

21                           “(v) applications modernization and  
 22                   rationalization;

23                           “(vi) building systems energy effi-  
 24                   ciency; and

25                           “(vii) telework;

1           “(B) ensure that the agency is eligible to  
2 realize savings and rewards brought about  
3 through increased efficiency; and

4           “(C) to the maximum extent practicable,  
5 incorporate existing standards, specifications,  
6 performance metrics, and best management  
7 practices.

8           “(3) PERFORMANCE GOALS.—

9           “(A) IN GENERAL.—Not later than 180  
10 days after the date of enactment of this sub-  
11 section, the Director shall establish performance  
12 goals for evaluating the efforts of Federal agen-  
13 cies in improving the maintenance, purchase,  
14 and use of energy efficiency of information and  
15 communications technology systems.

16           “(B) ADMINISTRATION.—The performance  
17 goals shall—

18           “(i) measure information technology  
19 costs over a specific time period of 3 to 5  
20 years; and

21           “(ii) provide, to the maximum extent  
22 practicable, a complete picture of all costs,  
23 including energy costs.

24           “(4) REPORTS.—

“(A) AGENCY REPORTS.—Each Federal agency subject to the requirements of this subsection shall include in the report of the agency under section 527 of the Energy Independence and Security Act of 2007(42 U.S.C. 17143) a description of the efforts of the agency under this subsection.

“(B) OMB GOVERNMENT EFFICIENCY REPORT AND SCORE CARDS.—Effective beginning not later than April 1, 2011, the Director shall include in the annual report and scorecard of the Director under section 528 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17143) a description of the efforts of Federal agencies under this subsection.”.

**SEC. 278. INCENTIVES FOR FEDERAL AGENCIES TO PARTICIPATE IN ENERGY EFFICIENCY PROGRAMS.**

Section 546(c) of the National Energy Conservation Policy Act (42 U.S.C. 8256(c)) is amended—

(1) in paragraph (1), by inserting “(including Independent System Operators, State agencies, and third party entities implementing those programs on behalf of utilities or State agencies)” after “electric utilities”;

(2) in paragraph (2), by inserting “State agency, and third party entity implementing those programs on behalf of utilities or State agencies,” after “such utility,”;

(3) in paragraph (3), by inserting “State agencies, and third party entities implementing those programs on behalf of utilities or State agencies,” after “gas utilities”; and

(4) in the paragraph (4), by inserting “or State agency” after “a utility”.

## **PART VI—ENERGY EFFICIENCY INFORMATION**

### **ON HOMES AND BUILDINGS**

#### **SEC. 281. BUILDING ENERGY PERFORMANCE INFORMATION PROGRAM.**

(a) DEFINITIONS.—In this section:

(1) ACHIEVED PERFORMANCE.—The term “achieved performance” means the measured energy consumption of a building determined using actual consumption data normalized for appropriate variables.

(2) ADMINISTRATOR.—The term “Administrator” means the Administrator of the Environmental Protection Agency.

(3) BUILDING ENERGY PERFORMANCE.—The term “building energy performance” means primary

1 energy consumption per square foot of floor space,  
2 or other measure of energy consumption per energy  
3 service, as determined by the Secretary for a build-  
4 ing type.

5 (4) BUILDING ENERGY PERFORMANCE  
6 VALUE.—The term “building energy performance  
7 value” means a value used for comparing building  
8 energy performance among buildings, as determined  
9 by methods developed by the Administrator.

10 (5) BUILDING TYPE.—The term “building  
11 type” means a type of a building, as identified by  
12 the 1 or more principal activities in the building,  
13 such as office buildings, laboratories, libraries, data  
14 centers, retail spaces, hotels, food sales, food service,  
15 warehouses, and educational facilities.

16 (6) COMMERCIAL BUILDINGS ENERGY CON-  
17 SUMPTION SURVEY.—The term “Commercial Build-  
18 ings Energy Consumption Survey” means the Com-  
19 mercial Buildings Energy Consumption Survey au-  
20 thorized by section 205(k) of the Department of En-  
21 ergy Organization Act (42 U.S.C. 7135(k)).

22 (7) COVERED BUILDING TYPE.—The term “cov-  
23 ered building type” means a building type for which  
24 statistically significant energy performance data

1 exist to serve as the basis of measurement protocols  
2 and certifications for building energy use.

3 (8) DESIGNED PERFORMANCE.—The term “de-  
4 signed performance” means the estimated energy  
5 performance of a building using a standardized set  
6 of operational conditions obtained from building con-  
7 struction documents and other available data.

8 (9) MEASUREMENT PROTOCOL.—The term  
9 “measurement protocol” means the methodology,  
10 prescribed by the Administrator, for determining the  
11 achieved performance or designed performance and  
12 the associated building energy performance value for  
13 a building of a specific building type.

14 (10) RESIDENTIAL ENERGY CONSUMPTION SUR-  
15 VEY.—The term “Residential Energy Consumption  
16 Survey” means the Residential Energy Consumption  
17 Survey authorized by section 205(k) of the Depart-  
18 ment of Energy Organization Act (42 U.S.C.  
19 7135(k)).

20 (11) SECRETARY.—The term “Secretary”  
21 means the Secretary of Energy.

22 (b) BUILDING ENERGY PERFORMANCE INFORMA-  
23 TION PROGRAM.—The Administrator, in consultation with  
24 the Secretary, shall establish a voluntary energy perform-

1   ance information program with broad applicability to  
2   buildings nationwide—

3           (1) to provide timely and accurate information  
4           on comparative energy performance; and

5           (2) to increase public awareness of the impor-  
6           tance of building energy efficiency and energy per-  
7           formance through public education.

8           (c) BUILDING TYPE DETERMINATION FOR ASSESS-  
9   MENT OF ENERGY PERFORMANCE.—

10           (1) REPORT.—Not later than 90 days after the  
11           date of enactment of this Act, the Secretary shall  
12           submit to Congress a report that describes—

13                   (A) all principal building types for which  
14                   statistically significant energy performance data  
15                   exists to serve as the basis for building energy  
16                   performance information; and

17                   (B) those building types for which addi-  
18                   tional data are required.

19           (2) ADDITIONAL RESOURCES AND REPORTS.—

20                   (A) IN GENERAL.—For each principal  
21                   building type identified under paragraph  
22                   (1)(B), the Secretary shall include a description  
23                   of—



1 (i) additional resources that will be re-  
2 quired to fully develop the relevant data-  
3 bases; and

4 (ii) the anticipated timeline for com-  
5 pletion of the data development.

6 (B) ADDITIONAL REPORTS.—The Sec-  
7 retary shall submit to Congress additional re-  
8 ports on information required under this sub-  
9 section as often as is considered necessary by  
10 the Secretary, but not less than once every 2  
11 years.

12 (d) IMPROVING BUILDING ENERGY CONSUMPTION  
13 DATABASES.—

14 (1) COMMERCIAL BUILDINGS ENERGY CON-  
15 SUMPTION SURVEY.—The Secretary shall support  
16 improvements to the Commercial Buildings Energy  
17 Consumption Survey or such other commercial build-  
18 ings energy performance databases as the Secretary  
19 considers appropriate—

20 (A) to characterize the achieved perform-  
21 ance of existing commercial buildings for the  
22 building types covered by the Commercial  
23 Buildings Energy Consumption Survey (as of  
24 the date of enactment of this Act); and

1 (B) to cover additional building types, as  
2 identified by the Secretary, to enable the devel-  
3 opment of measurement protocols for those  
4 building types under subsection (e) that cover  
5 at least 85 percent of all major commercial  
6 building energy use not later than 5 years after  
7 the date of enactment of this Act.

8 (2) RESIDENTIAL ENERGY CONSUMPTION SUR-  
9 VEY.—While conducting the Residential Energy  
10 Consumption Survey, the Secretary may evaluate  
11 whether the data, or other data types are appro-  
12 priate, to enable the development of achieved per-  
13 formance measurement formats for residential build-  
14 ing energy not later than 5 years after the date of  
15 enactment of this Act.

16 (e) ENERGY PERFORMANCE MEASUREMENT.—

17 (1) MEASUREMENT.—Not later than 2 years  
18 after identifying a covered building type, the Admin-  
19 istrator shall, after providing notice and soliciting  
20 public comment, establish —

21 (A) methods to measure achieved perform-  
22 ance and designed performance; and

23 (B) procedures for collecting and updating  
24 information.

1           (2) INFORMATION DISPLAY.—After providing  
2       notice and soliciting public comment, the Adminis-  
3       trator may—

4           (A) establish 1 or more formats that—

5               (i) display achieved performance and  
6               designed performance;

7               (ii) are tailored to building types; or

8               (iii) display other desired information  
9               related to building energy performance;  
10              and

11           (B) provide for the display of both  
12       achieved performance and designed performance  
13       for a building, other than in a case in which  
14       data are not available, practicable, or cost effec-  
15       tive.

16           (3) EXISTING PROGRAMS.—In developing for-  
17       mats under this subsection, the Administrator shall  
18       consider existing public and private programs for  
19       building energy performance information, including  
20       programs outside of the United States.

21           (4) CERTIFICATES.—After providing for appro-  
22       priate notice and comment, the Administrator shall  
23       publish the final specifications for the information,  
24       including on certificates or other forms of informa-  
25       tion applicable to covered building types.

1           (5) PROGRAM REVIEW.—At least once every 5  
2       years, the Administrator shall review, and as nec-  
3       essary, modify the building energy performance in-  
4       formation program.

5       (f) PUBLIC OUTREACH.—In consultation with the  
6       Administrator and in conjunction with other energy effi-  
7       ciency awareness efforts, the Secretary shall establish a  
8       business and consumer education program to increase  
9       awareness of the importance of building energy efficiency  
10      and the availability of building energy performance infor-  
11      mation, to facilitate widespread use of building energy per-  
12      formance information programs.

13      (g) DEMONSTRATION PROJECTS.—

14           (1) IN GENERAL.—The Administrator, in con-  
15      sultation with the Secretary shall conduct dem-  
16      onstration projects for different building types to  
17      evaluate the sufficiency of the model certificate spec-  
18      ifications, measurement, and other alternatives pro-  
19      posed by State or local agencies, utilities, or other  
20      implementing organizations.

21           (2) ZERO-NET ENERGY COMMERCIAL BUILD-  
22      INGS INITIATIVE.—The Secretary shall coordinate  
23      demonstration projects under this subsection with  
24      the Zero-Net Energy Commercial Buildings Initia-  
25      tive established under section 422 of the Energy

1 Independence and Security Act of 2007 (42 U.S.C.  
2 17082).

3 (h) VOLUNTARY STATE AND LOCAL INFORMATION  
4 PROGRAM.—

5 (1) COORDINATION WITH STATES AND LOCAL  
6 GOVERNMENTS.—On the request of a State or local  
7 government, the Secretary may—

8 (A) coordinate with the State energy office  
9 or other State agencies, or with the appropriate  
10 local government offices, on the development of  
11 a building energy performance information pro-  
12 gram;

13 (B) provide technical assistance and infor-  
14 mation on best practices; and

15 (C) in the case of a program that includes  
16 the key elements in paragraph (2), provide a  
17 grant for initial program administration.

18 (2) KEY ELEMENTS OF A BUILDING ENERGY  
19 PERFORMANCE INFORMATION PROGRAM.—A model  
20 building energy information performance program  
21 shall—

22 (A) make information on building energy  
23 performance available to the public; and

1 (B) use the information formats estab-  
2 lished by the Administrator under subsection  
3 (e) or alternative formats.

4 (3) PROGRESS REPORT.—Not later than 3  
5 years after the date of enactment of this Act, the  
6 Secretary shall submit to Congress a progress report  
7 that—

8 (A) evaluates the effectiveness of efforts to  
9 advance the use of the program by States and  
10 units of local government; and

11 (B) recommends any further steps that are  
12 necessary to broaden the use of the program by  
13 States and units of local government.

14 (i) PUBLIC BUILDING IMPLEMENTATION.—

15 (1) FEDERAL BUILDINGS.—

16 (A) IN GENERAL.—Not later than 3 years  
17 after the date of enactment of this Act, each  
18 Federal agency owning or operating buildings  
19 of covered building types shall implement the  
20 building energy information program in a man-  
21 ner that—

22 (i) 30 percent of covered buildings  
23 built before the final rule establishing the  
24 program; and

1 (ii) 90 percent of the stock of covered  
2 building types built after the establishment  
3 of the program.

4 (B) GUIDELINES.—Not later than 1 year  
5 after the date of enactment of this Act, the Sec-  
6 retary shall develop guidelines for the imple-  
7 mentation of Federal building energy perform-  
8 ance information programs.

9 (2) STATE AND UNITS OF LOCAL GOVERNMENT  
10 BUILDINGS.—

11 (A) IN GENERAL.—Effective beginning on  
12 the date that is 3 years after the date of enact-  
13 ment of this Act, any newly constructed build-  
14 ing to be owned by a State, county, or local  
15 government that is a covered building and re-  
16 ceives Federal financial assistance shall be re-  
17 quired to use the certificate provided for under  
18 this section.

19 (B) INFORMATION.—The Secretary shall  
20 provide information concerning the building en-  
21 ergy performance information program for Fed-  
22 eral buildings (including information on the re-  
23 sults, best practices, accompanying analysis,  
24 and implementation) to States and units of  
25 local governments for adaptation and adoption,

1           at the discretion of the States and units of local  
 2           government, as soon as practicable after the  
 3           date of enactment of this Act.

4           (j) ENERGY STAR FOR EXISTING BUILDINGS PRO-  
 5     GRAM.—The Administrator may use information, meas-  
 6     urements, and other forms of energy performance infor-  
 7     mation developed under this section to establish a vol-  
 8     untary Energy Star program that recognizes high effi-  
 9     ciency retrofits of existing commercial and residential  
 10    buildings.

11          (k) AUTHORIZATION OF APPROPRIATIONS.—There  
 12    are authorized to be appropriated such sums as are nec-  
 13    essary to carry out this section.

14   **SEC.    282.    EVALUATION,    MEASUREMENT,    AND**  
 15                   **VERIFICATION OF ENERGY SAVINGS.**

16          (a) DEFINITIONS.—In this section:

17           (1) EVALUATION.—The term “evaluation”  
 18    means the performance of studies and activities to  
 19    determine—

20                   (A) the effects of a program or project;

21                   (B) changes in energy efficiency markets;

22                   (C) levels of demand or energy savings;

23                   and

24                   (D) program cost-effectiveness.



1           (2) IMPACT EVALUATION.—The term “impact  
2           evaluation” means the evaluation of the program or  
3           project-specific, directly induced changes in energy  
4           savings and greenhouse gas emissions reductions at-  
5           tributable to a program or project.

6           (3) MEASUREMENT AND VERIFICATION.—The  
7           term “measurement and verification” means data  
8           collection, monitoring, and analysis associated with  
9           the calculation of total energy and demand savings  
10          from individual sites or projects, including as a part  
11          of an impact evaluation.

12          (b) RULES.—Not later than 2 years after the date  
13          of enactment of this Act, the Secretary shall promulgate  
14          uniform rules to document the energy savings and avoided  
15          greenhouse gas emissions of energy efficiency programs  
16          and projects that—

17                (1) receive funding from Federal, State, or local  
18                governments or public utilities;

19                (2) require specific levels of energy reductions;  
20                and

21                (3) are eligible for allowances or allowance pro-  
22                ceeds based on energy savings and greenhouse gas  
23                emissions reductions under climate change regula-  
24                tions.

25          (c) REQUIREMENTS.—

1           (1) IN GENERAL.—In developing rules under  
2       subsection (b), the Secretary shall ensure, to the  
3       maximum extent practicable, that the rules—

4                   (A) are enforceable;

5                   (B) give reasonable assurance that energy  
6       savings and avoided greenhouse gas emission  
7       from energy efficiency programs and projects  
8       are verifiable and additional;

9                   (C) are complete and transparent;

10                  (D) balance risk management, certainty of  
11       estimated impacts, and implementation costs;  
12       and

13                  (E) provide sufficient direction relating to  
14       methodologies and assumptions (including  
15       additionality, market transformation impacts,  
16       and measure persistence) to ensure—

17                   (i) reasonable uniformity among var-  
18       ious States and entities; and

19                   (ii) consistency in results.

20           (2) PROCESS.—In developing rules under sub-  
21       section (b), the Secretary shall—

22                  (A) consider and harmonize the rules with  
23       existing domestic and international protocols  
24       wherever practicable; and

1 (B) consult with States, utilities, and other  
2 appropriate stakeholders.

3 **PART VII—RESIDENTIAL HIGH PERFORMANCE**

4 **ZERO-NET-ENERGY BUILDINGS INITIATIVE**

5 **SEC. 291. RESIDENTIAL HIGH PERFORMANCE ZERO-NET-**  
6 **ENERGY BUILDINGS INITIATIVE.**

7 (a) DEFINITIONS.—In this section:

8 (1) DIRECTOR.—The term “Director” means  
9 the Director of Residential High-Performance Zero-  
10 Net-Energy Buildings appointed under subsection  
11 (c).

12 (2) INITIATIVE.—The term “Initiative” means  
13 the Residential High Performance Zero-Net-Energy  
14 Buildings Initiative established under subsection (b).

15 (3) SECRETARY.—The term “Secretary” means  
16 the Secretary of Energy, acting through the Assist-  
17 ant Secretary of Energy Efficiency and Renewable  
18 Energy.

19 (4) ZERO-NET-ENERGY BUILDING.—The term  
20 “zero-net-energy building” means a residential build-  
21 ing 4 stories or less that is designed, constructed,  
22 and operated—

23 (A) to require greatly reduced needs for  
24 energy through efficiency gains;

1 (B) to meet the balance of energy needs  
2 through renewable technologies;

3 (C) to produce no net emissions of green-  
4 house gases in space heating, cooling, domestic  
5 water heating, lighting, and appliances; and

6 (D) to be economically viable.

7 (b) ESTABLISHMENT.—The Secretary shall establish  
8 and carry out an initiative, to be known as the “Residen-  
9 tial High-Performance Zero-Net-Energy Buildings Initia-  
10 tive”—

11 (1) to reduce the quantity of energy consumed,  
12 and increase the quantity of renewable energy gen-  
13 erated, in residential buildings located in the United  
14 States; and

15 (2) to promote the development of zero-net-en-  
16 ergy buildings in the United States.

17 (c) DIRECTOR.—

18 (1) IN GENERAL.—The Secretary shall appoint  
19 a Director of Residential High-Performance Zero-  
20 Net-Energy Buildings to carry out the Initiative.

21 (2) POSITION.—The position of the Director  
22 shall be a career reserved position in the Senior Ex-  
23 ecutive Service,

24 (d) HIGH-PERFORMANCE RESIDENTIAL GREEN  
25 BUILDING PARTNERSHIP CONSORTIUM.—

1           (1) INITIAL PERIOD.—Not later than 180 days  
2       after the date of enactment of this Act, the Director  
3       shall—

4           (A) use existing resources and frameworks  
5       (such as the residential research and develop-  
6       ment program) to enter into 1 or more agree-  
7       ments with the competitively selected Building  
8       America Industry consortia in existence on the  
9       date of enactment of this Act, if feasible, to de-  
10      velop and carry out the Initiative during the 5-  
11      year period beginning on the date of enactment  
12      of this Act; or

13          (B) competitively select, and enter into 1  
14      or more agreements with, 1 or more consortia  
15      to develop and carry out the Initiative during  
16      the 5-year period.

17          (2) SUBSEQUENT PERIODS.—Not later than 5  
18      years after the date of enactment of this Act and  
19      every 5 years thereafter, the Director shall competi-  
20      tively select, and enter into 1 or more agreements  
21      with, 1 or more consortia to develop and carry out  
22      the Initiative during a 5-year period.

23          (3) AGREEMENTS.—In entering into an agree-  
24      ment with a consortium under this subsection, the  
25      Director shall, if appropriate, use the authority de-

1       scribed in section 646(g) of the Department of En-  
2       ergy Organization Act (42 U.S.C. 7256(g)).

3       (e) GOALS.—The goals of the Initiative shall be—

4               (1) to develop and disseminate technologies,  
5       practices, and policies for the development and es-  
6       tablishment of zero-net-energy buildings; and

7               (2) to promote technologies and strategies that  
8       will enable—

9                       (A) the design and construction of zero-  
10       net-energy buildings (including identification  
11       and validation) by 2015; and

12                      (B) any new residential building con-  
13       structed on or after 2020 to be a cost-effective  
14       zero-net-energy building.

15       (f) COMPONENTS.—In carrying out the Initiative, the  
16       Director, in consultation with the consortium selected  
17       under subsection (d) and leveraging existing resources and  
18       initiatives to the maximum extent practicable, may—

19               (1) conduct research and development on build-  
20       ing science, design, materials, components, equip-  
21       ment and controls, operation and other practices, in-  
22       tegration, energy use measurement, and  
23       benchmarking;

24               (2) conduct pilot programs and demonstration  
25       projects to evaluate replicable approaches to achiev-

1       ing energy-efficient residential buildings using re-  
2       newable technologies for a variety of building types  
3       in a variety of climate zones;

4           (3) consider the energy benefits of improved  
5       land planning and transportation planning to maxi-  
6       mize use of existing infrastructure;

7           (4) conduct deployment, dissemination, and  
8       technical assistance activities to encourage wide-  
9       spread adoption of technologies, practices, and poli-  
10      cies to achieve energy efficient residential buildings;

11          (5) conduct other research, development, dem-  
12      onstration, and deployment activities necessary to  
13      achieve each goal of the Initiative, as determined by  
14      the Director, in consultation with the consortium;

15          (6) develop training materials and courses for  
16      building professionals and trades on achieving cost-  
17      effective zero-net-energy buildings;

18          (7) develop and disseminate public education  
19      materials to share information on the benefits and  
20      cost-effectiveness of zero-net-energy buildings;

21          (8) support code-setting organizations and  
22      State and local governments in developing minimum  
23      performance standards in building codes that recog-  
24      nize the ready availability of many technologies used  
25      in zero-net-energy buildings;

1           (9) develop strategies for overcoming the split  
 2           incentives between builders and purchasers, and  
 3           landlords and tenants, to ensure that energy-effi-  
 4           ciency and renewable technology investments are  
 5           made that are cost-effective on a lifecycle basis; and

6           (10) develop improved means of measurement  
 7           and verification of energy savings and performance  
 8           for public dissemination.

9           (g) COST SHARING.—In carrying out this section, the  
 10          Director shall require cost sharing in accordance with sec-  
 11          tion 988 of the Energy Policy Act of 2005 (42 U.S.C.  
 12          16352).

13          (h) AUTHORIZATION OF APPROPRIATIONS.—There  
 14          are authorized to be appropriated to carry out this sec-  
 15          tion—

16                 (1) \$40,000,000 for fiscal year 2010;

17                 (2) \$60,000,000 for each of fiscal years 2011  
 18          and 2012; and

19                 (3) \$100,000,000 for each of fiscal years 2013  
 20          through 2020.

## 21                   **Subtitle D—Electric Grid**

### 22          **SEC. 295. NATIONAL ELECTRIC SYSTEM EFFICIENCY AND** 23                 **PEAK DEMAND REDUCTION GOAL.**

24          (a) DEFINITIONS.—In this section:



1           (1) APPLICABLE BASELINE.—The term “appli-  
2       cable baseline” means the highest annual peak de-  
3       mand during 1 or more years determined by the  
4       Commission, in consultation with the Secretary and  
5       the North American Electric Reliability Corporation.

6           (2) COMMISSION.—The term “Commission”  
7       means Federal Energy Regulatory Commission.

8           (3) DEMAND REDUCTION.—The term “demand  
9       reduction” means the reduction in annual peak de-  
10      mand as compared to a previous baseline year or pe-  
11      riod, expressed in megawatts.

12          (4) DYNAMIC PEAK MANAGEMENT CONTROL.—  
13      The term “dynamic peak management control”  
14      means the control of megawatts of electricity  
15      through a demand response program or other means  
16      that is directly capable of actively and dynamically  
17      reducing peak demand.

18          (5) LOAD-SERVING ENTITY.—

19              (A) IN GENERAL.—The term “load-serving  
20      entity” means an entity that provides electricity  
21      directly to retail consumers with the responsi-  
22      bility to ensure power quality and reliability.

23              (B) INCLUSIONS.—The term “load-serving  
24      entity” includes an entity described in subpara-  
25      graph (A) that is investor-owned, publicly-

1 owned, owned by a rural electric cooperative, or  
2 owned by another entity.

3 (6) PEAK DEMAND.—The term “peak demand”  
4 means electricity demand—

5 (A) during the highest hour on the system  
6 of a load-serving entity during a calendar year,  
7 expressed in megawatts;

8 (B) measured using an alternative calcula-  
9 tion method determined by the Commission, in  
10 consultation with the Secretary and the North  
11 American Electric Reliability Corporation; and

12 (C) that takes into account monthly and  
13 seasonal variations in peak demand for elec-  
14 tricity.

15 (7) PEAK DEMAND PERIOD.—The term “peak  
16 demand period” means the time period on the sys-  
17 tem of a load-serving entity relative to peak demand  
18 that may warrant special measures or electricity re-  
19 sources to maintain system reliability or avoid excess  
20 costs while meeting peak demand.

21 (8) REGIONAL TRANSMISSION ORGANIZATION.—  
22 The term “Regional Transmission Organization”  
23 means an entity that is approved as a Regional  
24 Transmission Organization by the Commission.

1           (9) SMART GRID.—The term “smart grid”  
2       means smart grid (within the meaning of title XIII  
3       of the Energy Independence and Security Act of  
4       2007 (42 U.S.C. 17381 et seq.)).

5           (10) SYSTEM LOAD FACTOR.—The term “sys-  
6       tem load factor” means the ratio that the kilowatt  
7       hours consumed on a system bear to the highest  
8       level of demand in kilowatts on the system during a  
9       given year.

10       (b) GOAL.—It is the policy of the United States  
11      that—

12           (1) the national electric system efficiency goal  
13       of the United States is to optimize and make more  
14       efficient the planning and operation of national and  
15       local electricity systems in a manner that the system  
16       load factor of the systems will be improved by 1.5  
17       percent per year during each of calendar years 2010  
18       through 2030; and

19           (2) the goal described in paragraph (1) can be  
20       met or exceeded by lessening the difference between  
21       the periods of lowest and highest electricity demand,  
22       with particular focus on reducing the frequency and  
23       severity of peak demand periods, using smart grid  
24       and demand response technologies, practices, and  
25       activities, including—

1 (A) the reduction of overall electricity de-  
2 mand through the adoption of energy-efficient  
3 technologies or conservation practices;

4 (B) the use of demand response tech-  
5 nologies, practices, and activities that allow dy-  
6 namic control, load-shifting, and reduction of  
7 time-based electricity consumption by load-serv-  
8 ing entities and electricity customers, including  
9 the wide-spread installation or use of—

10 (i) distributed generation;

11 (ii) smart meters and equipment with  
12 smart grid capabilities;

13 (iii) energy storage; and

14 (iv) time-based pricing that reflects  
15 marginal electricity generation costs; and

16 (C) the use of smart grid technologies,  
17 practices, and activities (including activities de-  
18 scribed in title XIII of the Energy Independ-  
19 ence and Security Act of 2007 (42 U.S.C.  
20 17381 et seq.)) that provide time-based infor-  
21 mation on, and dynamic control of, the elec-  
22 tricity grid allowing for the most cost-effective,  
23 efficient, and reliable generation, transmission,  
24 and distribution of electricity.

25 (c) ACTION PLAN.—

1           (1) IN GENERAL.—Not later than 180 days  
2     after the date of enactment of this Act, the Sec-  
3     retary, in cooperation with the Commission, Re-  
4     gional Transmission Organizations, the National As-  
5     sociation of Regulatory Utility Commissioners, and  
6     heads of other appropriate Federal agencies, shall  
7     develop an action plan to achieve or exceed the na-  
8     tional goal established under subsection (a).

9           (2) PLAN CONTENTS.—The action plan shall—

10           (A) identify future regulatory, funding,  
11           and policy priorities that would assist the  
12           United States in meeting the national goal de-  
13           scribed in paragraph (1);

14           (B) include data collection methodologies  
15           and compilations used to establish baseline and  
16           goal attainment data;

17           (C) include guidelines for the establish-  
18           ment of dynamic peak management control  
19           goals, including—

20                   (i) the establishment of applicable  
21                   baselines in a consistent nationwide man-  
22                   ner; and

23                   (ii) the use of a methodology that pro-  
24                   vides for adjustments to baseline and goals  
25                   for a load-serving entity to reflect changes

1 in the number of customers served, weath-  
2 er conditions, and any other appropriate  
3 factors;

4 (D) include a system and rules for meas-  
5 urement and verification of demand reductions;  
6 and

7 (E) coordinate with any existing com-  
8 plementary programs or initiatives managed by  
9 load-serving entities, Regional Transmission Or-  
10 ganizations, and States.

11 (3) PUBLIC INPUT AND COMMENT.—The Sec-  
12 retary shall develop the plan in a manner that pro-  
13 vides appropriate opportunities for public input and  
14 comment.

15 (4) ACTION PLAN UPDATES.—The Secretary  
16 shall—

17 (A) update the action plan every 3 years;  
18 and

19 (B) include the updated action plan in the  
20 national energy policy plan required by section  
21 801 of the Department of Energy Organization  
22 Act (42 U.S.C. 7321).

23 (5) REPORT TO CONGRESS.—In updating the  
24 national electric system efficiency goal established  
25 under subsection (a), the Secretary shall submit to

1 the Committee on Energy and Natural Resources of  
2 the Senate and the Committee on Energy and Com-  
3 merce of the House of Representatives a report de-  
4 scribing—

5 (A) progress made toward implementing  
6 the necessary policies to meet the national goal;

7 (B) the resulting cost-savings to ratepayers  
8 and the United States economy;

9 (C) the improvements to the reliability and  
10 efficiency of the United States electricity grid;  
11 and

12 (D) any additional legal authorities nec-  
13 essary to achieve the national goal.

14 (6) PROGRESS REPORTING AND TRANSPARENCY  
15 FOR RATEPAYERS.—Not later than 2 years after the  
16 date of enactment of this Act, the Secretary shall es-  
17 tablish a public domain website on which the Sec-  
18 retary shall provide information and data dem-  
19 onstrating progress by States, other jurisdictional  
20 entities, and load-serving entities in meeting the na-  
21 tional electric system efficiency goal established  
22 under subsection (b).

23 (7) NO IMPACT ON EXISTING STATE GOALS AND  
24 STANDARDS.—Nothing in this section diminishes  
25 any authority of a State or political subdivision of a

1 State to adopt or enforce any law (including regula-  
 2 tions) that increases electricity grid efficiency, smart  
 3 grid and distributed generation deployment, dynamic  
 4 peak management control, demand response and dis-  
 5 tributed storage, or the regulation of load-serving  
 6 entities.

7 **SEC. 296. UNIFORM NATIONAL STANDARDS FOR INTER-**  
 8 **CONNECTION OF CERTAIN SMALL POWER**  
 9 **PRODUCTION FACILITIES.**

10 (a) FINDINGS.—Section 2 of the Public Utility Regu-  
 11 latory Policies Act of 1978 (16 U.S.C. 2601) is amend-  
 12 ed—

13 (1) in paragraph (5), by striking “and” at the  
 14 end;

15 (2) in paragraph (6), by striking the period at  
 16 the end and inserting “, and”; and

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

18 “(7) uniform national standards for the inter-  
 19 connection of certain small power production facili-  
 20 ties.”.

21 (b) STANDARDS FOR INTERCONNECTION.—

22 (1) IN GENERAL.—Subtitle B of title I of the  
 23 Public Utility Regulatory Policies Act of 1978 (16  
 24 U.S.C. 2621 et seq.) is amended by adding at the  
 25 end the following:



1 **“SEC. 118. INTERCONNECTION OF CERTAIN SMALL POWER**  
 2 **PRODUCTION FACILITIES.**

3 “(a) STANDARD FOR FACILITIES OF 15 KILOWATTS  
 4 OR LESS.—The Commission shall establish a standard by  
 5 which each electric utility shall make available, on request,  
 6 interconnection service to any electric consumer that the  
 7 electric utility serves with respect to any facility that gen-  
 8 erates up to 15 kilowatts of electric energy on the premises  
 9 of the electric consumer.

10 “(b) ENFORCEMENT.—

11 “(1) BY THE COMMISSION.—

12 “(A) IN GENERAL.—Except as provided in  
 13 paragraph (2), the Commission may enforce the  
 14 standard established under subsection (a)  
 15 against any electric utility.

16 “(B) ADMINISTRATION.—The require-  
 17 ments of the standard shall be treated as a rule  
 18 enforceable under the Federal Power Act (16  
 19 U.S.C. 791a et seq.).

20 “(2) BY A STATE REGULATORY AUTHORITY.—

21 The Commission may enter into an agreement with  
 22 a State regulatory authority to discontinue the en-  
 23 forcement of this section in the State by the Com-  
 24 mission if the Commission finds that the State or  
 25 the State regulatory authority has adopted and is  
 26 enforcing a standard for interconnection services

1       that is consistent with the standard established  
2       under subsection (a).

3           “(3) RESUMPTION OF COMMISSION ENFORCE-  
4       MENT.—The Commission may rescind an agreement  
5       under paragraph (2) and resume enforcement of the  
6       standard established under subsection (a) if, as de-  
7       termined by the Commission, the State has failed to  
8       enforce a consistent State standard.

9           “(c) EXPANDED STANDARD.—

10          “(1) REPORT.—Not later than 3 years after the  
11       date of enactment of this section, the Commission  
12       shall submit to Congress a report on whether the  
13       standard established under subsection (a) should be  
14       amended to apply to facilities that generate up to 50  
15       kilowatts of electric energy on the premises of an  
16       electric consumer.

17          “(2) AUTHORITY TO AMEND STANDARD.—

18           “(A) IN GENERAL.—Except as provided in  
19       subparagraph (B), if the Commission makes an  
20       affirmative determination under paragraph (1),  
21       the Commission may, after public notice and  
22       comment, amend the standard established  
23       under subsection (a) to apply to facilities that  
24       generate up to 50 kilowatts of electric energy  
25       on the premises of an electric consumer.

1                   “(B) DISAPPROVAL.—Subparagraph (A)  
 2                   shall not apply if, during the first period of 90  
 3                   calendar days (not counting days on which ei-  
 4                   ther House is not in session because of an ad-  
 5                   journment of more than 3 days) of continuous  
 6                   session of Congress (broken only by an adjourn-  
 7                   ment sine die) after the date of the receipt of  
 8                   the report under paragraph (1), a joint resolu-  
 9                   tion is enacted disapproving the amendment of  
 10                  the standard

11                  “(d) MODEL STANDARD FOR FACILITIES OF UP TO  
 12 20 MEGAWATTS.—The Commission shall establish a  
 13 model standard for the interconnection of small power pro-  
 14 duction facilities with a capacity greater than 15 kilo-  
 15 watts, but not greater than 20 megawatts, for the consid-  
 16 eration of State regulatory authorities under section  
 17 111(d)(15).”.

18                  (2) CONFORMING AMENDMENT.—The table of  
 19 contents in section 1(b) of the Public Utility Regu-  
 20 latory Policies Act of 1978 (16 U.S.C. prec. 2601)  
 21 is amended by adding at the end of the items relat-  
 22 ing to subtitle B of title I the following:

“Sec. 118. Interconnection of certain small power production facilities.”.

1     **TITLE III—IMPROVED ENERGY**  
 2                     **SECURITY**

3     **Subtitle A—Cyber Security of the**  
 4                     **Electric Transmission Grid**

5     **SEC. 301. CRITICAL ELECTRIC INFRASTRUCTURE.**

6             Part II of the Federal Power Act (16 U.S.C. 824 et  
 7 seq.) is amended by adding at the end the following:

8     **“SEC. 224. CRITICAL ELECTRIC INFRASTRUCTURE.**

9             “(a) DEFINITIONS.—In this section:

10                 “(1) CRITICAL ELECTRIC INFRASTRUCTURE.—

11             The term ‘critical electric infrastructure’ means sys-  
 12             tems and assets, whether physical or virtual, used  
 13             for the generation, transmission, or distribution of  
 14             electric energy affecting interstate commerce that, as  
 15             determined by the Commission or the Secretary (as  
 16             appropriate), are so vital to the United States that  
 17             the incapacity or destruction of the systems and as-  
 18             sets would have a debilitating impact on national se-  
 19             curity, national economic security, or national public  
 20             health or safety.

21                 “(2) CRITICAL ELECTRIC INFRASTRUCTURE IN-  
 22             FORMATION.—The term ‘critical electric infrastruc-  
 23             ture information’ means critical infrastructure infor-  
 24             mation relating to critical electric infrastructure.

1           “(3) CRITICAL INFRASTRUCTURE INFORMA-  
2           TION.—The term ‘critical infrastructure information’  
3           has the meaning given the term in section 212 of the  
4           Critical Infrastructure Information Act of 2002 (6  
5           U.S.C. 131).

6           “(4) CYBER SECURITY THREAT.—The term  
7           ‘cyber security threat’ means the imminent danger  
8           of an act that disrupts, attempts to disrupt, or poses  
9           a significant risk of disrupting the operation of pro-  
10          grammable electronic devices or communications net-  
11          works (including hardware, software, and data) es-  
12          sential to the reliable operation of critical electric in-  
13          frastructure.

14          “(5) CYBER SECURITY VULNERABILITY.—The  
15          term ‘cyber security vulnerability’ means a weakness  
16          or flaw in the design or operation of any program-  
17          mable electronic device or communication network  
18          that exposes critical electric infrastructure to a cyber  
19          security threat.

20          “(6) SECRETARY.—The term ‘Secretary’ means  
21          the Secretary of Energy.

22          “(b) AUTHORITY OF COMMISSION.—

23                 “(1) IN GENERAL.—The Commission shall issue  
24                 such rules or orders as are necessary to protect crit-

1 ical electric infrastructure from cyber security  
2 vulnerabilities.

3 “(2) EXPEDITED PROCEDURES.—The Commis-  
4 sion may issue a rule or order without prior notice  
5 or hearing if the Commission determines the rule or  
6 order must be issued immediately to protect critical  
7 electric infrastructure from a cyber security vulner-  
8 ability.

9 “(3) CONSULTATION.—Before issuing a rule or  
10 order under paragraph (2), to the extent practicable,  
11 taking into account the nature of the threat and ur-  
12 gency of need for action, the Commission shall con-  
13 sult with the entities described in subsection (e)(1)  
14 and with officials at other Federal agencies, as ap-  
15 propriate, regarding implementation of actions that  
16 will effectively address the identified cyber security  
17 vulnerabilities.

18 “(4) TERMINATION OF RULES OR ORDERS.—A  
19 rule or order issued to address a cyber security vul-  
20 nerability under this subsection shall expire on the  
21 effective date of a standard developed and approved  
22 pursuant to section 215 to address the cyber secu-  
23 rity vulnerability.

24 “(c) EMERGENCY AUTHORITY OF SECRETARY.—

1           “(1) IN GENERAL.—If the Secretary determines  
2           that immediate action is necessary to protect critical  
3           electric infrastructure from a cyber security threat,  
4           the Secretary may require, by order, with or without  
5           notice, persons subject to the jurisdiction of the  
6           Commission under this section to take such actions  
7           as the Secretary determines will best avert or miti-  
8           gate the cyber security threat.

9           “(2) COORDINATION WITH CANADA AND MEX-  
10          ICO.—In exercising the authority granted under this  
11          subsection, the Secretary is encouraged to consult  
12          and coordinate with the appropriate officials in Can-  
13          ada and Mexico responsible for the protection of  
14          cyber security of the interconnected North American  
15          electricity grid.

16          “(3) CONSULTATION.—Before exercising the  
17          authority granted under this subsection, to the ex-  
18          tent practicable, taking into account the nature of  
19          the threat and urgency of need for action, the Sec-  
20          retary shall consult with the entities described in  
21          subsection (e)(1) and with officials at other Federal  
22          agencies, as appropriate, regarding implementation  
23          of actions that will effectively address the identified  
24          cyber security threat.

1           “(4) COST RECOVERY.—The Commission shall  
2       establish a mechanism that permits public utilities to  
3       recover prudently incurred costs required to imple-  
4       ment immediate actions ordered by the Secretary  
5       under this subsection.

6       “(d) DURATION OF EXPEDITED OR EMERGENCY  
7       RULES OR ORDERS.—Any rule or order issued by the  
8       Commission without prior notice or hearing under sub-  
9       section (b)(2) or any order issued by the Secretary under  
10      subsection (c) shall remain effective for not more than 90  
11      days unless, during the 90 day-period, the Commission—

12           “(1) gives interested persons an opportunity to  
13      submit written data, views, or arguments (with or  
14      without opportunity for oral presentation); and

15           “(2) affirms, amends, or repeals the rule or  
16      order.

17      “(e) JURISDICTION.—

18           “(1) IN GENERAL.—Notwithstanding section  
19      201, this section shall apply to any entity that owns,  
20      controls, or operates critical electric infrastructure.

21           “(2) COVERED ENTITIES.—

22           “(A) IN GENERAL.—An entity described in  
23      paragraph (1) shall be subject to the jurisdic-  
24      tion of the Commission for purposes of—

25           “(i) carrying out this section; and



1                   “(ii) applying the enforcement au-  
2                   thorities of this Act with respect to this  
3                   section.

4                   “(B) JURISDICTION.—This subsection  
5                   shall not make an electric utility or any other  
6                   entity subject to the jurisdiction of the Commis-  
7                   sion for any other purpose.

8                   “(3) ALASKA AND HAWAII EXCLUDED.—Except  
9                   as provided in subsection (f), nothing in this section  
10                  shall apply in the State of Alaska or Hawaii.

11                  “(f) DEFENSE FACILITIES.—Not later than 1 year  
12                  after the date of enactment of this section, the Secretary  
13                  of Defense shall prepare, in consultation with the Sec-  
14                  retary, the States of Alaska and Hawaii, the Territory of  
15                  Guam, and the electric utilities that serve national defense  
16                  facilities in those States and Territory, a comprehensive  
17                  plan that identifies the emergency measures or actions  
18                  that will be taken to protect the reliability of the electric  
19                  power supply of the national defense facilities located in  
20                  those States and Territory in the event of an imminent  
21                  cybersecurity threat.

22                  “(g) PROTECTION OF CRITICAL ELECTRIC INFRA-  
23                  STRUCTURE INFORMATION.—

24                  “(1) IN GENERAL.—Section 214 of the Critical  
25                  Infrastructure Information Act of 2002 (6 U.S.C.

1       133) shall apply to critical electric infrastructure in-  
2       formation submitted to the Commission or the Sec-  
3       retary under this section to the same extent as that  
4       section applies to critical infrastructure information  
5       voluntarily submitted to the Department of Home-  
6       land Security under that Act (6 U.S.C. 131 et seq.).

7               “(2) RULES PROHIBITING DISCLOSURE.—Not-  
8       withstanding section 552 of title 5, United States  
9       Code, the Secretary and the Commission shall pre-  
10      scribe regulations prohibiting disclosure of informa-  
11      tion obtained or developed in ensuring cyber security  
12      under this section if the Secretary or Commission,  
13      as appropriate, decides disclosing the information  
14      would be detrimental to the security of critical elec-  
15      tric infrastructure.

16              “(3) PROCEDURES FOR SHARING INFORMA-  
17      TION.—

18                      “(A) IN GENERAL.—The Secretary and the  
19      Commission shall establish procedures on the  
20      release of critical infrastructure information to  
21      entities subject to this section, to the extent  
22      necessary to enable the entities to implement  
23      rules or orders of the Commission or the Sec-  
24      retary.

1                   “(B) REQUIREMENTS.—The procedures  
2                   shall—

3                   “(i) limit the redissemination of infor-  
4                   mation described in subparagraph (A) to  
5                   ensure that the information is not used for  
6                   an unauthorized purpose;

7                   “(ii) ensure the security and confiden-  
8                   tiality of the information;

9                   “(iii) protect the constitutional and  
10                  statutory rights of any individuals who are  
11                  subjects of the information; and

12                  “(iv) provide data integrity through  
13                  the timely removal and destruction of obso-  
14                  lete or erroneous names and information.”.

## 15                   **Subtitle B—Nuclear Energy**

### 16   **SEC. 311. NATIONAL COMMISSION ON NUCLEAR WASTE.**

17                  The Nuclear Waste Policy Act of 1982 (42 U.S.C.  
18   10101 et seq.) is amended by adding at the end the fol-  
19   lowing:

## 20   **“TITLE VI—NATIONAL COMMIS-** 21   **SION ON NUCLEAR WASTE**

### 22   **“SEC. 601. ESTABLISHMENT OF COMMISSION.**

23                  “‘There is established a Federal advisory committee  
24   to be known as the ‘National Commission on Nuclear

1 Waste’ (referred to in this title as the ‘National Commis-  
2 sion’).

3 **“SEC. 602. PURPOSES.**

4 “The purposes of the National Commission are—

5 “(1) to conduct a comprehensive study of alter-  
6 native means of safely managing or disposing of  
7 spent nuclear fuel and high-level radioactive waste  
8 from civilian nuclear activity and atomic energy de-  
9 fense activity; and

10 “(2) to recommend to Congress such legislative  
11 or other action as may be necessary to manage or  
12 dispose of spent nuclear fuel and high-level radio-  
13 active waste successfully and safely.

14 **“SEC. 603. COMPOSITION OF THE NATIONAL COMMISSION.**

15 “(a) MEMBERS.—The National Commission shall be  
16 composed of 11 members appointed by the President from  
17 among prominent United States citizens with national rec-  
18 ognition and significant depth of experience in such pro-  
19 fessions as government service, public administration, nat-  
20 ural or physical sciences, engineering, and public health  
21 and safety.

22 “(b) EXCLUSION.—An officer or employee of the  
23 Federal Government or any State or local government may  
24 not serve as a member of the National Commission.

1       “(c) BALANCE.—The membership of the National  
 2 Commission shall be fairly balanced in terms of the points  
 3 of view represented and functions to be performed by the  
 4 National Commission. Not more than 6 members of the  
 5 National Commission shall be members of the same polit-  
 6 ical party.

7       “(d) INDEPENDENCE.—The advice and recommenda-  
 8 tions of the National Commission shall result from the Na-  
 9 tional Commission’s independent judgment and shall not  
 10 be inappropriately influenced by any special interest.

11       “(e) CHAIRMAN.—The President shall designate a  
 12 chairman (referred to in this title as the ‘Chairman’) from  
 13 among the members of the National Commission.

14       **“SEC. 604. FUNCTIONS.**

15       “(a) STUDY OF ALTERNATIVE WASTE MANAGEMENT  
 16 STRATEGIES.—The National Commission shall—

17               “(1) examine alternative means of safely man-  
 18 aging and disposing of spent nuclear fuel and high-  
 19 level radioactive waste from civilian nuclear activity  
 20 and atomic defense activity, including—

21                       “(A) deep geologic disposal of spent nu-  
 22 clear fuel and high-level radioactive waste in a  
 23 repository;

1           “(B) long-term storage of spent nuclear  
2           fuel and high-level radioactive waste at the sites  
3           where it is currently stored or being generated;

4           “(C) long-term storage of spent nuclear  
5           fuel and high-level radioactive waste at 1 or  
6           more regional storage facilities;

7           “(D) chemical reprocessing of spent nu-  
8           clear fuel with uranium and plutonium recy-  
9           cling; and

10          “(E) such other alternatives or combina-  
11          tion of alternatives to managing and disposing  
12          of spent nuclear fuel and high-level radioactive  
13          waste as the National Commission determines  
14          to be reasonable; and

15          “(2) evaluate, for each of the alternatives con-  
16          sidered under paragraph (1)—

17               “(A) the degree to which the alternative  
18               will isolate spent nuclear fuel and high-level ra-  
19               dioactive waste from the public and the environ-  
20               ment;

21               “(B) the degree to which the alternative  
22               will expose workers, the general public, and the  
23               environment to radiation during the handling,  
24               treatment, or processing of spent nuclear fuel

1 and high-level radioactive waste prior to final  
2 disposition;

3 “(C) the degree to which the alternative  
4 will be secure from attack or intrusion;

5 “(D) the risk of nuclear proliferation posed  
6 by the alternative;

7 “(E) the total life cycle cost of the alter-  
8 native;

9 “(F) the length of time needed to site, li-  
10 cense, and construct necessary facilities;

11 “(G) the degree to which spent nuclear  
12 fuel and high-level radioactive waste will need  
13 to be transported between facilities; and

14 “(H) the cumulative effect of the alter-  
15 native on the environment, and measures that  
16 can be taken to avoid or minimize adverse ef-  
17 fects of the alternative on the environment.

18 “(b) REVIEW OF PRIOR REPOSITORY PROGRAM.—

19 The National Commission shall—

20 “(1) review the efforts of the Department to  
21 implement the programs under title I and identify  
22 any deficiencies in the implementation of those pro-  
23 grams; and

1           “(2) recommend any measures to ensure that  
2       future efforts to site a repository or storage facility  
3       will—

4           “(A) provide a reasonable assurance that  
5       the public and the environment will be ade-  
6       quately protected from the hazards posed by  
7       spent nuclear fuel or high-level radioactive  
8       waste stored or disposed of in the facility; and

9           “(B) be acceptable to the public.

10       “(c) REVIEW OF REPROCESSING AND ADVANCED  
11 FUEL CYCLE PROGRAMS.—The National Commission  
12 shall—

13           “(1) review foreign and domestic programs to  
14       reprocess commercial spent nuclear fuel;

15           “(2) assess the technical challenges of devel-  
16       oping and validating the safe operation of the proc-  
17       esses and systems required to recycle commercial  
18       spent nuclear fuel without separating plutonium, in-  
19       cluding the time and funding resources likely to be  
20       required;

21           “(3) evaluate the regulatory adequacy of health  
22       and safety standards for radionuclide release from  
23       recycling facilities and recycled fuel fabrication fa-  
24       cilities;



1           “(4) assess the probable forms of the final  
2       wastes resulting from reprocessing operations, in-  
3       cluding how such wastes would be stored and main-  
4       tained pending disposal; and

5           “(5) analyze the technical, economic, environ-  
6       mental, and health and safety advantages and dis-  
7       advantages of reprocessing spent nuclear fuel com-  
8       pared to disposal in a geologic repository.

9       “(d) STUDY OF INCENTIVES PROGRAM.—The Na-  
10   tional Commission shall—

11           “(1) examine the economic and other impacts of  
12       hosting a nuclear waste repository, reprocessing fa-  
13       cility, or regional storage facility on the host State,  
14       any affected Indian tribe, and any affected unit of  
15       local government; and

16           “(2) recommend measures it determines nec-  
17       essary or advisable to provide economic compensa-  
18       tion and incentives to a State, Indian tribe, or unit  
19       of local government that agrees to host a repository,  
20       reprocessing facility, or regional storage facility.

21       “(e) STUDY OF ALTERNATIVE MEANS OF MANAGING  
22   AND OPERATING THE NUCLEAR WASTE PROGRAM.—The  
23   National Commission shall—

24           “(1) study alternative approaches to managing  
25       the construction and operation of civilian nuclear

1 waste management facilities, including the feasibility  
2 of establishing a private corporation for such pur-  
3 poses; and

4 “(2) recommend whether responsibility for  
5 managing the siting, construction, and operation,  
6 and monitoring of civilian nuclear waste manage-  
7 ment facilities should continue to be vested in the  
8 Secretary or whether it should be transferred to an  
9 alternative Federal agency or entity.

10 “(f) STUDY OF ALTERNATIVE MEANS OF FINANC-  
11 ING.—The National Commission shall—

12 “(1) examine the cost of carrying out nuclear  
13 waste management activities;

14 “(2) evaluate the adequacy of the Waste Fund;  
15 and

16 “(3) recommend measures the National Com-  
17 mission determines necessary or advisable for—

18 “(A) the disposition of balances remaining  
19 in the Waste Fund; and

20 “(B) the collection and disposition of any  
21 additional fees that may be needed to ensure  
22 that the cost of carrying out nuclear waste dis-  
23 posal activities are fully recovered from the per-  
24 sons responsible for generating such waste.

1   **“SEC. 605. ADMINISTRATION.**

2           “(a) COMPENSATION.—Each member of the National  
3 Commission shall be compensated at the daily equivalent  
4 of the annual rate of basic pay in effect for a position  
5 at level IV of the Executive Schedule under section 5315  
6 of title 5, United States Code, for each day the member  
7 is engaged in the work of the National Commission.

8           “(b) TRAVEL EXPENSES.—Each member of the Na-  
9 tional Commission may receive travel expenses, including  
10 per diem in lieu of subsistence, in the same manner as  
11 person employed intermittently in the Federal Government  
12 service under section 5703 of title 5, United States Code.

13           “(c) STAFF.—The Chairman is authorized to appoint  
14 and fix the compensation of a staff director and such other  
15 personnel as may be necessary to enable the National  
16 Commission to carry out its functions, subject to the appli-  
17 cable provisions of the Federal Advisory Committee Act  
18 (5 U.S.C. App.) and title 5, United States Code.

19           “(d) DETAILEES.—

20           “(1) IN GENERAL.—Any Federal Government  
21 employee may be detailed to the National Commis-  
22 sion without reimbursement from the National Com-  
23 mission.

24           “(2) EXCEPTION.—Notwithstanding paragraph  
25 (1), no employee of the Department may be detailed  
26 to the National Commission.

1           “(3) EFFECT ON DETAILEE.—Any such detailee  
2       shall retain the rights, status, and privileges of his  
3       or her regular employment without interruption.

4           “(e) CONSULTANTS.—The National Commission may  
5       procure the services of experts and consultants in accord-  
6       ance with section 3109 of title 5, United States Code.

7           “(f) CONTRACTING.—The National Commission may,  
8       to the extent funds are available under this title or subse-  
9       quent appropriation Acts, enter into contracts to enable  
10      the National Commission to discharge its duties under this  
11      title.

12          “(g) INFORMATION FROM FEDERAL AGENCIES.—  
13      The National Commission may request any Federal agen-  
14      cy, including the Nuclear Waste Technical Review Board,  
15      to furnish such information, advice, or assistance as it de-  
16      termines necessary to carry out its functions, and each  
17      such agency shall, to the extent permitted by law, furnish  
18      such information, advice, or assistance upon the request  
19      of the Chairman.

20          “(h) ASSISTANCE FROM THE GENERAL SERVICES  
21      ADMINISTRATION.—The Administrator of General Serv-  
22      ices shall, upon the request of the Chairman, provide the  
23      National Commission with necessary administrative serv-  
24      ices, facilities, and support, on a reimbursable basis.

1       “(i) POSTAL SERVICES.—The National Commission  
2 may use the United States mails in the same manner and  
3 under the same conditions as a Federal agency.

4       **“SEC. 606. REPORT.**

5       “The National Commission shall submit to the Presi-  
6 dent and Congress a final report containing the National  
7 Commission’s findings, conclusions, and recommendations  
8 not later than 2 years after the date of enactment of this  
9 Act.

10       **“SEC. 607. FUNDING.**

11       “(a) TRANSFER OF FUNDS.—Notwithstanding sec-  
12 tion 302(d), of the amounts authorized to be appropriated  
13 to the Secretary from the Waste Fund under the heading  
14 ‘NUCLEAR WASTE DISPOSAL’ under title III of division  
15 C of the Omnibus Appropriations Act, 2009 (Public Law  
16 111–8; 123 Stat. 618), \$3,000,000 shall be transferred  
17 to the National Commission for purposes of carrying out  
18 this title.

19       “(b) DURATION OF AVAILABILITY.—Except as pro-  
20 vided in section 608(b), amounts made available to the  
21 National Commission under subsection (a) shall remain  
22 available until expended or the termination of the National  
23 Commission.

1 **“SEC. 608. TERMINATION.**

2       “(a) IN GENERAL.—The National Commission, and  
3 all authorities under this title, shall terminate 60 days  
4 after the date on which the final report is submitted under  
5 section 606.

6       “(b) UNEXPENDED FUNDS.—Any funds made avail-  
7 able to the National Commission under section 607 that  
8 are not expended by the National Commission by the date  
9 on which the National Commission is terminated under  
10 subsection (a) shall be deposited in the general fund of  
11 the Treasury.”.

12 **SEC. 312. SENSE OF CONGRESS REGARDING THE STRA-**  
13 **TEGIC ROLE OF NUCLEAR ENERGY.**

14       (a) FINDINGS.—Congress finds that—

15               (1) nuclear energy is a strategic technology and  
16 should be recognized for—

17                       (A) providing clean and secure domestic  
18 energy for the United States; and

19                       (B) reducing greenhouse gases;

20               (2) the use and expansion of nuclear energy  
21 technology is essential for—

22                       (A) the production of electricity and other  
23 industrial applications; and

24                       (B) the reduction of greenhouse gas emis-  
25 sions;

1           (3) it is the continuing obligation of the Federal  
2       Government to provide for the safe disposal of spent  
3       nuclear fuel and high-level radioactive waste, includ-  
4       ing the development of any analysis or assessment  
5       that is required to establish a sustainable, long-term  
6       program for the management of spent nuclear fuel  
7       and high-level radioactive waste;

8           (4) spent nuclear fuel and high-level radioactive  
9       waste should be stored in a limited number of se-  
10      cure, centralized facilities;

11          (5) to encourage State and local support for the  
12      establishment of centralized spent nuclear fuel and  
13      high-level radioactive waste storage facilities, the  
14      Federal Government should expedite the conduct of  
15      a sustainable long-term management program;

16          (6) the reprocessing of spent nuclear fuel  
17      may—

18                (A) reduce the burden on geological reposi-  
19      tories for ultimate waste disposal; and

20                (B) provide additional fuel for nuclear re-  
21      actors; and

22          (7) advanced technologies in spent fuel recy-  
23      cling and advanced reactors may—

24                (A) further reduce the volume and radioac-  
25      tivity of high-level radioactive waste; and

1 (B) provide for a closed fuel cycle that will  
2 generate additional fuel for nuclear reactors.

3 (b) SENSE OF CONGRESS.—It is the sense of Con-  
4 gress that the Federal Government should reaffirm the  
5 policy of the United States—

6 (1) to support the use and expansion of nuclear  
7 energy technology for—

8 (A) the production of electricity and other  
9 industrial applications; and

10 (B) the reduction of greenhouse gas emis-  
11 sions; and

12 (2) to fulfill the obligation of the Federal Gov-  
13 ernment with respect to spent nuclear fuel and high-  
14 level radioactive waste.

15 **SEC. 313. ADVANCED FUEL RECYCLING PROCESS DEVELOP-**  
16 **MENT.**

17 Section 953 of the Energy Policy Act of 2005 (42  
18 U.S.C. 16273) is amended—

19 (1) in subsection (b), by striking “Research”;  
20 and

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

22 “(e) ADVANCED FUEL RECYCLING PROCESS DEVEL-  
23 OPMENT.—

24 “(1) DEFINITION OF ADVANCED FUEL RECY-  
25 CLING PROCESS.—In this subsection through sub-



1 section (g), the term ‘advanced fuel recycling proc-  
2 ess’ means an integrated, proliferation-resistant,  
3 spent nuclear fuel recycling or transmutation process  
4 that—

5 “(A) does not separate pure plutonium;

6 “(B) reduces the burden on geological re-  
7 positories for ultimate waste disposal;

8 “(C) minimizes environmental and public  
9 health and safety impacts; and

10 “(D) is an alternative to reprocessing tech-  
11 nologies deployed prior to the date of enactment  
12 of this subsection.

13 “(2) DESIGN, CRITERIA, AND EVALUATIONS.—

14 In addition to the activities authorized under sub-  
15 section (a), the Secretary shall—

16 “(A) complete the development and testing  
17 of a complete and integrated process flowsheet  
18 for all steps involved in an advanced fuel recy-  
19 cling process;

20 “(B) characterize the waste streams result-  
21 ing from all steps in the advanced fuel recycling  
22 process identified under subparagraph (A);

23 “(C) develop waste treatment processes  
24 and designs for disposal facilities for waste  
25 streams characterized under subparagraph (B);

1           “(D) on completion of sufficient technical  
2 progress in the program, as evaluated under  
3 subsection (g)—

4           “(i) develop a generic environmental  
5 impact statement for the technologies de-  
6 veloped under this subsection; and

7           “(ii) conduct design and engineering  
8 work sufficient to develop firm cost esti-  
9 mates with respect to the development of  
10 advanced fuel recycling processes; and

11          “(E) cooperate with the Nuclear Regu-  
12 latory Commission in making facilities of the  
13 Department available to the Commission for  
14 purposes of the Commission carrying out inde-  
15 pendent, confirmatory research as part of the li-  
16 censing process for facilities constructed or  
17 used under the program.

18          “(f) REGULATORY STANDARDS.—

19           “(1) IN GENERAL.—The Nuclear Regulatory  
20 Commission shall have licensing and related regu-  
21 latory authority under the Atomic Energy Act of  
22 1954 (42 U.S.C. 2011 et seq.) over facilities that  
23 use an advanced fuel recycling process.

24           “(2) REVISION OF APPLICABLE STANDARDS.—

1           “(A) NUCLEAR REGULATORY COMMIS-  
2           SION.—The Nuclear Regulatory Commission  
3           shall establish standards for protection against  
4           radiation (including occupational exposures) re-  
5           sulting from activities at facilities that use an  
6           advanced fuel recycling process, including facili-  
7           ties to fabricate fuel enriched with actinide ele-  
8           ments other than uranium.

9           “(B) ENVIRONMENTAL PROTECTION AGEN-  
10          CY.—The Administrator of the Environmental  
11          Protection Agency shall establish generally ap-  
12          plicable environmental standards for the protec-  
13          tion of the public and the general environment  
14          from radioactive material released from facili-  
15          ties that use an advanced fuel recycling process,  
16          including facilities to fabricate fuel enriched  
17          with actinide elements other than uranium.

18       “(g) COMPREHENSIVE EVALUATION.—

19           “(1) IN GENERAL.—On completion of sufficient  
20          technical progress in the program under subsection  
21          (e), the Secretary shall direct the Nuclear Energy  
22          Advisory Committee and the Nuclear Waste Tech-  
23          nical Review Board to evaluate and prepare reports  
24          concerning the readiness of the program for detailed

1 design, engineering, licensing, and deployment of ad-  
 2 vanced fuel recycling processes.

3 “(2) REPORT.—The Secretary shall submit to  
 4 Congress the reports of the Nuclear Energy Advi-  
 5 sory Committee and the Nuclear Waste Technical  
 6 Review Board described in paragraph (1) with the  
 7 first budget request submitted to carry out activities  
 8 covered by the reports.”.

## 9 **Subtitle C—Improving United** 10 **States Strategic Reserves**

### 11 **SEC. 321. PETROLEUM PRODUCT RESERVE.**

12 (a) STRATEGIC PETROLEUM RESERVE.—Section  
 13 154(a) of the Energy Policy and Conservation Act (42  
 14 U.S.C. 6234(a)) is amended by striking “1 billion barrels  
 15 of petroleum products” and inserting “1,000,000,000 bar-  
 16 rels of petroleum products (including at least 30,000,000  
 17 barrels of refined petroleum products)”.

18 (b) PLAN.—Title I of the Energy Policy and Con-  
 19 servation Act is amended by inserting after section 154  
 20 (42 U.S.C. 6234) the following:

#### 21 **“SEC. 155. PLAN.**

22 “Not later than 180 days after the date of enactment  
 23 of this section, the Secretary shall submit to the President  
 24 and, if the President approves, to Congress, a plan to in-

1 clude refined petroleum products in the Strategic Petro-  
2 leum Reserve, including a description of—

3 “(1) the disposition of refined petroleum prod-  
4 ucts that shall be stored in the Reserve, which shall  
5 be selected—

6 “(A) to alleviate shortages that might be  
7 expected to result from hurricanes, earth-  
8 quakes, or other acts of nature; and

9 “(B) to minimize the number of different  
10 kinds of refined petroleum products that shall  
11 be stored;

12 “(2) the method of acquisition of refined petro-  
13 leum products for storage in the Reserve, which  
14 shall—

15 “(A) be intended to minimize both the cost  
16 and market disruption associated with the ac-  
17 quisition; and

18 “(B) include—

19 “(i) an analysis of the option of ex-  
20 changing crude oil from the Reserve for re-  
21 fined petroleum products; and

22 “(ii) the anticipated time requirement  
23 for building the inventory of refined petro-  
24 leum products;

1           “(3) storage facility options for the storage of  
2           refined petroleum products, including the anticipated  
3           location of existing or new facilities;

4           “(4) the estimated costs of establishment, main-  
5           tenance, and operation of the refined petroleum  
6           product component of the Reserve;

7           “(5) efforts the Department will take to ensure  
8           that distributors and importers are not discouraged  
9           from maintaining and increasing supplies of refined  
10          petroleum products; and

11          “(6) actions that will be taken to ensure quality  
12          of refined petroleum products in the Reserve, includ-  
13          ing the rotation of products stored.”.

14          (c) DRAWDOWN AND SALE.—Section 161 of the En-  
15          ergy Policy and Conservation Act (42 U.S.C. 6241) is  
16          amended—

17               (1) by striking subsection (d) and inserting the  
18               following:

19               “(d) LIMITATION ON DRAWDOWN AND SALE.—

20                   “(1) IN GENERAL.—The drawdown and sale of  
21                   petroleum products from the Strategic Petroleum  
22                   Reserve may not be made unless the Secretary de-  
23                   termines that—

24                           “(A) the drawdown and sale are required  
25                           by—

1                   “(i) a severe energy market supply  
2                   disruption; or

3                   “(ii) obligations of the United States  
4                   under the international energy program; or

5                   “(B) in the case of the refined petroleum  
6                   product component of the Reserve, a sale of re-  
7                   fined petroleum products will mitigate the im-  
8                   pacts of weather-related events or other acts of  
9                   nature that have resulted in a severe energy  
10                  market supply disruption.

11               “(2) SEVERE ENERGY MARKET SUPPLY DISRUP-  
12               TION.—For purpose of this subsection, a severe en-  
13               ergy market supply disruption shall be considered to  
14               exist if the Secretary determines that—

15               “(A) an emergency situation exists and  
16               there is a disruption in global oil market sup-  
17               plies of significant scope and duration;

18               “(B) a severe increase in the price of pe-  
19               troleum products has resulted, or is likely to re-  
20               sult, from the emergency situation; and

21               “(C) the price increase is likely to cause a  
22               major adverse impact on the national econ-  
23               omy.”; and

1           (2) in subsections (h)(1) and (i), by striking  
 2       “President” each place it appears and inserting  
 3       “Secretary”.

4   **SEC. 322. PETROLEUM EXCHANGE AUTHORITY.**

5       (a) PETROLEUM PRODUCTS FOR STORAGE IN STRA-  
 6   TEGIC PETROLEUM RESERVE.—Section 160(a) of the En-  
 7   ergy Policy and Conservation Act (42 U.S.C. 6240(a)) is  
 8   amended—

9           (1) by redesignating paragraphs (1) through  
 10       (3) as subparagraphs (A) through (C), respectively,  
 11       and indenting the subparagraphs appropriately;

12           (2) in subparagraph (A) (as redesignated by  
 13       paragraph (1)), by inserting a semicolon at the end;

14           (3) in subparagraph (C) (as redesignated by  
 15       paragraph (1)), by inserting “in accordance with  
 16       paragraph (2),” before “petroleum products”;

17           (4) by striking “(a) The Secretary” and insert-  
 18       ing the following:

19       “(a) AUTHORITY OF SECRETARY.—

20           “(1) IN GENERAL.—The Secretary”; and

21           (5) by adding at the end the following:

22       “(2) MONETARY COMPENSATION.—In acquiring  
 23       petroleum products under paragraph (1)(C), the  
 24       Secretary may accept monetary compensation for



1 differences in volume, quality, or time of delivery as  
2 a result of—

3 “(A) exchanges or deferrals of deliveries in  
4 the event that the reserve inventory is at the  
5 rated capacity of the reserve inventory; or

6 “(B) discrepancies in delivered volumes  
7 with respect to contractual volumes.”.

8 (b) SPR PETROLEUM ACCOUNT.—Section 167(b) of  
9 the Energy Policy and Conservation Act (42 U.S.C.  
10 6247(b)) is amended—

11 (1) by redesignating paragraphs (2) and (3) as  
12 paragraphs (1) and (2), respectively;

13 (2) in paragraph (1) (as redesignated by para-  
14 graph (1)), by striking “; and” and inserting a semi-  
15 colon;

16 (3) in paragraph (2) (as redesignated by para-  
17 graph (1)), by striking the period at the end and in-  
18 serting “; and”; and

19 (4) by adding at the end the following:

20 “(3) notwithstanding section 660 of the Depart-  
21 ment of Energy Organization Act (42 U.S.C. 7270),  
22 for each fiscal year, in an aggregate amount equal  
23 to the aggregate amount of the receipts to the  
24 United States from any exchange of petroleum prod-

1       ucts or discrepancies in delivered volume under sec-  
2       tion 160 (including section 160(a)(1)(C)).”.

3       **Subtitle D—Federal Oil and Gas**  
4       **Development**

5       **PART I—OIL AND GAS LEASING**

6       **SEC. 331. OIL AND GAS PERMIT PROCESSING IMPROVE-**  
7       **MENT FUND.**

8       Section 35(c) of the Mineral Leasing Act (30 U.S.C.  
9       191(c)) is amended by adding at the end the following:

10       “(4) AUTHORIZATION OF APPROPRIATIONS.—

11       There is authorized to be appropriated from the  
12       Fund, or to the extent adequate funds in the Fund  
13       are not available from miscellaneous receipts of the  
14       Treasury, for the coordination and processing of oil  
15       and gas use authorizations and for oil and gas in-  
16       spection and enforcement on onshore Federal land  
17       under the jurisdiction of the Pilot Project offices de-  
18       scribed in section 365(d) of the Energy Policy Act  
19       of 2005 (42 U.S.C. 15924(d)) \$20,000,000 for each  
20       of fiscal years 2016 through 2020, to remain avail-  
21       able until expended.”.

1 **SEC. 332. FACILITATION OF COPRODUCTION OF GEO-**  
2 **THERMAL ENERGY ON OIL AND GAS LEASES.**

3 Section 4(b) of the Geothermal Steam Act of 1970  
4 (30 U.S.C. 1003(b)) is amended by adding at the end the  
5 following:

6 “(4) LAND SUBJECT TO OIL AND GAS LEASE.—  
7 Land under an oil and gas lease issued pursuant to  
8 the Mineral Leasing Act (30 U.S.C. 181 et seq.) or  
9 the Mineral Leasing Act for Acquired Lands (30  
10 U.S.C. 351 et seq.) that is subject to an approved  
11 application for permit to drill and from which oil  
12 and gas production is occurring may be available for  
13 leasing under subsection (c) by the holder of the oil  
14 and gas lease—

15 “(A) on a determination that—

16 “(i) geothermal energy will be pro-  
17 duced from a well producing or capable of  
18 producing oil and gas; and

19 “(ii) the public interest will be served  
20 by the issuance of such a lease; and

21 “(B) in order to provide for the coproduc-  
22 tion of geothermal energy with oil and gas.”.

1           **PART II—OUTER CONTINENTAL SHELF**

2   **SEC. 341. IMPLEMENTATION OF INVENTORY OF OUTER**  
3           **CONTINENTAL SHELF RESOURCES.**

4           (a) IN GENERAL.—Section 357 of the Energy Policy  
5 Act of 2005 (42 U.S.C. 15912) is amended—

6               (1) in subsection (a)—

7                       (A) by striking the first sentence of the  
8 matter preceding paragraph (1) and inserting  
9 the following: “The Secretary shall conduct a  
10 seismic inventory of oil and natural gas, and  
11 prepare a summary (the latter prepared with  
12 the assistance of, and based on information pro-  
13 vided by, the heads of appropriate Federal  
14 agencies) of the information obtained under  
15 paragraph (3), for the waters of the United  
16 States Outer Continental Shelf (referred to in  
17 this section as the ‘OCS’) in the Atlantic Re-  
18 gion, the Eastern Gulf of Mexico, and the Alas-  
19 ka Region.”;

20               (B) in paragraph (2)—

21                       (i) by striking “3-D” and inserting  
22 “2-D and 3-D”; and

23                       (ii) by adding “and” at the end; and

24               (C) by striking paragraphs (3) through (5)  
25 and inserting in the following:

1           “(3) use existing inventories and mapping of  
2       marine resources undertaken by the National Ocean-  
3       ographic and Atmospheric Administration and with  
4       the assistance of and based on information provided  
5       by the Department of Defense and other Federal  
6       and State agencies possessing relevant data, and use  
7       any available data regarding alternative energy po-  
8       tential, navigation uses, fisheries, aquaculture uses,  
9       recreational uses, habitat, conservation, and military  
10      uses.”; and

11           (2) by striking subsection (b) and inserting the  
12      following:

13      “(b) IMPLEMENTATION.—The Secretary shall carry  
14      out the inventory and analysis under subsection (a) in 3  
15      phases, with priority given to all or part of applicable plan-  
16      ning areas of the outer Continental Shelf—

17           “(1) estimated to have the greatest potential for  
18      energy development in barrel of oil equivalent; and

19           “(2) outside of any leased area or area sched-  
20      uled for leasing prior to calendar year 2011 under  
21      any outer Continental Shelf 5-year leasing program  
22      or amendment to the program under section 18 of  
23      the Outer Continental Shelf Lands Act (43 U.S.C.  
24      1344).

25      “(c) REPORTS.—

1           “(1) IN GENERAL.—Not later than 90 days  
2       after the date of enactment of this paragraph, the  
3       Secretary shall submit to the Committee on Energy  
4       and Natural Resources of the Senate and the Com-  
5       mittee on Natural Resources of the House of Rep-  
6       resentatives a report that provides a plan for exe-  
7       cuting the seismic inventories required under this  
8       section, including an estimate of the costs to com-  
9       plete the seismic inventory by region and environ-  
10      mental and permitting activities to facilitate expedi-  
11      tious completion.

12           “(2) FIRST PHASE.—Not later than 2 years  
13      after the date of enactment of this paragraph, the  
14      Secretary shall submit to Congress a report describ-  
15      ing the results of the first phase of the inventory  
16      and analysis under subsection (a).

17           “(3) SUBSEQUENT PHASES.—Not later than 2  
18      years after the date on which the report is submitted  
19      under paragraph (2) and 2 years thereafter, the Sec-  
20      retary shall submit to Congress a report describing  
21      the results of the second and third phases, respec-  
22      tively, of the inventory and analysis under subsection  
23      (a).

24           “(4) PUBLIC AVAILABILITY.—A report sub-  
25      mitted under paragraph (2) or (3) shall be—

1 “(A) made publicly available; and

2 “(B) updated not less frequently than once  
3 every 5 years.”.

4 (b) RELATIONSHIP TO 5-YEAR PROGRAM.—The re-  
5 quirement that the Secretary of the Interior carry out the  
6 inventory required by the amendment made by subsection  
7 (a) shall not be considered to require, authorize, or provide  
8 a basis or justification for delay by the Secretary of the  
9 Interior or any other agency of the issuance of any outer  
10 Continental Shelf leasing program or amendment to the  
11 program under section 18 of the Outer Continental Shelf  
12 Lands Act (43 U.S.C. 1344), or any lease sale pursuant  
13 to that section.

14 (c) PERMITS.—Nothing in this section or an amend-  
15 ment made by this section precludes the issuance by the  
16 Secretary of the Interior of a permit to conduct geological  
17 and geophysical exploration of the outer Continental Shelf  
18 in accordance with the Outer Continental Shelf Lands Act  
19 (43 U.S.C. 1331 et seq.) and other applicable law.

20 (d) FUNDING.—Section 999H(d) of the Energy Pol-  
21 icy Act of 2005 (42 U.S.C. 16378(d)) is amended—

22 (1) by striking paragraph (1) and inserting the  
23 following:

24 “(1) 35 percent shall be used for activities  
25 under section 999A(b)(1), except that for each of

1       fiscal years 2010 through 2015 the amount made  
 2       available under this paragraph shall be used to carry  
 3       out section 357 (for the completion of necessary en-  
 4       vironmental analyses under the National Environ-  
 5       mental Policy Act of 1969 (42 U.S.C. 4321 et seq.),  
 6       with a priority given to completion of programmatic  
 7       environmental impact statements necessary to carry  
 8       out the seismic inventory or portions of the inven-  
 9       tory required by section 357, and the use of seismic  
 10      technology to obtain accurate resource estimates).”;  
 11      and

12               (2) in paragraph (4)—

13                       (A) by inserting “(A) except as provided in  
 14                       subparagraph (B),” before “25”; and

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

16                       “(B) notwithstanding subparagraph (A),  
 17                       for each of fiscal years 2010 through 2015—

18                               “(i) 15 percent shall be used for the  
 19                               purposes described in subparagraph (A);  
 20                               and

21                               “(ii) 10 percent shall be used for the  
 22                               activities described in paragraph (1).”.

23      (e) AUTHORIZATION OF APPROPRIATIONS.—There  
 24      are authorized to be appropriated to carry out this section,



1 to be available until expended without fiscal year limita-  
2 tion—

3 (1) \$100,000,000 for each of fiscal years 2010  
4 through 2015; and

5 (2) \$50,000,000 for each of fiscal years 2016  
6 through 2020.

7 **SEC. 342. ALASKA OCS PERMIT PROCESSING COORDINA-**  
8 **TION OFFICE.**

9 (a) ESTABLISHMENT.—The Secretary of the Interior  
10 (referred to in this section as the “Secretary”) shall estab-  
11 lish a regional joint outer Continental Shelf lease and per-  
12 mit processing office for the Alaska outer Continental  
13 Shelf region.

14 (b) MEMORANDUM OF UNDERSTANDING.—

15 (1) IN GENERAL.—Not later than 90 days after  
16 the date of enactment of this Act, the Secretary  
17 shall enter into a memorandum of understanding for  
18 the purposes of carrying out this section with—

19 (A) the Secretary of Commerce;

20 (B) the Chief of Engineers;

21 (C) the Administrator of the Environ-  
22 mental Protection Agency; and

23 (D) any other Federal agency that may  
24 have a role in permitting activities.

1           (2) STATE PARTICIPATION.—The Secretary  
2           shall request that the Governor of Alaska be a signa-  
3           tory to the memorandum of understanding.

4           (c) DESIGNATION OF QUALIFIED STAFF.—

5           (1) IN GENERAL.—Not later than 30 days after  
6           the date of the signing of the memorandum of un-  
7           derstanding under subsection (b), each Federal sig-  
8           natory party shall, if appropriate, assign to the of-  
9           fice described in subsection (a) an employee who has  
10          expertise in the regulatory issues administered by  
11          the office in which the employee is employed relating  
12          to leasing and the permitting of oil and gas activities  
13          on the outer Continental Shelf.

14          (2) DUTIES.—An employee assigned under  
15          paragraph (1) shall—

16                (A) not later than 90 days after the date  
17                of assignment, report to the office described in  
18                subsection (a);

19                (B) be responsible for all issues relating to  
20                the jurisdiction of the home office or agency of  
21                the employee; and

22                (C) participate as part of the applicable  
23                team of personnel working on proposed oil and  
24                gas leasing and permitting, including planning  
25                and environmental analyses.

1       (d) TRANSFER OF FUNDS.—For the purposes of co-  
2 ordination and processing of oil and gas use authorizations  
3 for the Alaska outer Continental Shelf region, the Sec-  
4 retary may authorize the expenditure or transfer of such  
5 funds as are necessary to—

6           (1) the Secretary of Commerce;

7           (2) the Chief of Engineers;

8           (3) the Administrator of the Environmental  
9 Protection Agency;

10          (4) any other Federal agency having a role in  
11 permitting activities; and

12          (5) the State of Alaska.

13       (e) SAVINGS PROVISION.—Nothing in this section af-  
14 fects—

15          (1) the operation of any Federal or State law;

16       or

17          (2) any delegation of authority made by the  
18 head of a Federal agency for employees that are as-  
19 signed to the coordination office.

20       (f) AUTHORIZATION OF APPROPRIATIONS.—There is  
21 authorized to be appropriated to carry out this section  
22 \$2,000,000 for each of fiscal years 2009 through 2019,  
23 to remain available until expended.

1 **SEC. 343. MORATORIUM OF OIL AND GAS LEASING IN CER-**  
 2 **TAIN AREAS OF THE GULF OF MEXICO.**

3 (a) MORATORIUM.—Section 104 of the Gulf of Mex-  
 4 ico Energy Security Act of 2006 (43 U.S.C. 1331 note;  
 5 Public Law 109–432) is amended—

6 (1) by striking subsection (a) and inserting the  
 7 following:

8 “(a) IN GENERAL.—Except as provided in subsection  
 9 (d), effective during the period beginning on the date of  
 10 enactment of this Act and ending on June 30, 2022, the  
 11 Secretary shall not offer for leasing, preleasing, or any re-  
 12 lated activity any area in the Eastern Planning Area that  
 13 is within 45 statute miles of the coastline of the State of  
 14 Florida.”; and

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

16 “(d) EXCEPTIONS.—

17 “(1) DEFINITIONS.—In this paragraph:

18 “(A) DESTIN DOME AREA.—The term  
 19 ‘Destin Dome Area’ means the area in the Cen-  
 20 tral and Eastern Planning Areas of the outer  
 21 Continental Shelf identified as ‘Destin Dome  
 22 (NH16-08)’ in the document entitled ‘MMS  
 23 Gulf of Mexico Region Planning Areas and Ac-  
 24 tive Leases’ and dated May 14, 2009.

25 “(B) PENSACOLA AREA.—The term ‘Pen-  
 26 sacola Area’ means the area in the Central and

1 Eastern Planning Areas of the outer Conti-  
2 nental Shelf identified as ‘Pensacola (NH16-  
3 05)’ in the document entitled ‘MMS Gulf of  
4 Mexico Region Planning Areas and Active  
5 Leases’ and dated May 14, 2009.

6 “(2) AUTHORIZED AREAS.—The Secretary may  
7 offer for leasing any area in the Destin Dome Area  
8 or the Pensacola Area.”.

9 (b) NATIONAL DEFENSE AREA.—Section 12(d) of  
10 the Outer Continental Shelf Lands Act (43 U.S.C.  
11 1341(d)) is amended—

12 (1) by striking “The United States” and insert-  
13 ing the following:

14 “(1) IN GENERAL.—The United States”; and

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

16 “(2) REVIEW.—Annually, the Secretary of De-  
17 fense shall—

18 “(A) review the areas of the outer Conti-  
19 nental Shelf that have been designated as re-  
20 stricted from exploration and operation to de-  
21 termine whether the areas should remain under  
22 restriction; and

23 “(B) based on the review under subpara-  
24 graph (A), make recommendations to the Presi-  
25 dent.”.

1 (c) LEASING OF MORATORIUM AREAS.—

2 (1) IN GENERAL.—Not later than 180 days  
3 after the date on which any necessary environmental  
4 analyses are completed under the National Environ-  
5 mental Policy Act of 1969 (42 U.S.C. 4321 et seq.),  
6 the Secretary shall offer for leasing under the Outer  
7 Continental Shelf Lands Act (43 U.S.C. 1331 et  
8 seq.) in accordance with the completed environ-  
9 mental analyses any areas made available for leasing  
10 as a result of this subtitle (including amendments  
11 made by this subtitle).

12 (2) ADMINISTRATION.—Notwithstanding the  
13 omission of the areas made available for leasing  
14 under paragraph (1) from the applicable 5-year plan  
15 developed by the Secretary pursuant to section 18 of  
16 the Outer Continental Shelf Lands Act (43 U.S.C.  
17 1344), the areas shall be offered for leasing under  
18 this section, in accordance with the completed envi-  
19 ronmental analyses referred to in paragraph (1).

20 (d) CONFORMING AMENDMENT.—Section 105 of the  
21 Department of the Interior, Environment, and Related  
22 Agencies Appropriations Act, 2006 (Public Law 109–54;  
23 119 Stat. 521) (as amended by section 103(d) of the Gulf  
24 of Mexico Energy Security Act of 2006 (43 U.S.C. 1331  
25 note; Public Law 109–432)) is amended by inserting “and

1 any other area that the Secretary of the Interior may offer  
 2 for leasing, preleasing, or any related activity under sec-  
 3 tion 104 of that Act” after “(2006)”.

4 **SEC. 344. REPEAL OF OUTER CONTINENTAL SHELF DEEP**  
 5 **WATER AND DEEP GAS ROYALTY RELIEF.**

6 (a) IN GENERAL.—Sections 344 and 345 of the En-  
 7 ergy Policy Act of 2005 (42 U.S.C. 15904, 15905) are  
 8 repealed.

9 (b) ADMINISTRATION.—The Secretary of the Interior  
 10 shall not be required to provide for royalty relief in the  
 11 lease sale terms beginning with the first lease sale held  
 12 on or after the date of enactment of this Act for which  
 13 a final notice of sale has not been published.

14 **PART III—MISCELLANEOUS**

15 **SEC. 351. MINERALS MANAGEMENT SERVICE.**

16 Title III of the Federal Oil and Gas Royalty Manage-  
 17 ment Act of 1982 (30 U.S.C. 1751 et seq.) is amended  
 18 by adding at the end the following:

19 **“SEC. 310. MINERALS MANAGEMENT SERVICE.**

20 “(a) DIRECTOR.—Any Director of the Minerals Man-  
 21 agement Service shall be appointed by the President, by  
 22 and with the advice and consent of the Senate.

23 “(b) DISCRETION.—Nothing in this section affects  
 24 the discretion granted to the Secretary by Reorganization

1 Plan No. 3 of 1950 (43 U.S.C. 1451 note; 64 Stat. 1262;  
2 85 Stat. 76).”.

3 **SEC. 352. PRESERVATION OF GEOLOGICAL AND GEO-**  
4 **PHYSICAL DATA.**

5 Section 351(k) of the Energy Policy Act of 2005 (42  
6 U.S.C. 15908(k)) is amended by striking “2010” and in-  
7 serting “2020”.

8 **SEC. 353. ALASKA NATURAL GAS PIPELINE.**

9 Section 116 of the Alaska Natural Gas Pipeline Act  
10 (15 U.S.C. 720n) is amended—

11 (1) in subsection (a)(3)—

12 (A) in the first sentence, by inserting be-  
13 fore the period at the end the following: “, ex-  
14 cept that a holder of a certificate may request  
15 the Secretary to extend the period to issue Fed-  
16 eral guarantee instruments for not more than  
17 180 days following the date of resolution of any  
18 reopening, contest, or other proceeding relating  
19 to the certificate”; and

20 (B) in the second sentence, by inserting  
21 before the period at the end the following: “, or  
22 connecting to pipeline infrastructure capable of  
23 delivering commercially economic quantities of  
24 natural gas to the continental United States”;

25 (2) in subsection (b)—



1 (A) by striking paragraph (2);

2 (B) by redesignating paragraphs (3) and  
3 (4) as paragraphs (2) and (3), respectively; and

4 (C) in paragraph (2) (as so redesignated),  
5 by striking “and completion guarantees”;

6 (3) in subsection (c)(2), by striking  
7 “\$18,000,000,000” and inserting  
8 “\$30,000,000,000”;

9 (4) in subsection (d)—

10 (A) in the first sentence of paragraph (1),  
11 by inserting before the period at the end the  
12 following: “, except that an issued loan guar-  
13 antee instrument shall apply to not less than 80  
14 percent of project costs unless by previous con-  
15 sent of the borrower”; and

16 (B) in paragraph (2), by striking “An eli-  
17 gible” and inserting “A”; and

18 (5) in subsection (g)—

19 (A) by striking paragraph (2);

20 (B) by redesignating paragraphs (3) and  
21 (4) as paragraphs (2) and (3), respectively; and

22 (C) in paragraph (2) (as so redesignated),  
23 by inserting before the period at the end the  
24 following: “under subsection (a)(3), including  
25 direct lending from the Federal Financing

1 Bank of all or a part of the amount to the hold-  
2 er, in lieu of a guarantee”.

3 **SEC. 354. DENALI NATIONAL PARK AND PRESERVE NAT-**  
4 **URAL GAS PIPELINE.**

5 (a) DEFINITIONS.—In this section:

6 (1) APPURTENANCE.—

7 (A) IN GENERAL.—The term “appur-  
8 tenance” includes cathodic protection or test  
9 stations, valves, signage, and buried commu-  
10 nication and electric cables relating to the oper-  
11 ation of high-pressure natural gas transmission.

12 (B) EXCLUSIONS.—The term “appur-  
13 tenance” does not include compressor stations.

14 (2) PARK.—The term “Park” means the Denali  
15 National Park and Preserve in the State of Alaska.

16 (3) SECRETARY.—The term “Secretary” means  
17 the Secretary of the Interior.

18 (b) PERMIT.—The Secretary may issue right-of-way  
19 permits for—

20 (1) a high-pressure natural gas transmission  
21 pipeline (including appurtenances) in non-wilderness  
22 areas within the boundary of Denali National Park  
23 within, along, or near the approximately 7-mile seg-  
24 ment of the George Parks Highway that runs  
25 through the Park; and

1           (2) any distribution and transmission pipelines  
2           and appurtenances that the Secretary determines to  
3           be necessary to provide natural gas supply to the  
4           Park.

5           (c) TERMS AND CONDITIONS.—A permit authorized  
6           under subsection (b)—

7           (1) may be issued only—

8                   (A) if the permit is consistent with the  
9                   laws (including regulations) generally applicable  
10                  to utility rights-of-way within units of the Na-  
11                  tional Park System;

12                  (B) in accordance with section 1106(a) of  
13                  the Alaska National Interest Lands Conserva-  
14                  tion Act (16 U.S.C. 3166(a)); and

15                  (C) if, following an appropriate analysis  
16                  prepared in compliance with the National Envi-  
17                  ronmental Policy Act of 1969 (42 U.S.C. 4321  
18                  et seq.), the route of the right-of-way is the  
19                  route through the Park with the least adverse  
20                  environmental effects for the Park; and

21           (2) shall be subject to such terms and condi-  
22           tions as the Secretary determines to be necessary.

1 **SEC. 355. EXEMPTION OF TRANS-ALASKA OIL PIPELINE**  
2 **SYSTEM FROM CERTAIN REQUIREMENTS.**

3 The Trans-Alaska Pipeline Authorization Act (43  
4 U.S.C. 1651 et seq.) is amended by adding at the end  
5 the following:

6 **“SEC. 208. EXEMPTION OF TRANS-ALASKA OIL PIPELINE**  
7 **SYSTEM FROM CERTAIN REQUIREMENTS.**

8 “(a) IN GENERAL.—Except as provided in subsection  
9 (b), no part of the trans-Alaska oil pipeline system shall  
10 be considered to be a district, site, building, structure, or  
11 object for purposes of section 106 of the National Historic  
12 Preservation Act (16 U.S.C. 470f), regardless of whether  
13 all or part of the trans-Alaska oil pipeline system may oth-  
14 erwise be listed on, or eligible for listing on, the National  
15 Register of Historic Places.

16 “(b) INDIVIDUAL ELEMENTS.—

17 “(1) IN GENERAL.—Subject to subsection (c),  
18 the Secretary of the Interior may identify up to 3  
19 sections of the trans-Alaska oil pipeline system that  
20 possess national or exceptional historic significance,  
21 and that should remain after the pipeline is no  
22 longer used for the purpose of oil transportation.

23 “(2) HISTORIC SITE.—Any sections identified  
24 under paragraph (1) shall be considered to be a his-  
25 toric site.

1           “(3) VIEWS.—In making the identification  
2           under this subsection, the Secretary shall consider  
3           the views of—

4                   “(A) the owners of the pipeline;

5                   “(B) the State Historic Preservation Offi-  
6           cer;

7                   “(C) the Advisory Council on Historic  
8           Preservation; and

9                   “(D) the Federal Coordinator for Alaska  
10          Natural Gas Transportation Projects.

11          “(c) CONSTRUCTION, MAINTENANCE, RESTORATION,  
12   AND REHABILITATION ACTIVITIES.—Subsection (b) does  
13   not prohibit the owners of the trans-Alaska oil pipeline  
14   system from carrying out construction, maintenance, res-  
15   toration, or rehabilitation activities on or for a section of  
16   the system described in subsection (b).”.

17   **SEC. 356. PROCUREMENT AND ACQUISITION OF ALTER-**  
18                   **NATIVE FUELS.**

19          Section 526 of the Energy Independence and Security  
20   Act of 2007 (42 U.S.C. 17142) is amended to read as  
21   follows:

22   **“SEC. 526. PROCUREMENT AND ACQUISITION OF ALTER-**  
23                   **NATIVE FUELS.**

24          “(a) IN GENERAL.—Except as provided in subsection  
25   (b), no Federal agency shall enter into a contract for pro-

1 curement of an alternative or synthetic fuel, including a  
2 fuel produced from nonconventional petroleum sources, for  
3 any mobility-related use other than for research or testing,  
4 unless the contract specifies that the lifecycle greenhouse  
5 gas emissions associated with the production and combus-  
6 tion of the fuel supplied under the contract, on an ongoing  
7 basis, be less than or equal to such emissions from the  
8 equivalent conventional fuel produced from conventional  
9 petroleum sources.

10 “(b) EXCEPTIONS.—Subsection (a) shall not prohibit  
11 a Federal agency from entering into a contract to pur-  
12 chase a generally available fuel that is produced, in whole  
13 or in part, from a nonconventional petroleum source if—

14 “(1) the contract does not specifically require  
15 the contractor to provide a fuel from a nonconven-  
16 tional petroleum source;

17 “(2) the purpose of the contract is not to obtain  
18 a fuel from a nonconventional petroleum source; and

19 “(3) the contract does not provide incentives  
20 (excluding compensation at market prices for the  
21 purchase of fuel purchased) for a refinery upgrade  
22 or expansion to allow a refinery to use or increase  
23 the use by the refinery of fuel from a nonconven-  
24 tional petroleum source.”.

1 **SEC. 357. GEOLOGIC MATERIALS ARCHIVING GRANT PRO-**  
2 **GRAM.**

3 (a) FINDINGS.—Congress finds that—

4 (1) the collection of rock core samples and the  
5 well logs relating to the collection of the rock core  
6 samples are vital for the exploration, analysis, and  
7 eventual production of the oil, natural gas, shale oil,  
8 coal, and geothermal resources of the United States;

9 (2) the collection and storage of rock core sam-  
10 ples over time is expensive and requires large stor-  
11 age facilities;

12 (3) because of current fiscal constraints, States  
13 are finding it increasingly difficult to afford the stor-  
14 age and maintenance of the geologic record of the  
15 United States;

16 (4) the loss of any core samples or logs harms  
17 the ability of the United States to pinpoint the loca-  
18 tion of energy sources by downgrading the geologic  
19 knowledge;

20 (5) the retention of core samples—

21 (A) provides critical data for—

22 (i) the geologic sequestration of car-  
23 bon dioxide;

24 (ii) groundwater and aquifer studies  
25 for regional water supplies; and

26 (iii) tracking potential contamination;

1 (B) is important for the siting of deep geo-  
 2 logic repositories for the storage of hazardous  
 3 materials;

4 (C) is vital for—

5 (i) infrastructure development;

6 (ii) the location of construction mate-  
 7 rials; and

8 (iii) geohazards mitigation; and

9 (D) provides important data for climate  
 10 and other historical geology studies; and

11 (6) it is unknown what core sample data would  
 12 be needed for in the future as—

13 (A) new technology becomes available; and

14 (B) our understanding of the “sub-surface  
 15 frontier” evolves.

16 (b) GRANT PROGRAM.—

17 (1) IN GENERAL.—There is established in the  
 18 Department of the Interior a grant program under  
 19 which the Secretary of the Interior (referred to in  
 20 this section as the “Secretary”) shall provide grants  
 21 to individual States, State Geologic Surveys, or Re-  
 22 gional Consortiums to build, maintain, and operate  
 23 centers to store geologic samples (including core  
 24 samples, surface samples, micropaleontology sam-  
 25 ples, well cuttings, and geochemical samples) col-



1 lected as a result of oil and gas exploration, mineral  
2 exploration, and geotechnical studies and research.

3 (2) APPLICATION.—To be eligible to receive a  
4 grant under paragraph (1), a State shall submit to  
5 the Secretary an application in such form, at such  
6 time, and containing such information as the Sec-  
7 retary may require.

8 (3) REQUIRED MAINTENANCE.—The Secretary  
9 shall not provide a grant to a State under paragraph  
10 (1) unless the State agrees to maintain any center  
11 provided assistance under this section for at least 20  
12 years after the date on which the grant is provided.

13 (4) AMOUNT OF GRANT.—The maximum  
14 amount of a grant provided to a State under para-  
15 graph (1) shall be \$15,000,000.

16 (c) AUTHORIZATION OF APPROPRIATIONS.—There is  
17 authorized to be appropriated to provide grants under this  
18 section \$100,000,000.

## 19 **Subtitle E—Public Land** 20 **Renewable Energy Deployment**

### 21 **SEC. 361. RENEWABLE ENERGY FEDERAL PERMIT COORDI-** 22 **NATION.**

23 Section 365 of the Energy Policy Act of 2005 (42  
24 U.S.C. 15924) is amended by adding at the end the fol-  
25 lowing:

1       “(k) PILOT PROJECT OFFICES TO IMPROVE FED-  
2 ERAL PERMIT COORDINATION FOR RENEWABLE EN-  
3 ERGY.—

4               “(1) DEFINITION OF RENEWABLE ENERGY.—In  
5 this subsection, the term ‘renewable energy’ means  
6 energy derived from a wind, solar, or geothermal  
7 source.

8               “(2) FIELD OFFICES.—As part of the Pilot  
9 Project, the Secretary shall designate 1 field office  
10 of the Bureau of Land Management in each of the  
11 following States to serve as Renewable Energy Per-  
12 mit Coordination Offices for coordination of Federal  
13 permits for renewable energy projects and trans-  
14 mission involving Federal land facilitating the devel-  
15 opment of renewable energy:

16                   “(A) Alaska.

17                   “(B) Arizona.

18                   “(C) California.

19                   “(D) Colorado.

20                   “(E) Idaho.

21                   “(F) Oregon.

22                   “(G) New Mexico.

23                   “(H) Nevada.

24                   “(I) Montana.

25                   “(J) Utah.

1 “(K) Washington.

2 “(L) Wyoming.

3 “(3) MEMORANDUM OF UNDERSTANDING.—

4 “(A) IN GENERAL.—Not later than 90  
5 days after the date of enactment of this sub-  
6 section, the Secretary shall enter into an  
7 amended memorandum of understanding under  
8 subsection (b) to provide for the inclusion of the  
9 additional Renewable Energy Pilot Project Of-  
10 fices in the Pilot Project.

11 “(B) SIGNATURE OF SECRETARY.—The  
12 Secretary shall be a signatory of the amended  
13 memorandum of understanding.

14 “(C) SIGNATURES BY GOVERNORS.—The  
15 Secretary shall request that the Governors of  
16 each of the States described in paragraph (2)  
17 be signatories to the amended memorandum of  
18 understanding.

19 “(4) DESIGNATION OF QUALIFIED STAFF.—Not  
20 later than 30 days after the date of the signing of  
21 the amended memorandum of understanding, all  
22 Federal signatory parties shall, if appropriate, as-  
23 sign to each Renewable Energy Pilot Project Office  
24 designated under paragraph (2) an employee de-

1       scribed in subsection (c) to carry out duties de-  
2       scribed in that subsection.

3               “(5) ADDITIONAL PERSONNEL.—The Secretary  
4       shall assign to each Renewable Energy Pilot Project  
5       Office additional personnel under subsection (f).

6               “(6) TRANSFER OF FUNDS.—To coordinate and  
7       process renewable energy authorizations on Federal  
8       land under the jurisdiction of a Pilot Project Office  
9       designated under paragraph (2), the Secretary may  
10      authorize the expenditure or transfer of such funds  
11      as are necessary to—

12              “(A) any Federal agency described in sub-  
13      section (h); and

14              “(B) any State described in paragraph (2).

15              “(7) FUNDING.—

16              “(A) IN GENERAL.—The Federal share of  
17      any royalties, fees, rentals, bonus bids, or other  
18      payments from wind or solar development on  
19      land administered by the Secretary shall be de-  
20      posited in a special fund in the Treasury to be  
21      known as the ‘BLM Wind and Solar Energy  
22      Permit Processing Improvement Fund’ (re-  
23      ferred to in this subsection as ‘Fund’).

24              “(B) AUTHORIZATION OF APPROPRIA-  
25      TIONS.—There is authorized to be appropriated

1 from the Fund or, to the extent amounts are  
 2 not available in the Fund, from the Treasury  
 3 for the costs of administering program oper-  
 4 ations for wind and solar development under  
 5 the Public Land Renewable Energy Deployment  
 6 and Adjustment Act of 2009 and the Federal  
 7 Land Policy and Management Act of 1976 (43  
 8 U.S.C. 1701 et seq.) \$10,000,000 for each of  
 9 fiscal years 2009 through 2019, to remain  
 10 available without fiscal year limitation until ex-  
 11 pended.”.

12 **SEC. 362. EXTENSION OF FUNDING FOR IMPLEMENTATION**  
 13 **OF GEOTHERMAL STEAM ACT OF 1970.**

14 (a) IN GENERAL.—Section 234(a) of the Energy Pol-  
 15 icy Act of 2005 (42 U.S.C. 15873(a)) is amended by strik-  
 16 ing “in the first 5 fiscal years beginning after the date  
 17 of enactment of this Act” and inserting “for each fiscal  
 18 year through fiscal year 2020”.

19 (b) AUTHORIZATION.—Section 234(b) of the Energy  
 20 Policy Act of 2005 (42 U.S.C. 15873(b)) is amended—

21 (1) by striking “Amounts” and inserting the  
 22 following:

23 “(1) IN GENERAL.—Amounts”; and

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

1           “(2) AUTHORIZATION.—Effective for fiscal year  
 2           2011 and each fiscal year thereafter, amounts de-  
 3           posited under subsection (a) shall be available to the  
 4           Secretary of the Interior for expenditure, subject to  
 5           appropriation and without fiscal year limitation, to  
 6           implement the Geothermal Steam Act of 1970 (30  
 7           U.S.C. 1001 et seq.) and this Act.”.

8   **SEC. 363. PROGRAMMATIC ENVIRONMENTAL IMPACT**  
 9                           **STATEMENTS AND LAND USE PLANNING.**

10          (a) PUBLIC LAND.—Not later than 1 year after the  
 11          date of enactment of this Act, the Secretary of the Interior  
 12          shall—

13               (1) complete a programmatic environmental im-  
 14               pact statement in accordance with the National En-  
 15               vironmental Policy Act of 1969 (42 U.S.C. 4321 et  
 16               seq.) to analyze the potential impacts of—

17                       (A) a program to develop solar energy on  
 18                       land administered by the Secretary, acting  
 19                       through the Bureau of Land Management; and

20                       (B) any necessary amendments to land use  
 21                       plans for the land; and

22               (2) amend any land use plans as appropriate to  
 23               provide for the development of renewable energy in  
 24               areas considered appropriate by the Secretary.

1 (b) NATIONAL FOREST SYSTEM LAND.—As soon as  
2 practicable but not later than 18 months after the date  
3 of enactment of this Act, the Secretary of Agriculture  
4 shall—

5 (1) complete a programmatic environmental im-  
6 pact statement in accordance with the National En-  
7 vironmental Policy Act of 1969 (42 U.S.C. 4321 et  
8 seq.) to analyze the potential impacts of—

9 (A) a program to develop solar and wind  
10 energy on National Forest System land admin-  
11 istered by the Secretary; and

12 (B) any necessary amendments to land use  
13 plans for the land; and

14 (2) amend any land use plans as appropriate to  
15 provide for the development of renewable energy in  
16 areas considered appropriate by the Secretary imme-  
17 diately on completion of the programmatic environ-  
18 mental impact statement.

19 (c) EFFECT ON PROCESSING APPLICATIONS.—The  
20 requirement for completion of programmatic environ-  
21 mental impact statements under this section shall not re-  
22 sult in any delay in processing applications for wind or  
23 solar development on land administered by the Secretary  
24 of the Interior, acting through the Bureau of Land Man-  
25 agement, or on National Forest System land.

1 **SEC. 364. REPORT.**

2 (a) STUDY.—

3 (1) IN GENERAL.—Not later than 180 days  
4 after the date of enactment of this Act, the Sec-  
5 retary of the Interior, in consultation with the Sec-  
6 retary of Agriculture, shall enter into an arrange-  
7 ment with the National Academy of Sciences under  
8 which the Academy shall conduct a study on the  
9 siting, development, and management of projects for  
10 the production of wind and solar energy on—

11 (A) land available for energy development  
12 that is administered by the Secretary of the In-  
13 terior, acting through the Bureau of Land Man-  
14 agement; and

15 (B) National Forest System land adminis-  
16 tered by the Secretary of Agriculture that is  
17 available for energy development.

18 (2) MATTERS TO BE ADDRESSED.—The study  
19 shall address—

20 (A) the effectiveness of—

21 (i) laws (including regulations) and  
22 policies in effect on the date of enactment  
23 of this Act in—

24 (I) facilitating the development of  
25 wind and solar energy projects on the  
26 land; and



- 1 (II) ensuring the public receives  
2 a fair return for the use of the land;
- 3 (ii) policies designed to discourage  
4 speculation in the development of wind and  
5 solar projects on the land;
- 6 (iii) the land use planning process in  
7 siting wind and solar facilities;
- 8 (iv) mitigation planning for wind and  
9 solar projects on the land, particularly with  
10 respect to fish and wildlife and water re-  
11 sources;
- 12 (v) best management practices devel-  
13 oped by the Secretary of the Interior and  
14 the Secretary of Agriculture for wind and  
15 solar projects; and
- 16 (vi) adaptive management of the im-  
17 pacts associated with wind and solar  
18 projects on the land; and
- 19 (B) the advantages and disadvantages of  
20 using—
- 21 (i) rights-of-way as a means of au-  
22 thorizing the use of the Federal land de-  
23 scribed in paragraph (1) for wind and  
24 solar energy development; and

1                   (ii) a competitive or noncompetitive  
2                   leasing system as a means of authorizing  
3                   the use of the Federal land described in  
4                   paragraph (1) for wind and solar energy  
5                   development.

6           (b) RECOMMENDATIONS.—The study shall—

7                   (1) analyze the matters described in subsection  
8           (a)(2); and

9                   (2) make recommendations as to—

10                   (A) whether a competitive or noncompeti-  
11                   tive leasing system would be a more effective  
12                   means than the system in effect on the date of  
13                   enactment of this Act to authorize the use of  
14                   Federal land described in subsection (a)(1) to  
15                   meet the goals of facilitating the development of  
16                   wind and solar energy projects while achieving  
17                   a fair return to the public;

18                   (B) the most effective system to authorize  
19                   the use of Federal land described in subsection  
20                   (a)(1) to meet the goals of facilitating the de-  
21                   velopment of wind and solar energy projects  
22                   while achieving a fair return to the public; and

23                   (C) changes, if any, to Federal law (includ-  
24                   ing regulations) or policy necessary to address  
25                   more effectively the siting, development, and

1 management of solar and wind projects on the  
2 land.

3 (c) COMPLETION OF STUDY.—Not later than 18  
4 months after the date of enactment of this Act, the Na-  
5 tional Academy of Sciences shall—

6 (1) submit to the Secretary of the Interior and  
7 the Secretary of Agriculture the findings and rec-  
8 ommendations of the study required under sub-  
9 sections (a) and (b); and

10 (2) on completion of the study, make the results  
11 of the study available to the public.

12 (d) REPORT TO CONGRESS.—Not later than 180 days  
13 after the date of receipt of the findings and recommenda-  
14 tions of the study under subsection (c)(1), the Secretary  
15 of the Interior, in consultation with the Secretary of Agri-  
16 culture, shall submit to Congress a report on—

17 (1) the findings and recommendations of the  
18 study;

19 (2) the agreement or disagreement of the Secre-  
20 taries with respect to each of the findings and rec-  
21 ommendations of the National Academy of Sciences;

22 (3) the administrative actions to be taken by  
23 each of the Secretaries in response to the findings  
24 and recommendations; and

25 (4) any recommended changes in law.

1 **SEC. 365. RENEWABLE ENERGY DEVELOPMENT ON**  
2 **BROWNFIELD SITES.**

3 (a) DEFINITIONS.—In this section:

4 (1) ADMINISTRATOR.—The term “Adminis-  
5 trator” means the Administrator of the Environ-  
6 mental Protection Agency.

7 (2) RENEWABLE ENERGY.—The term “renew-  
8 able energy” has the meaning given the terms “ex-  
9 isting renewable energy” and “new renewable en-  
10 ergy” in section 610 of the Public Utility Regulatory  
11 Policies Act of 1978 (as added by section \_\_01(a)).

12 (b) DEPARTMENT OF ENERGY AND ENVIRONMENTAL  
13 PROTECTION AGENCY EFFORTS.—The Secretary, in con-  
14 junction with the Administrator, shall—

15 (1) in partnership with the National Renewable  
16 Energy Laboratory, identify opportunities to  
17 prioritize renewable energy development on  
18 brownfield sites;

19 (2) provide to States, units of local govern-  
20 ments, project developers, and other stakeholders  
21 publicly available resources identifying potential  
22 brownfield sites for renewable energy development,  
23 with an emphasis on non-Federal land; and

24 (3) provide technical assistance to State and  
25 local officials, interested project developers, and  
26 other stakeholders to expedite renewable energy pro-

1       duction from brownfield sites identified under this  
2       subsection, with an emphasis on non-Federal land.

3       (c) REPORT.—Not later than 1 year after the date  
4 of enactment of this Act, the Secretary and Administrator  
5 shall submit to Congress a report that includes—

6           (1) proposals for Federal policies, incentives, or  
7       other means of encouraging renewable energy pro-  
8       duction on sites identified under subsection (b); and

9           (2) data on existing and potential job creation  
10      from, environmental benefits of, and energy produc-  
11      tion from renewable energy on brownfield sites.

12      (d) STAKEHOLDER FORUMS.—The Secretary, in con-  
13 junction with the Administrator, shall conduct stakeholder  
14 forums in each region of the United States to assist State  
15 and local officials, project developers, and other stake-  
16 holders with renewable energy project siting on brownfield  
17 sites, with an emphasis on non-Federal land.

18      (e) EFFECT.—Nothing in this section affects existing  
19 Federal efforts to promote the reuse and redevelopment  
20 of brownfield sites.

21      (f) AUTHORIZATION OF APPROPRIATIONS.—There  
22 are authorized to be appropriated such sums as are nec-  
23 essary to carry out this section for each of fiscal years  
24 2011 through 2015.

1 **SEC. 366. DEVELOPMENT OF SOLAR AND WIND ENERGY ON**  
2 **PUBLIC LAND.**

3 (a) DEFINITIONS.—In this section:

4 (1) COVERED LAND.—The term “covered land”  
5 means land that is—

6 (A)(i) public land administered by the Sec-  
7 retary; or

8 (ii) National Forest System land adminis-  
9 tered by the Secretary of Agriculture; and

10 (B) designated for the development of solar or  
11 wind energy under a land use plan established  
12 under—

13 (i) the Federal Land Policy and Manage-  
14 ment Act of 1976 (43 U.S.C. 1701 et seq.); or

15 (ii) the National Forest Management Act  
16 of 1976 (16 U.S.C. 1600 et seq.).

17 (2) PILOT PROGRAM.—The term “pilot pro-  
18 gram” means the wind and solar leasing pilot pro-  
19 gram established under subsection (b).

20 (3) PUBLIC LAND.—The term “public land”  
21 has the meaning given the term “public lands” in  
22 section 103 of the Federal Land Policy and Manage-  
23 ment Act of 1976 (43 U.S.C. 1702).

24 (4) SECRETARY.—The term “Secretary” means  
25 the Secretary of the Interior.

26 (b) PILOT PROGRAM.—

1           (1) IN GENERAL.—Not later than 180 days  
2       after the date of enactment of this Act, the Sec-  
3       retary shall establish a wind and solar leasing pilot  
4       program.

5           (2) SELECTION OF SITES.—

6               (A) IN GENERAL.—Not later than 90 days  
7       after the date the pilot program is established  
8       under this subsection, the Secretary shall select  
9       2 sites that are appropriate for the development  
10      of a solar energy project, and 2 sites that are  
11      appropriate for the development of a wind en-  
12      ergy project, on covered land as part of the  
13      pilot program.

14            (B) SITE SELECTION.—In carrying out  
15      subparagraph (A), the Secretary shall seek to  
16      select sites—

17               (i) for which there is likely to be a  
18               high level of industry interest; and

19               (ii) that are representative of sites on  
20               which solar or wind energy is likely to be  
21               developed on covered land.

22            (C) INELIGIBLE SITES.—The Secretary  
23      shall not select as part of the pilot program any  
24      site for which a right-of way for site testing or  
25      construction has been issued.

1           (3) LEASE SALES.—

2                   (A) IN GENERAL.—Except as provided in  
3                   subparagraph (C)(ii), not later than 180 days  
4                   after the date sites are selected under para-  
5                   graph (2), the Secretary shall offer each site for  
6                   competitive leasing to qualified bidders under  
7                   such terms and conditions as are required by  
8                   the Secretary.

9                   (B) BIDDING SYSTEMS.—In offering the  
10                  sites for lease, the Secretary—

11                         (i) may vary the bidding systems to be  
12                         used at each lease sale; but

13                         (ii) shall limit bidding to 1 round in  
14                         any lease sale.

15           (C) LEASE TERMS.—

16                         (i) IN GENERAL.—As part of the pilot  
17                         program, the Secretary may vary the  
18                         length of the lease terms and establish  
19                         such other lease terms and conditions as  
20                         the Secretary considers appropriate.

21                         (ii) DATA COLLECTION.—As part of  
22                         the pilot program, the Secretary shall—

23                                 (I) offer on a noncompetitive  
24                                 basis on at least 1 site a short-term  
25                                 lease for data collection; and



1                   (II) on the expiration of the  
2                   short-term lease, offer on a competi-  
3                   tive basis a long-term lease, giving  
4                   credit toward the bonus bid to the  
5                   holder of the short-term lease for any  
6                   qualified expenditures to collect data  
7                   to develop the site during the short-  
8                   term lease.

9                   (4) COMPLIANCE WITH LAWS.—In offering for  
10                  lease the selected sites under paragraph (3), the Sec-  
11                  retary shall comply with all applicable environmental  
12                  and other laws.

13                  (5) REPORT.—The Secretary shall—

14                    (A) compile a report of the results of each  
15                    lease sale under the pilot program, including—

16                       (i) the level of competitive interest;

17                       and

18                       (ii) a summary of bids and revenues  
19                       received; and

20                    (B) not later than 90 days after the final  
21                    lease sale, submit to the Committee on Energy  
22                    and Natural Resources of the Senate and the  
23                    Committee on Natural Resources of the House  
24                    of Representatives the report described in sub-  
25                    paragraph (A).

1           (6) RIGHTS-OF-WAY.—During the pendency of  
2           the pilot program, the Secretary shall continue to  
3           issue rights-of-way, in compliance with authority in  
4           effect on the date of enactment of this Act, for avail-  
5           able sites not selected for the pilot program.

6           (c) SECRETARIAL DETERMINATION.—

7           (1) IN GENERAL.—Not later than 30 months  
8           after the date of enactment of this Act, the Sec-  
9           retary shall determine whether to establish a leasing  
10          program under this section for wind or solar energy.

11          (2) ESTABLISHMENT.—The Secretary shall es-  
12          tablish a leasing program if the Secretary deter-  
13          mines that the program—

14                (A) is in the public interest; and

15                (B) provides an effective means of devel-  
16          oping wind or solar energy on covered land.

17          (3) CONSULTATION.—In making the determina-  
18          tions required under this subsection, the Secretary  
19          shall consult with—

20                (A) the Secretary of Agriculture;

21                (B) the heads of other relevant Federal  
22          agencies;

23                (C) affected States and Indian tribes;

24                (D) representatives of the solar and wind  
25          industry;

1 (E) representatives of the environmental  
2 and conservation community; and

3 (F) the public.

4 (4) CONSIDERATIONS.—In making the deter-  
5 minations required under this subsection, the Sec-  
6 retary shall consider the results of the report pro-  
7 vided under subsection (b)(5) and the results of the  
8 pilot program.

9 (5) REGULATIONS.—Not later than 180 days  
10 after the date on which any determination is made  
11 to establish a leasing program, the Secretary shall  
12 promulgate final regulations to implement the pro-  
13 gram.

14 (6) REPORT.—If the Secretary determines that  
15 a leasing program should not be established, not  
16 later than 60 days after the date of the determina-  
17 tion, the Secretary shall submit to the Committee on  
18 Energy and Natural Resources of the Senate and  
19 the Committee on Natural Resources of the House  
20 of Representatives a report describing the reasons  
21 and findings for the determination.

22 (d) TRANSITION.—

23 (1) IN GENERAL.—If the Secretary determines  
24 that a leasing program should be established, the  
25 Secretary shall continue to provide for the issuance

1 of rights-of-way for the development of wind or solar  
2 energy in accordance with each requirement de-  
3 scribed in title V of the Federal Land Policy and  
4 Management Act of 1976 (43 U.S.C. 1761 et seq.)  
5 until the program is established and final regula-  
6 tions for the program are promulgated.

7 (2) ADMINISTRATION.—The Secretary shall by  
8 regulation provide for a reasonable transition from  
9 the use of rights-of-way to leases, taking into ac-  
10 count the status of the project (including whether  
11 rights-of-way for testing or construction have been  
12 granted or whether a plan of development has been  
13 submitted).

14 (e) LEASING PROGRAM.—If the Secretary determines  
15 under subsection (c) that a leasing program should be es-  
16 tablished, the program shall be established in accordance  
17 with subsections (f) through (l).

18 (f) COMPETITIVE LEASES.—

19 (1) IN GENERAL.—Except as provided in para-  
20 graph (2), leases for wind or solar energy develop-  
21 ment under this section shall be issued on a competi-  
22 tive basis with a single round of bidding in any lease  
23 sale.

24 (2) EXCEPTIONS.—Paragraph (1) shall not  
25 apply if the Secretary determines that—

1 (A) no competitive interest exists;

2 (B) the public interest would not be served  
3 by the competitive issuance of a lease or right-  
4 of-way; or

5 (C) the lease is for the placement and op-  
6 eration of a meteorological or data collection fa-  
7 cility or for the development or demonstration  
8 of a new wind or solar technology and has a  
9 term of not more than 5 years.

10 (g) PAYMENTS.—

11 (1) IN GENERAL.—The Secretary shall establish  
12 royalties, fees, rentals, bonuses, or other payments  
13 to ensure a fair return to the United States for any  
14 lease issued under this section.

15 (2) BONUS BIDS.—The Secretary may grant  
16 credit toward any bonus bid for a qualified expendi-  
17 ture by the holder of a lease described in subsection  
18 (f)(2)(C) in any competitive lease sale held for a  
19 long-term lease covering the same land covered by  
20 the lease described in subsection (f)(2)(C).

21 (3) ROYALTIES.—Any lease shall require the  
22 payment of a royalty established by the Secretary  
23 pursuant to rulemaking that shall be a percentage of  
24 the gross proceeds from the sale of electricity at a  
25 rate that—

1 (A) encourages production of solar or wind  
2 energy; and

3 (B) ensures a fair return to the public  
4 comparable to the return that would be ob-  
5 tained on State and private land.

6 (4) ROYALTY RELIEF.—To promote the great-  
7 est generation of renewable energy, the Secretary  
8 may—

9 (A) reduce any royalty otherwise required  
10 on a showing by clear and convincing evidence  
11 by the person holding a lease under which the  
12 generation of energy has occurred that, without  
13 the reduction in royalty, generation would not  
14 occur; or

15 (B) provide that no royalty or a reduced  
16 royalty is required under a lease for a period  
17 not to exceed 5 years beginning on the date  
18 that generation initially commences.

19 (h) ELIGIBILITY.—To be eligible to hold a lease  
20 under this section, a person shall meet the eligibility re-  
21 quirements for leasing under the first section of the Min-  
22 eral Leasing Act (30 U.S.C. 181).

23 (i) REQUIREMENTS.—The Secretary shall ensure that  
24 any activity under a leasing program is carried out in a  
25 manner that—

1           (1) is consistent with all applicable land use  
2       planning, environmental, and other laws; and

3           (2) provides for—

4               (A) safety;

5               (B) protection of the environment;

6               (C) prevention of waste;

7               (D) diligent development of the resource;

8               (E) coordination with applicable Federal  
9       agencies;

10              (F) a fair return to the United States for  
11       any lease;

12              (G) use of best management practices, in-  
13       cluding planning and practices for mitigation of  
14       impacts;

15              (H) public notice and comment on any pro-  
16       posals submitted for a lease under this section;  
17       and

18              (I) oversight, inspection, research, moni-  
19       toring, and enforcement relating to a lease  
20       under this section.

21       (j) LEASE DURATION, SUSPENSION, AND CANCELLA-  
22       TION.—The Secretary shall establish terms and conditions  
23       for the duration, issuance, transfer, renewal, suspension,  
24       and cancellation of a lease under this section.

1 (k) SECURITY.—The Secretary shall require the hold-  
 2 er of a lease issued under this section—

3 (1) to furnish a surety bond or other form of  
 4 security, as prescribed by the Secretary;

5 (2) to provide for the reclamation and restora-  
 6 tion of the area covered by the lease; and

7 (3) to comply with such other requirements as  
 8 the Secretary considers necessary to protect the in-  
 9 terests of the public and the United States.

10 (l) DISPOSITION OF REVENUES.—The Secretary shall  
 11 provide for the payment of 5 percent of the revenues re-  
 12 ceived by the Federal Government as a result of leasing  
 13 under this section or the issuance of rights-of-way for wind  
 14 or solar development under title V of the Federal Land  
 15 Policy and Management Act of 1976 (43 U.S.C. 1761 et  
 16 seq.) to the State within which the boundaries of the  
 17 leased land or right-of-way are located.

## 18 **Subtitle F—Carbon Capture**

### 19 **SEC. 371. LARGE-SCALE CARBON STORAGE PROGRAM.**

20 (a) IN GENERAL.—Subtitle F of title IX of the En-  
 21 ergy Policy Act of 2005 (42 U.S.C. 16291 et seq.) is  
 22 amended by inserting after section 963 (42 U.S.C. 16293)  
 23 the following:

#### 24 **“SEC. 963A. LARGE-SCALE CARBON STORAGE PROGRAM.**

25 **“(a) DEFINITIONS.—In this section:**



1           “(1) INDUSTRIAL SOURCE.—The term ‘indus-  
2       trial source’ means any source of carbon dioxide that  
3       is not naturally occurring.

4           “(2) LARGE-SCALE.—The term ‘large-scale’  
5       means the injection of over 1,000,000 tons of carbon  
6       dioxide each year from industrial sources into a geo-  
7       logical formation.

8           “(3) SECRETARY CONCERNED.—The term ‘Sec-  
9       retary concerned’ means—

10           “(A) the Secretary of Agriculture (acting  
11       through the Chief of the Forest Service), with  
12       respect to National Forest System land; and

13           “(B) the Secretary of the Interior, with re-  
14       spect to land managed by the Bureau of Land  
15       Management (including land held for the ben-  
16       efit of an Indian tribe).

17       “(b) PROGRAM.—In addition to the research, develop-  
18       ment, and demonstration program authorized by section  
19       963, the Secretary shall carry out a program to dem-  
20       onstrate the commercial application of integrated systems  
21       for the capture, injection, monitoring, and long-term geo-  
22       logical storage of carbon dioxide from industrial sources.

23       “(c) AUTHORIZED ASSISTANCE.—In carrying out the  
24       program, the Secretary may enter into cooperative agree-

1 ments to provide financial and technical assistance to up  
2 to 10 demonstration projects.

3 “(d) PROJECT SELECTION.—The Secretary shall  
4 competitively select recipients of cooperative agreements  
5 under this section from among applicants that—

6 “(1) provide the Secretary with sufficient geo-  
7 logical site information (including hydrogeological  
8 and geophysical information) to establish that the  
9 proposed geological storage unit is capable of long-  
10 term storage of the injected carbon dioxide, includ-  
11 ing—

12 “(A) the location, extent, and storage ca-  
13 pacity of the geological storage unit at the site  
14 into which the carbon dioxide will be injected;

15 “(B) the principal potential modes of  
16 geomechanical failure in the geological storage  
17 unit;

18 “(C) the ability of the geological storage  
19 unit to retain injected carbon dioxide; and

20 “(D) the measurement, monitoring, and  
21 verification requirements necessary to ensure  
22 adequate information on the operation of the  
23 geological storage unit during and after the in-  
24 jection of carbon dioxide;

1           “(2) possess the land or interests in land nec-  
2       essary for—

3           “(A) the injection and storage of the car-  
4       bon dioxide at the proposed geological storage  
5       unit; and

6           “(B) the closure, monitoring, and long-  
7       term stewardship of the geological storage unit;

8           “(3) possess or have a reasonable expectation of  
9       obtaining all necessary permits and authorizations  
10      under applicable Federal and State laws (including  
11      regulations); and

12          “(4) agree to comply with each requirement of  
13      subsection (e).

14      “(e) TERMS AND CONDITIONS.—The Secretary shall  
15      condition receipt of financial assistance pursuant to a co-  
16      operative agreement under this section on the recipient  
17      agreeing to—

18          “(1) comply with all applicable Federal and  
19      State laws (including regulations), including a cer-  
20      tification by the appropriate regulatory authority  
21      that the project will comply with Federal and State  
22      requirements to protect drinking water supplies;

23          “(2) in the case of industrial sources subject to  
24      the Clean Air Act (42 U.S.C. 7401 et seq.), inject

1       only carbon dioxide captured from industrial sources  
2       in compliance with that Act;

3           “(3) comply with all applicable construction and  
4       operating requirements for deep injection wells;

5           “(4) measure, monitor, and test to verify that  
6       carbon dioxide injected into the injection zone is  
7       not—

8           “(A) escaping from or migrating beyond  
9       the confinement zone; or

10          “(B) endangering an underground source  
11       of drinking water;

12          “(5) comply with applicable well-plugging, post-  
13       injection site care, and site closure requirements, in-  
14       cluding—

15           “(A)(i) maintaining financial assurances  
16       during the post-injection closure and monitoring  
17       phase until a certificate of closure is issued by  
18       the Secretary; and

19           “(ii) promptly undertaking remediation ac-  
20       tivities for any leak from the geological storage  
21       unit that would endanger public health or safe-  
22       ty or natural resources; and

23          “(B) complying with subsection (f);

24          “(6) comply with applicable long-term care re-  
25       quirements;

1           “(7) maintain financial protection in a form  
2           and in an amount acceptable to—

3                   “(A) the Secretary;

4                   “(B) the Secretary with jurisdiction over  
5           the land; and

6                   “(C) the Administrator of the Environ-  
7           mental Protection Agency; and

8           “(8) provide the assurances described in section  
9           963(c)(4)(B).

10          “(f) POST INJECTION CLOSURE AND MONITORING  
11   ELEMENTS.—In assessing whether a project complies with  
12   site closure requirements under subsection (e)(5), the Sec-  
13   retary, in consultation with the Administrator of the Envi-  
14   ronmental Protection Agency, shall determine whether the  
15   recipient of financial assistance has demonstrated contin-  
16   uous compliance with each of the following over a period  
17   of not less than 10 consecutive years after the plume of  
18   carbon dioxide has stabilized within the geologic formation  
19   that comprises the geologic storage unit following the ces-  
20   sation of injection activities:

21                   “(1) The estimated location and extent of the  
22           project footprint (including the detectable plume of  
23           carbon dioxide and the area of elevated pressure re-  
24           sulting from the project) has not substantially

1 changed and is contained within the geologic storage  
2 unit.

3 “(2) The injection zone formation pressure has  
4 ceased to increase following cessation of carbon diox-  
5 ide injection into the geologic storage unit.

6 “(3) There is no leakage of either carbon diox-  
7 ide or displaced formation fluid from the geologic  
8 storage unit that is endangering public health and  
9 safety, including underground sources of drinking  
10 water and natural resources.

11 “(4) The injected or displaced formation fluids  
12 are not expected to migrate in the future in a man-  
13 ner that encounters a potential leakage pathway.

14 “(5) The injection wells at the site completed  
15 into or through the injection zone or confining zone  
16 are plugged and abandoned in accordance with the  
17 applicable requirements of Federal or State law gov-  
18 erning the wells.

19 “(g) INDEMNIFICATION AGREEMENTS.—

20 “(1) DEFINITION OF LIABILITY.—In this sub-  
21 section, the term ‘liability’ means any legal liability  
22 for—

23 “(A) bodily injury, sickness, disease, or  
24 death;

1           “(B) loss of or damage to property, or loss  
2           of use of property; or

3           “(C) injury to or destruction or loss of nat-  
4           ural resources, including fish, wildlife, and  
5           drinking water supplies.

6           “(2) AGREEMENTS.—Not later than 1 year  
7           after the date of the receipt by the Secretary of a  
8           completed application for a demonstration project,  
9           the Secretary may agree to indemnify and hold  
10          harmless the recipient of a cooperative agreement  
11          under this section from liability arising out of or re-  
12          sulting from a demonstration project in excess of the  
13          amount of liability covered by financial protection  
14          maintained by the recipient under subsection (e)(7).

15          “(3) EXCEPTION FOR GROSS NEGLIGENCE AND  
16          INTENTIONAL MISCONDUCT.—Notwithstanding para-  
17          graph (1), the Secretary may not indemnify the re-  
18          cipient of a cooperative agreement under this section  
19          from liability arising out of conduct of a recipient  
20          that is grossly negligent or that constitutes inten-  
21          tional misconduct.

22          “(4) COLLECTION OF FEES.—

23                 “(A) IN GENERAL.—The Secretary shall  
24                 collect a fee from any person with whom an  
25                 agreement for indemnification is executed under

1           this subsection in an amount that is equal to  
 2           the net present value of payments made by the  
 3           United States to cover liability under the in-  
 4           demnification agreement.

5           “(B) AMOUNT.—The Secretary shall estab-  
 6           lish, by regulation, criteria for determining the  
 7           amount of the fee, taking into account—

8                 “(i) the likelihood of an incident re-  
 9                 sulting in liability to the United States  
 10                under the indemnification agreement; and

11               “(ii) other factors pertaining to the  
 12               hazard of the indemnified project.

13           “(C) USE OF FEES.—Fees collected under  
 14           this paragraph shall be deposited in the Treas-  
 15           ury and credited to miscellaneous receipts.

16           “(5) CONTRACTS IN ADVANCE OF APPROPRIA-  
 17           TIONS.—

18           “(A) IN GENERAL.—Subject to subpara-  
 19           graph (B), the Secretary The Secretary may  
 20           enter into agreements of indemnification under  
 21           this subsection in advance of appropriations  
 22           and incur obligations without regard to section  
 23           1341 of title 31, United States Code (commonly  
 24           known as the ‘Anti-Deficiency Act’), or section  
 25           11 of title 41, United States Code (commonly



1 known as the ‘Adequacy of Appropriations  
2 Act’).

3 “(B) LIMITATION.—The amount of indem-  
4 nification under this subsection shall not exceed  
5 \$10,000,000,000 (adjusted not less than once  
6 during each 5-year period following the date of  
7 enactment of this section, in accordance with  
8 the aggregate percentage change in the Con-  
9 sumer Price Index since the previous adjust-  
10 ment under this subparagraph), in the aggre-  
11 gate, for all persons indemnified in connection  
12 with an agreement and for each project, includ-  
13 ing such legal costs as are approved by the Sec-  
14 retary.

15 “(6) CONDITIONS OF AGREEMENTS OF INDEM-  
16 NIFICATION.—

17 “(A) IN GENERAL.—An agreement of in-  
18 demnification under this subsection may con-  
19 tain such terms as the Secretary considers ap-  
20 propriate to carry out the purposes of this sec-  
21 tion.

22 “(B) ADMINISTRATION.—The agreement  
23 shall provide that, if the Secretary makes a de-  
24 termination the United States will probably be

1 required to make indemnity payments under the  
2 agreement, the Attorney General—

3 “(i) shall collaborate with the recipi-  
4 ent of an award under this subsection; and

5 “(ii) may—

6 “(I) approve the payment of any  
7 claim under the agreement of indem-  
8 nification;

9 “(II) appear on behalf of the re-  
10 cipient;

11 “(III) take charge of an action;  
12 and

13 “(IV) settle or defend an action.

14 “(C) SETTLEMENT OF CLAIMS.—

15 “(i) IN GENERAL.—The Attorney  
16 General shall have final authority on behalf  
17 of the United States to settle or approve  
18 the settlement of any claim under this sub-  
19 section on a fair and reasonable basis with  
20 due regard for the purposes of this sub-  
21 section.

22 “(ii) EXPENSES.—The settlement  
23 shall not include expenses in connection  
24 with the claim incurred by the recipient.

25 “(h) FEDERAL LAND.—

1           “(1) IN GENERAL.—The Secretary concerned  
2           may authorize the siting of a project on Federal  
3           land under the jurisdiction of the Secretary con-  
4           cerned in a manner consistent with applicable laws  
5           and land management plans and subject to such  
6           terms and conditions as the Secretary concerned de-  
7           termines to be necessary.

8           “(2) FRAMEWORK FOR GEOLOGICAL CARBON  
9           SEQUESTRATION ON PUBLIC LAND.—In determining  
10          whether to authorize a project on Federal land, the  
11          Secretary concerned shall take into account the  
12          framework for geological carbon sequestration on  
13          public land prepared in accordance with section 714  
14          of the Energy Independence and Security Act of  
15          2007 (Public Law 110–140; 121 Stat. 1715).

16          “(i) ACCEPTANCE OF TITLE AND LONG-TERM MONI-  
17          TORING.—

18               “(1) IN GENERAL.—As a condition of a cooper-  
19               ative agreement under this section, the Secretary  
20               may accept title to, or transfer of administrative ju-  
21               risdiction from another Federal agency over, any  
22               land or interest in land necessary for the monitoring,  
23               remediation, or long-term stewardship of a project  
24               site.

1           “(2) LONG-TERM MONITORING ACTIVITIES.—

2       After accepting title to, or transfer of, a site closed  
3       in accordance with this section, the Secretary shall  
4       monitor the site and conduct any remediation activi-  
5       ties to ensure the geological integrity of the site and  
6       prevent any endangerment of public health or safety.

7           “(3) FUNDING.—There is appropriated to the  
8       Secretary, out of funds of the Treasury not other-  
9       wise appropriated, such sums as are necessary to  
10      carry out paragraph (2).”.

11      (b) CONFORMING AMENDMENTS.—

12           (1) Section 963 of the Energy Policy Act of  
13      2005 (42 U.S.C. 16293) is amended—

14           (A) by redesignating subsections (a)  
15           through (d) as subsections (b) through (e), re-  
16           spectively;

17           (B) by inserting before subsection (b) (as  
18           so redesignated) the following:

19      “(a) DEFINITIONS.—In this section:

20           “(1) INDUSTRIAL SOURCE.—The term ‘indus-  
21           trial source’ means any source of carbon dioxide that  
22           is not naturally occurring.

23           “(2) LARGE-SCALE.—The term ‘large-scale’  
24           means the injection of over 1,000,000 tons of carbon

1 dioxide from industrial sources over the lifetime of  
 2 the project.”;

3 (C) in subsection (b) (as so redesignated),  
 4 by striking “IN GENERAL” and inserting “PRO-  
 5 GRAM”;

6 (D) in subsection (c) (as so redesignated),  
 7 by striking “subsection (a)” and inserting “sub-  
 8 section (b)”;

9 (E) in subsection (d)(3) (as so redesign-  
 10 ated), by striking subparagraph (D).

11 (2) Sections 703(a)(3) and 704 of the Energy  
 12 Independence and Security Act of 2007 (42 U.S.C.  
 13 17251(a)(3), 17252) are amended by striking “sec-  
 14 tion 963(c)(3) of the Energy Policy Act of 2005 (42  
 15 U.S.C. 16293(c)(3))” each place it appears and in-  
 16 serting “section 963(d)(3) of the Energy Policy Act  
 17 of 2005 (42 U.S.C. 16293(d)(3))”.

18 **SEC. 372. TRAINING PROGRAM FOR STATE AGENCIES.**

19 (a) ESTABLISHMENT.—The Secretary of Energy, in  
 20 consultation with the Administrator of the Environmental  
 21 Protection Agency and the Secretary of Transportation,  
 22 shall establish a program to provide grants for employee  
 23 training purposes to State agencies involved in permitting,  
 24 management, inspection, and oversight of carbon capture,  
 25 transportation, and storage projects.

1 (b) AUTHORIZATION OF APPROPRIATIONS.—There is  
 2 authorized to be appropriated to the Secretary of Energy  
 3 to carry out this section \$10,000,000 for each of fiscal  
 4 years 2010 through 2020.

## 5 **Subtitle G—Island Energy**

### 6 **SEC. 381. AFFILIATED ISLAND ENERGY INDEPENDENCE**

#### 7 **TEAM.**

8 (a) DEFINITIONS.—In this section:

9 (1) AFFILIATED ISLAND.—The term “affiliated  
 10 island” means—

11 (A) the Commonwealth of Puerto Rico;

12 (B) Guam;

13 (C) American Samoa;

14 (D) the Commonwealth of the Northern  
 15 Mariana Islands;

16 (E) the Federated States of Micronesia;

17 (F) the Republic of the Marshall Islands;

18 (G) the Republic of Palau; and

19 (H) the United States Virgin Islands.

20 (2) SECRETARY.—The term “Secretary” means  
 21 the Secretary of Energy (acting through the Assist-  
 22 ant Secretary of Energy Efficiency and Renewable  
 23 Energy), in consultation with the Secretary of the  
 24 Interior and the Secretary of State.

1           (3) TEAM.—The term “team” means the team  
2           established by the Secretary under subsection (b).

3           (b) ESTABLISHMENT.—As soon as practicable after  
4           the date of enactment of this Act, the Secretary shall as-  
5           semble a team of technical, policy, and financial experts  
6           to address the energy needs of each affiliated island—

7           (1) to reduce the reliance and expenditure of  
8           each affiliated island on imported fossil fuels;

9           (2) to increase the use by each affiliated island  
10          of indigenous, nonfossil fuel energy sources;

11          (3) to improve the performance of the energy  
12          infrastructure of the affiliated island through  
13          projects—

14                (A) to improve the energy efficiency of  
15                power generation, transmission, and distribu-  
16                tion; and

17                (B) to increase consumer energy efficiency;

18          (4) to improve the performance of the energy  
19          infrastructure of each affiliated island through en-  
20          hanced planning, education, and training;

21          (5) to adopt research-based and public-private  
22          partnership-based approaches as appropriate;

23          (6) to stimulate economic development and job  
24          creation; and

1           (7) to enhance the engagement by the Federal  
2       Government in international efforts to address island  
3       energy needs.

4       (c) DUTIES OF TEAM.—

5           (1) ENERGY ACTION PLANS.—

6           (A) IN GENERAL.—In accordance with  
7       subparagraph (B), the team shall provide tech-  
8       nical, programmatic, and financial assistance to  
9       each utility of each affiliated island, and the  
10      government of each affiliated island, as appro-  
11      priate, to develop and implement an energy Ac-  
12      tion Plan for each affiliated island to reduce the  
13      reliance of each affiliated island on imported  
14      fossil fuels through increased efficiency and use  
15      of indigenous clean-energy resources.

16          (B) REQUIREMENTS.—Each Action Plan  
17      described in subparagraph (A) for each affili-  
18      ated island shall require and provide for—

19           (i) the conduct of 1 or more studies to  
20      assess opportunities to reduce fossil fuel  
21      use through—

22           (I) the improvement of the en-  
23      ergy efficiency of the affiliated island;  
24      and



1 (II) the increased use by the af-  
2 filiated island of indigenous clean-en-  
3 ergy resources;

4 (ii) the identification and implementa-  
5 tion of the most cost-effective strategies  
6 and projects to reduce the dependence of  
7 the affiliated island on fossil fuels;

8 (iii) the promotion of education and  
9 training activities to improve the capacity  
10 of the local utilities of the affiliated island,  
11 and the government of the affiliated island,  
12 as appropriate, to plan for, maintain, and  
13 operate the energy infrastructure of the af-  
14 filiated island through the use of local or  
15 regional institutions, as appropriate;

16 (iv) the coordination of the activities  
17 described in clause (iii) to leverage the ex-  
18 pertise and resources of international enti-  
19 ties, the Department of Energy, the De-  
20 partment of the Interior, and the regional  
21 utilities of the affiliated island;

22 (v) the identification, and develop-  
23 ment, as appropriate, of research-based  
24 and private-public, partnership approaches  
25 to implement the Action Plan; and

1                   (vi) any other component that the  
2                   Secretary determines to be necessary to re-  
3                   duce successfully the use by each affiliated  
4                   island of fossil fuels.

5                   (2) REPORTS TO SECRETARY.—Not later than  
6                   1 year after the date on which the Secretary estab-  
7                   lishes the team and biannually thereafter, the team  
8                   shall submit to the Secretary a report that contains  
9                   a description of the progress of each affiliated island  
10                  in—

11                   (A) implementing the Action Plan of the  
12                   affiliated island developed under paragraph  
13                   (1)(A); and

14                   (B) reducing the reliance of the affiliated  
15                   island on fossil fuels.

16                  (d) USE OF REGIONAL UTILITY ORGANIZATIONS.—  
17                  To provide expertise to affiliated islands to assist the af-  
18                  filiated islands in meeting the purposes of this section, the  
19                  Secretary shall consider—

20                   (1) including regional utility organizations in  
21                   the establishment of the team; and

22                   (2) providing assistance through regional utility  
23                   organizations.

24                  (e) ANNUAL REPORTS TO CONGRESS.—Not later  
25                  than 30 days after the date on which the Secretary re-

1 ceives a report submitted by the team under subsection  
 2 (c)(2), the Secretary shall submit to the appropriate com-  
 3 mittees of Congress a report that contains a summary of  
 4 the report of the team.

5 (f) AUTHORIZATION OF APPROPRIATIONS.—There  
 6 are authorized to be appropriated such sums as are nec-  
 7 essary to carry out this section.

## 8 **TITLE IV—ENERGY INNOVATION** 9 **AND WORKFORCE DEVELOP-** 10 **MENT**

### 11 **Subtitle A—Funding**

#### 12 **SEC. 401. AUTHORIZATION OF APPROPRIATIONS FOR EN-** 13 **ERGY RESEARCH, DEVELOPMENT, DEM-** 14 **ONSTRATION, AND COMMERCIAL APPLICA-** 15 **TION ACTIVITIES.**

16 (a) ENERGY EFFICIENCY; DISTRIBUTED ENERGY  
 17 AND ELECTRIC ENERGY SYSTEMS; RENEWABLE EN-  
 18 ERGY.—

19 (1) IN GENERAL.—There are authorized to be  
 20 appropriated to the Secretary to carry out research,  
 21 development, demonstration, and commercial appli-  
 22 cation activities described in paragraph (2)—

23 (A) \$1,974,000,000 for fiscal year 2010;

24 (B) \$2,388,000,000 for fiscal year 2011;

1 (C) \$2,821,000,000 for fiscal year 2012;

2 and

3 (D) \$3,258,000,000 for fiscal year 2013.

4 (2) ACTIVITIES.—Paragraph (1) applies to—

5 (A) energy efficiency and conservation re-  
6 search, development, demonstration, and com-  
7 mercial application activities, including activi-  
8 ties authorized under subtitle A of title IX of  
9 the Energy Policy Act of 2005 (42 U.S.C.  
10 16191 et seq.);

11 (B) distributed energy and electric energy  
12 system activities, including activities authorized  
13 under subtitle B of title IX of that Act (42  
14 U.S.C. 16211 et seq.); and

15 (C) renewable energy research, develop-  
16 ment, demonstration, and commercial applica-  
17 tion activities, including activities authorized  
18 under subtitle C of title IX of that Act (42  
19 U.S.C. 16231 et seq.).

20 (b) NUCLEAR ENERGY.—Section 951 of the Energy  
21 Policy Act of 2005 (42 U.S.C. 16271) is amended by  
22 striking subsection (b) and inserting the following:

23 “(b) AUTHORIZATION OF APPROPRIATIONS FOR  
24 CORE PROGRAMS.—There are authorized to be appro-  
25 priated to the Secretary to carry out nuclear energy re-

1 search, development, demonstration, and commercial ap-  
 2 plication activities, including activities authorized under  
 3 this subtitle—

4 “(1) \$998,000,000 for fiscal year 2010;

5 “(2) \$1,196,000,000 for fiscal year 2011;

6 “(3) \$1,394,000,000 for fiscal year 2012; and

7 “(4) \$1,592,000,000 for fiscal year 2013.”.

8 (c) FOSSIL ENERGY.—Section 961(b) of the Energy  
 9 Policy Act of 2005 (42 U.S.C. 16291(b)) is amended—

10 (1) in paragraph (2), by striking “and” after  
 11 the semicolon at the end;

12 (2) in paragraph (3), by striking the period at  
 13 the end and inserting a semicolon; and

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

15 “(4) \$1,074,000,000 for fiscal year 2010;

16 “(5) \$1,272,000,000 for fiscal year 2011;

17 “(6) \$1,470,000,000 for fiscal year 2012; and

18 “(7) \$1,668,000,000 for fiscal year 2013.”.

19 (d) OFFICE OF SCIENCE.—Section 971(b) of the En-  
 20 ergy Policy Act of 2005 (42 U.S.C. 16311(b)) is amend-  
 21 ed—

22 (1) in paragraph (3), by striking “and” after  
 23 the semicolon at the end; and

24 (2) by striking paragraph (4) and inserting the  
 25 following:

- 1 “(4) \$5,800,000,000 for fiscal year 2010;  
 2 “(5) \$6,468,740,000 for fiscal year 2011;  
 3 “(6) \$7,214,586,000 for fiscal year 2012; and  
 4 “(7) \$8,046,427,000 for fiscal year 2013.”.

5 **Subtitle B—Grand Energy**  
 6 **Challenges Research Initiative**

7 **SEC. 411. GRAND ENERGY CHALLENGES RESEARCH INITIA-**  
 8 **TIVE.**

9 (a) ESTABLISHMENT.—The Secretary, acting  
 10 through the Under Secretary for Science and the Under  
 11 Secretary for Energy (referred to in this section as the  
 12 “Under Secretaries”), shall establish a Grand Energy  
 13 Challenges Research Initiative for the purposes of accel-  
 14 erating the solutions to Grand Energy Challenges through  
 15 the establishment of large-scale, multidisciplinary activi-  
 16 ties that blend research in basic, applied, and engineering  
 17 sciences, technology development, and other relevant dis-  
 18 ciplines.

19 (b) ADMINISTRATION.—The Under Secretaries shall  
 20 initiate large-scale research activities that bring together  
 21 the skills and talents of multiple investigators to enable  
 22 high-risk, cross-cutting research of a scope and complexity  
 23 that would not be practicable with individual investigators.

24 (c) GRAND ENERGY CHALLENGES.—Not later than  
 25 180 days after the date of enactment of this Act, the

1 Under Secretaries shall publish in the Federal Register  
2 a description of Grand Challenges in Energy that in-  
3 cludes—

4 (1) the Challenges described in the Basic Re-  
5 search Needs Workshops reports published by the  
6 Office of Basic Energy Sciences of the Office of  
7 Science of the Department of Energy;

8 (2) the Challenges described in the reports enti-  
9 tled “Directing Matter and Energy: Five Challenges  
10 for Science and the Imagination” and “New Science  
11 for a Secure and Sustainable Energy Future” of the  
12 Basic Energy Sciences Advisory Committee of the  
13 Department of Energy; and

14 (3) the energy-related Challenges described in  
15 the report entitled “Grand Challenges for Engineer-  
16 ing” of the National Academy of Engineering.

17 (d) GRAND CHALLENGE RESEARCH GRANTS.—

18 (1) IN GENERAL.—The Department of Energy  
19 shall carry out the research activities of the Initia-  
20 tive by competitively awarding grants to, entering  
21 into cooperative agreements with, or executing other  
22 transactions with (consistent with section 1007(g) of  
23 the Energy Policy Act of 2005 (42 U.S.C. 7256(g))  
24 consortiums that clearly indicate to the Department  
25 the manner by which the proposed research—

1 (A) is motivated by and is designed to ad-  
 2 dress 1 or more of the Grand Energy Chal-  
 3 lenges described in subsection (c);

4 (B) will contribute to fundamental sci-  
 5 entific, engineering, and technology under-  
 6 standing; and

7 (C) will integrate diverse approaches to  
 8 solving 1 or more of the Grand Energy Chal-  
 9 lenges through a robust management plan de-  
 10 signed to achieve success.

11 (2) CONSORTIUMS.—To be eligible for a Grand  
 12 Energy Challenge research grant, cooperative agree-  
 13 ment, or other transaction, a consortium shall—

14 (A) be made up of 1 or more of the fol-  
 15 lowing groups—

16 (i) institutions of higher education;

17 (ii) National Laboratories of the De-  
 18 partment of Energy;

19 (iii) Federally-funded research and de-  
 20 velopment centers;

21 (iv) private industry; and

22 (v) not-for-profit institutions;

23 (B) be comprised of at least 1 non-Federal  
 24 entity; and



1 (C) develop a multiyear road map that pro-  
 2 vides achievable metrics for overcoming the  
 3 Grand Energy Challenges described in sub-  
 4 section (c).

5 (e) AUTHORIZATION OF APPROPRIATIONS.—There  
 6 are authorized to be appropriated to such sums as are nec-  
 7 essary to carry out this section for each of fiscal years  
 8 2010 through 2019.

9 **Subtitle C—Improvements to Exist-**  
 10 **ing Energy Research and Devel-**  
 11 **opment Programs**

12 **SEC. 421. ADVANCED RESEARCH PROJECTS AGENCY—EN-**  
 13 **ERGY.**

14 Section 5012 of the America COMPETES Act (42  
 15 U.S.C. 16538) is amended—

16 (1) in subsection (a)(3), by striking “subsection  
 17 (m)(1)” and inserting “subsection (n)(1)”;

18 (2) in subsection (c)(1)(A)—

19 (A) in the matter preceding clause (i), by  
 20 striking “energy technologies” and inserting  
 21 “technologies”; and

22 (B) in clause (ii), by striking “, including  
 23 greenhouse gases” and inserting “and green-  
 24 house gas emissions from all sources”;

1           (3) in subsection (e)(1), by striking “all” and  
2           inserting “the initiation of”;

3           (4) by redesignating subsections (f) through  
4           (m) as subsections (g) through (n), respectively;

5           (5) by inserting after subsection (e) the fol-  
6           lowing:

7           “(f) ADMINISTRATION.—In carrying out this section,  
8           ARPA-E may initiate and execute grants, contracts, coop-  
9           erative agreements, and other transactions separate from  
10          the Department of Energy.”;

11          (6) in subsection (g)(1)(B)(iv) (as redesignated  
12          by paragraph (4)), by striking “subsection (j)” and  
13          inserting “subsection (k)”;

14          (7) in subsection (h)(2) (as redesignated by  
15          paragraph (4))—

16                  (A) by striking “2008” and inserting  
17                  “2009”; and

18                  (B) by striking “2011” and inserting  
19                  “2012”; and

20          (8) in subsection (l)(1) (as redesignated by  
21          paragraph (4)), by striking “4 years” and inserting  
22          “7 years”; and

23          (9) in subsection (n)(2)(B) (as redesignated by  
24          paragraph (4)), by striking “and 2010” and insert-  
25          ing “through 2020”.

1 **SEC. 422. DOMESTIC VEHICLE BATTERY MANUFACTURING**  
2 **RESEARCH.**

3 The United States Energy Storage Competitiveness  
4 Act of 2007 (42 U.S.C. 17231) is amended—

5 (1) by redesignating subsections (l) through (p)  
6 as subsections (m) through (q), respectively;

7 (2) by inserting after subsection (k) the fol-  
8 lowing:

9 “(l) DOMESTIC VEHICLE BATTERY MANUFACTURING  
10 RESEARCH.—

11 “(1) IN GENERAL.—The Secretary, acting  
12 through the Assistant Secretary for Energy Effi-  
13 ciency and Renewable Energy, shall conduct a re-  
14 search program on manufacturing batteries and bat-  
15 tery systems to support electric drive vehicles.

16 “(2) PURPOSES.—The purpose of the program  
17 shall be to improve existing processes, or develop  
18 new manufacturing processes, to enable higher qual-  
19 ity and less expensive energy batteries for electric  
20 drive vehicles.

21 “(3) PARTICIPANTS.—The program shall be  
22 conducted by teams of researchers, which may in-  
23 clude—

24 “(A) energy storage systems manufactur-  
25 ers;

1           “(B) material and equipment suppliers of  
2           battery and battery system manufacturers;

3           “(C) electric drive vehicle manufacturers;

4           “(D) National Laboratories;

5           “(E) other Federal agencies;

6           “(F) State and local governments; and

7           “(G) institutions of higher education.”;

8           (3) in subsection (n) (as redesignated by para-  
9           graph (1)), by striking “and (k)” and inserting “(k),  
10          and (l)”;

11          (4) in subsection (q) (as redesignated by para-  
12          graph (1))—

13                (A) in paragraph (5), by striking “and” at  
14                the end;

15                (B) in paragraph (6), by striking the pe-  
16                riod at the end and inserting “; and”; and

17                (C) by adding at the end the following:

18                “(7) the domestic vehicle energy storage manu-  
19                facturing research program under subsection (l)  
20                such sums as are necessary for each of fiscal years  
21                2009 through 2018.”.

1 **SEC. 423. LIGHTWEIGHT MATERIALS RESEARCH AND DE-**  
2 **VELOPMENT.**

3 Section 651 of the Energy Independence and Security  
4 Act of 2007 (42 U.S.C. 17241) is amended by striking  
5 subsection (b) and inserting the following:

6 “(b) AUTHORIZATION OF APPROPRIATIONS.—There  
7 are authorized to be appropriated to carry out this section  
8 \$100,000,000 for the period of fiscal years 2010 through  
9 2013.”.

10 **SEC. 424. AMENDMENTS TO THE METHANE HYDRATE RE-**  
11 **SEARCH AND DEVELOPMENT ACT OF 2000.**

12 (a) FINDINGS.—Section 2 of the Methane Hydrate  
13 Research and Development Act of 2000 (30 U.S.C. 2001)  
14 is amended—

15 (1) in paragraph (4), by striking “and” at the  
16 end;

17 (2) in paragraph (5), by striking the period at  
18 the end and inserting a semicolon; and

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

20 “(6) methane is a powerful greenhouse gas that  
21 may be exchanged between terrestrial methane hy-  
22 drate reservoirs and the atmosphere by natural or  
23 anthropogenic processes; and

24 “(7) the short- and long-term release of meth-  
25 ane from arctic or marine reservoirs may have sig-

1       nificant environmental effects, including global cli-  
2       mate change.”.

3       (b) METHANE HYDRATE RESEARCH AND DEVELOP-  
4       MENT PROGRAM.—

5               (1) IN GENERAL.—Section 4 of the Methane  
6       Hydrate Research and Development Act of 2000 (30  
7       U.S.C. 2003) is amended by striking subsection (b)  
8       and inserting the following:

9       “(b) GRANTS, CONTRACTS, COOPERATIVE AGREE-  
10      MENTS, INTERAGENCY FUNDS TRANSFER AGREEMENTS,  
11      AND FIELD WORK PROPOSALS.—

12              “(1) ASSISTANCE AND COORDINATION.—In car-  
13      rying out the program of methane hydrate research  
14      and development authorized by this section, the Sec-  
15      retary may award grants to, or enter into contracts  
16      or cooperative agreements with, institutions that—

17              “(A) conduct basic and applied research to  
18      identify, explore, assess, and develop methane  
19      hydrate as a commercially viable source of en-  
20      ergy;

21              “(B) identify and characterize methane hy-  
22      drate resources using remote sensing and seis-  
23      mic data;

1           “(C) develop technologies required for effi-  
2           cient and environmentally sound development of  
3           methane hydrate resources;

4           “(D) conduct basic and applied research to  
5           assess and mitigate the environmental impact of  
6           hydrate degassing (including natural degassing  
7           and degassing associated with commercial de-  
8           velopment);

9           “(E) develop technologies to reduce the  
10          risks of drilling through methane hydrates;

11          “(F) conduct exploratory drilling, well test-  
12          ing, and production testing operations on per-  
13          mafrost and nonpermafrost gas hydrates in  
14          support of the activities authorized by this  
15          paragraph, including drilling of 3 or more full-  
16          scale production test wells; or

17          “(G) expand education and training pro-  
18          grams in methane hydrate resource research  
19          and resource development through fellowships  
20          or other means for graduate education and  
21          training.

22          “(2) ENVIRONMENTAL MONITORING.—The Sec-  
23          retary shall conduct a long-term environmental mon-  
24          itoring program to study the effects of production  
25          from methane hydrate reservoirs.

1           “(3) COMPETITIVE PEER REVIEW.—Funds  
2       made available under paragraphs (1) and (2) shall  
3       be made available based on a competitive process  
4       using external scientific peer review of proposed re-  
5       search.”.

6           (2) CONFORMING AMENDMENT.—Section 4(e)  
7       of the Methane Hydrate Research and Development  
8       Act of 2000 (30 U.S.C. 2003(e)) is amended in the  
9       matter preceding paragraph (1) by striking “sub-  
10      section (b)(1)” and inserting “paragraphs (1) and  
11      (2) of subsection (b)”.

12       (c) AUTHORIZATION OF APPROPRIATIONS.—The  
13      Methane Hydrate Research and Development Act of 2000  
14      is amended by striking section 7 (30 U.S.C. 2006) and  
15      inserting the following:

16      **“SEC. 7. AUTHORIZATION OF APPROPRIATIONS.**

17           “There are authorized to be appropriated to the Sec-  
18      retary to carry out this Act, to remain available until ex-  
19      pended—

20           “(1) for use in carrying out section 4(b)(1)—

21                   “(A) \$60,000,000 for fiscal year 2011;

22                   “(B) \$70,000,000 for fiscal year 2012;

23                   “(C) \$80,000,000 for fiscal year 2013;

24                   “(D) \$90,000,000 for fiscal year 2014;

25                   and



1                   “(E) \$90,000,000 for fiscal year 2015; and  
2                   “(2) for use in carrying out section 4(b)(2),  
3           \$10,000,000 for each of fiscal years 2010 through  
4           2015.”.

5 **SEC. 425. PROGRAM TO EXPLOIT LOW-BTU GAS AND CON-**  
6 **SERVE HELIUM RESOURCES.**

7           (a) DEFINITION OF LOW-BTU GAS.—In this section,  
8 the term “low-Btu gas” means a fuel gas with a heating  
9 value of less than 250 Btu per cubic foot measured as  
10 the higher heating value resulting from the inclusion of  
11 noncombustible gases, including nitrogen, helium, argon,  
12 and carbon dioxide.

13           (b) AUTHORIZATION.—The Secretary shall support  
14 programs of research, development, commercial applica-  
15 tion, and conservation to expand the domestic production  
16 of low-Btu gas and helium resources, including the pro-  
17 grams described in subsection (c).

18           (c) PROGRAMS.—

19                   (1) MEMBRANE TECHNOLOGY RESEARCH.—The  
20 Secretary, in consultation with other appropriate  
21 agencies, shall support a civilian research program  
22 to develop advanced membrane technology that is  
23 used in the separation of gases from applications, in-  
24 cluding those that—

1 (A) pull off constituent gases that lower  
2 the Btu content of natural gas; or

3 (B) pull gases from landfills and separate  
4 out methane.

5 (2) HELIUM SEPARATION TECHNOLOGY.—The  
6 Secretary shall support a research program to de-  
7 velop technologies for separating, gathering, and  
8 processing helium in low concentrations that occurs  
9 naturally in geologic reservoirs or formations, includ-  
10 ing low-Btu gas production streams.

11 (3) INDUSTRIAL HELIUM PROGRAM.—The Sec-  
12 retary, working through the Industrial Technologies  
13 Program of the Department of Energy, shall support  
14 a research program—

15 (A) to develop technologies for recycling,  
16 reprocessing, and reusing helium; and

17 (B) to develop industrial gathering tech-  
18 nologies to capture helium from other chemical  
19 processing, including ammonia processing.

20 (d) INCENTIVES FOR INNOVATIVE TECHNOLOGIES.—  
21 Section 1703(b) of the Energy Policy Act of 2005 (42  
22 U.S.C. 16513(b)) is amended by adding at the end the  
23 following:

1           “(11) Low-Btu gas (as defined in section  
2           425(a) of the American Clean Energy Leadership  
3           Act of 2009) and helium gas projects.”.

4   **SEC. 426. OFFICE OF ARCTIC ENERGY.**

5           (a) IN GENERAL.—Title II of the Department of En-  
6   ergy Organization Act (42 U.S.C. 7131 et seq.) is amend-  
7   ed by adding at the end the following:

8   **“SEC. 218. OFFICE OF ARCTIC ENERGY.**

9           “(a) ESTABLISHMENT.—The Secretary may establish  
10   within the Department an Office of Arctic Energy (re-  
11   ferred to in this section as the ‘Office’).

12          “(b) PURPOSES.—The purposes of the Office shall  
13   be—

14               “(1) to promote research, development, and de-  
15               ployment of electric power technology that is cost-ef-  
16               fective and especially well suited to meet the needs  
17               of rural and remote regions of the United States, es-  
18               pecially regions in which permafrost is present or lo-  
19               cated nearby;

20               “(2) to promote research, development, and de-  
21               ployment in regions described in paragraph (1) of—

22                       “(A) enhanced oil recovery technology, in-  
23                       cluding heavy oil recovery, reinjection of carbon,  
24                       and extended reach drilling technologies;

1           “(B) gas-to-liquids technology and lique-  
2           fied natural gas (including associated transpor-  
3           tation systems);

4           “(C) small hydroelectric facilities, river  
5           turbines, and tidal power; and

6           “(D) natural gas hydrates, coal bed meth-  
7           ane, and shallow bed natural gas; and

8           “(3) to promote research, development, and de-  
9           ployment in those regions of cold weather of alter-  
10          native energy research, including wind, geothermal,  
11          fuel cells, biomass, ocean hydrokinetic energy, and  
12          solar energy.

13          “(c) LOCATION.—The Secretary shall locate the Of-  
14          fice at an institution of higher education with expertise  
15          and experience in the matters described in subsection (b).

16          “(d) ANNUAL REPORTS.—The Secretary shall submit  
17          to Congress an annual report that describes the research  
18          program that is proposed to carry out subsection (b)(3).

19          “(e) AUTHORIZATION OF APPROPRIATIONS.—There  
20          are authorized to be appropriated to the Secretary to carry  
21          out this section—

22                 “(1) \$15,000,000 for fiscal year 2010;

23                 “(2) \$20,000,000 for fiscal year 2011; and

24                 “(3) \$22,500,000 for fiscal year 2012 and each  
25          fiscal year thereafter.”.

1 (b) CONFORMING AMENDMENTS.—

2 (1) Section 3197 of the Floyd D. Spence Na-  
3 tional Defense Authorization Act for Fiscal Year  
4 2001 (42 U.S.C. 7144d) is repealed.

5 (2) The table of contents in the first section of  
6 the Department of Energy Organization Act (42  
7 U.S.C. 7101) is amended by adding at the end of  
8 the items relating to title II the following:

“Sec. 218. Office of Arctic Energy.”.

9 **SEC. 427. ULTRA-DEEPWATER AND UNCONVENTIONAL NAT-**  
10 **URAL GAS AND OTHER PETROLEUM RE-**  
11 **SOURCES PROGRAM.**

12 (a) PROGRAM.—Section 999A(a) of the Energy Pol-  
13 icy Act of 2005 (42 U.S.C. 16371(a)) is amended—

14 (1) by striking “The Secretary” and inserting  
15 the following:

16 “(1) ESTABLISHMENT.—The Secretary”; and

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

18 “(2) NAME.—The program established under  
19 this section shall be known as the ‘Unconventional  
20 Domestic Natural Gas and Other Petroleum Re-  
21 sources Program’.”.

22 (b) PURPOSES.—Section 999A of the Energy Policy  
23 Act of 2005 (42 U.S.C. 16371) is amended by adding at  
24 the end the following:

1       “(f) PURPOSES.—In carrying out the program au-  
 2 thorized by this subtitle, the Secretary shall seek to estab-  
 3 lish partnerships with research performers in institutions  
 4 of higher education and the private sector to undertake  
 5 research and development not likely otherwise to be under-  
 6 taken in the absence of support from the program.”.

7       (c) ANNUAL PLAN.—Section 999B(e)(3) of the En-  
 8 ergy Policy Act of 2005 (42 U.S.C. 16372(e)(3)) is  
 9 amended by striking “The Secretary” and inserting “Not  
 10 later than February 1 of each year, the Secretary”.

11       (d) FORM OF AWARD.—Section 999B(f) of the En-  
 12 ergy Policy Act of 2005 (42 U.S.C. 16372(f)) is amended  
 13 by adding at the end the following:

14               “(4) FORM OF AWARD.—The program consor-  
 15 tium may make awards in the form of grants, con-  
 16 tracts, cooperative agreements, or other trans-  
 17 actions.”.

18       (e) EXTENSION.—Section 999F of the Energy Policy  
 19 Act of 2005 (42 U.S.C. 16376) is amended by striking  
 20 “2014” and inserting “2017”.

21       (f) DEFINITION OF PROGRAM ADMINISTRATION  
 22 FUNDS.—Section 999G(3) of the Energy Policy Act of  
 23 2005 (42 U.S.C. 16377(3)) is amended by inserting “the  
 24 greater of \$4,000,000 or” after “not to exceed”.

1 (g) FUNDING.—Section 999H(e) of the Energy Pol-  
 2 icy Act of 2005 (42 U.S.C. 16378(e)) is amended by strik-  
 3 ing “\$100,000,000” and inserting “\$350,000,000”.

## 4 **Subtitle D—Energy Workforce** 5 **Development**

### 6 **SEC. 431. BEST PRACTICES FOR ENERGY CAREER ACAD-** 7 **EMIES.**

8 Section 3164 of the Department of Energy Science  
 9 Education Enhancement Act (42 U.S.C. 7381a) is amend-  
 10 ed—

11 (1) by redesignating subsections (c) through (f)  
 12 as subsections (d) through (g), respectively; and

13 (2) by inserting after subsection (b) the fol-  
 14 lowing:

15 “(c) ENERGY CAREER ACADEMIES.—The Director of  
 16 Science, Engineering, and Mathematics Education shall  
 17 disseminate best practices for career pathway programs  
 18 at public secondary schools that—

19 “(1) prepare students for careers in the energy  
 20 technology industry (as defined in section 1101 of  
 21 the Energy Policy Act of 2005 (42 U.S.C. 16411);  
 22 and

23 “(2) provide sufficient training to allow acad-  
 24 emy graduates to secure entry-level employment or  
 25 apprenticeships in the energy technology industry.”.

1 **SEC. 432. ENERGY CAREER ACADEMIES.**

2 The Department of Energy Science Education En-  
3 hancement Act is amended—

4 (1) by redesignating sections 3168 and 3169  
5 (42 U.S.C. 7381d, 7381e) as sections 3169 and  
6 3170, respectively; and

7 (2) by inserting after section 3167 (42 U.S.C.  
8 7381c–1) the following:

9 **“SEC. 3168. ENERGY CAREER ACADEMIES.**

10 “(a) PURPOSE.—The purpose of this section is to es-  
11 tablish a program of grants to State educational agencies  
12 to help local educational agencies create or expand energy  
13 career academies.

14 “(b) DEFINITIONS.—In this section:

15 “(1) COMMUNITY COLLEGE.—The term ‘com-  
16 munity college’ means—

17 “(A) a junior or community college (as de-  
18 fined in section 312(f) of the Higher Education  
19 Act of 1965 (20 U.S.C. 1058(f))); and

20 “(B) an institution of higher education at  
21 which more than 35 percent of all degrees are  
22 awarded at the 2-year level or below.

23 “(2) DIRECTOR.—The term ‘Director’ means  
24 the Director of Science, Engineering, and Mathe-  
25 matics Education.



1           “(3) ENERGY CAREER ACADEMY.—The term  
2           ‘energy career academy’ means a public secondary  
3           school that meets the best practices determined by  
4           the Director under section 3164(c).

5           “(4) LOCAL EDUCATIONAL AGENCY.—The term  
6           ‘local educational agency’ has the meaning given the  
7           term in section 9101 of the Elementary and Sec-  
8           ondary Education Act of 1965 (20 U.S.C. 7801).

9           “(5) SECONDARY SCHOOL.—The term ‘sec-  
10          ondary school’ has the meaning given the term in  
11          section 9101 of the Elementary and Secondary Edu-  
12          cation Act of 1965 (20 U.S.C. 7801).

13          “(6) STATE EDUCATIONAL AGENCY.—The term  
14          ‘State educational agency’ has the meaning given the  
15          term in section 9101 of the Elementary and Sec-  
16          ondary Education Act of 1965 (20 U.S.C. 7801).

17          “(c) GRANTS.—From the amounts made available  
18          under subsection (h), the Secretary, acting through the  
19          Director and in consultation with the Secretary of Labor,  
20          shall award renewable 5-year grants to State educational  
21          agencies on a competitive basis, to provide assistance to  
22          local educational agencies for the costs of establishing or  
23          expanding energy career academies.

24          “(d) FEDERAL AND NON-FEDERAL SHARES.—

1           “(1) FEDERAL SHARE.—The Federal share of  
2           the costs described in subsection (c) shall not exceed  
3           33 percent.

4           “(2) NON-FEDERAL SHARE.—The non-Federal  
5           share of the costs described in subsection (c) shall  
6           be—

7                   “(A) not less than 67 percent; and

8                   “(B) provided from non-Federal sources,  
9           in cash or in kind, fairly evaluated, including  
10          services.

11          “(3) MAINTENANCE OF EFFORT.—A State edu-  
12          cational agency shall provide assurances to the Sec-  
13          retary that funds provided to the State under this  
14          section will be used only to supplement, not to sup-  
15          plant, the amount of Federal, State, and local funds  
16          otherwise expended for activities covered by this sec-  
17          tion in the State.

18          “(e) APPLICATION.—To be eligible to receive a grant  
19          under this section, a State educational agency shall submit  
20          to the Director an application at such time, in such man-  
21          ner, and containing such information as the Director may  
22          require that describes—

23                   “(1) the process by which, and selection criteria  
24          with which, the State educational agency will select

1       and designate a public secondary school to host the  
2       proposed energy career academy;

3               “(2) how the State educational agency will en-  
4       sure that funds made available under this section  
5       are used to establish or expand an energy career  
6       academy;

7               “(3) how the State educational agency will use  
8       technical assistance and support from the Depart-  
9       ment, industry partners, community colleges, and  
10      other entities with experience and expertise in en-  
11      ergy workforce training;

12              “(4) the curricula and materials to be used in  
13      the energy career academy;

14              “(5) the availability of funds from non-Federal  
15      sources for the costs of the activities authorized  
16      under this section; and

17              “(6) a plan to sustain the program without  
18      Federal funding.

19      “(f) DISTRIBUTION.—In awarding grants under this  
20      section, the Director shall ensure a wide, equitable dis-  
21      tribution of grants among regions of the United States.

22      “(g) EVALUATION AND REPORT.—

23              “(1) EVALUATION.—Each State educational  
24      agency that receives a grant under this section shall  
25      develop and carry out an evaluation and account-

1 ability plan for the activities funded through the  
2 grant that measures the impact of the activities, in-  
3 cluding measurable objectives for student academic  
4 achievement, and job placement statistics for acad-  
5 emy graduates.

6 “(2) REPORT TO DIRECTOR.—The State edu-  
7 cational agency shall submit to the Director a report  
8 describing the results of the evaluation and account-  
9 ability plan.

10 “(3) REPORT TO CONGRESS.—Not later than 2  
11 years after the date of enactment of the American  
12 Clean Energy Leadership Act of 2009, the Director  
13 shall submit a report describing the impact of the  
14 activities assisted with funds made available under  
15 this section to—

16 “(A) the Committee on Science and Tech-  
17 nology of the House of Representatives;

18 “(B) the Committee on Energy and Com-  
19 merce of the House of Representatives;

20 “(C) the Committee on Education and  
21 Labor of the House of Representatives;

22 “(D) the Committee on Energy and Nat-  
23 ural Resources of the Senate; and

24 “(E) the Committee on Health, Education,  
25 Labor, and Pensions of the Senate.

1 “(h) AUTHORIZATION OF APPROPRIATIONS.—There  
 2 are authorized to be appropriated to carry out this sec-  
 3 tion—

4 “(1) \$14,000,000 for fiscal year 2009;

5 “(2) \$22,500,000 for fiscal year 2010; and

6 “(3) \$30,000,000 for fiscal year 2011.”.

7 **SEC. 433. ENERGY UTILITY TRADES PROGRAM FOR COMMU-**  
 8 **NITY COLLEGES.**

9 The Protecting America’s Competitive Edge Through  
 10 Energy Act (42 U.S.C. 16531 et seq.) is amended—

11 (1) by redesignating sections 5006 through  
 12 5012 (42 U.S.C. 16534 through 16538) as sections  
 13 5007 through 5013, respectively; and

14 (2) by inserting after section 5005 (42 U.S.C.  
 15 16533) the following:

16 **“SEC. 5006. ENERGY UTILITY TRADES PROGRAM FOR COM-**  
 17 **MUNITY COLLEGES.**

18 “(a) PURPOSE.—The purpose of this section is to ad-  
 19 dress the decline in the number of qualified employees for  
 20 the energy utility industry.

21 “(b) DEFINITION OF COMMUNITY COLLEGE.—In this  
 22 section, the term ‘community college’ means—

23 “(1) a junior or community college (as defined  
 24 in section 312(f) of the Higher Education Act of  
 25 1965 (20 U.S.C. 1058(f))); and

1           “(2) an institution of higher education at which  
2           more than 35 percent of all degrees are awarded at  
3           the 2-year level or below.

4           “(c) ESTABLISHMENT.—The Secretary shall estab-  
5           lish, in accordance with this section, a program to expand  
6           and enhance the educational capabilities of community col-  
7           leges to prepare students for careers in trades relevant to  
8           the energy utility industry.

9           “(d) GRANTS.—The Secretary shall award competi-  
10          tive grants to community colleges that establish or expand  
11          academic degree programs in the energy utility trades, in-  
12          cluding technicians in the nuclear utilities industry.

13          “(e) PRIORITY.—In evaluating grants under this sec-  
14          tion, the Secretary shall give priority to proposals that in-  
15          volve existing or new partnerships with private industry  
16          or other eligible energy utility entities or involve schools  
17          with underserved populations, as determined by the Sec-  
18          retary.

19          “(f) CRITERIA.—Criteria for a grant awarded under  
20          this section shall be based on—

21                 “(1) the potential to attract students to the  
22                 program;

23                 “(2) the ability to offer hands-on learning op-  
24                 portunities (including internships and apprentice-  
25                 ship) in the energy utility sector;

1           “(3) a demonstrated commitment to partner  
2           with secondary schools to promote careers in the en-  
3           ergy utility industry; and

4           “(4) the long-term sustainability of the program  
5           without Federal funding.

6           “(g) DURATION AND AMOUNT.—

7           “(1) DURATION.—A grant under this section  
8           may be—

9                   “(A) up to 5 years in duration; and

10                   “(B) renewed subject to the criteria de-  
11           scribed in subsection (f).

12           “(2) AMOUNT.—A community college that re-  
13           ceives a grant under this section shall be eligible for  
14           up to \$500,000 for each year of the grant period.

15           “(h) USE OF FUNDS.—A community college that re-  
16           ceives a grant under this section may use the grant to—

17                   “(1) recruit and retain new faculty;

18                   “(2) develop core and specialized course con-  
19           tent;

20                   “(3) encourage collaboration between faculty  
21           and industry partners;

22                   “(4) support outreach efforts to recruit stu-  
23           dents; and

24                   “(5) provide scholarships to participating stu-  
25           dents.”.

1 **SEC. 434. STUDENT AWARENESS OF ENERGY CAREER OP-**  
 2 **PORTUNITIES.**

3 Section 1101 of the Energy Policy Act of 2005 (42  
 4 U.S.C. 16411) is amended—

5 (1) in subsection (a)—

6 (A) by redesignating paragraphs (1) and  
 7 (2) as paragraphs (2) and (3), respectively; and

8 (B) by inserting before paragraph (2) (as  
 9 so redesignated) the following:

10 “(1) **COMMUNITY COLLEGE.**—The term ‘com-  
 11 munity college’ means—

12 “(A) a junior or community college (as de-  
 13 fined in section 312(f) of the Higher Education  
 14 Act of 1965 (20 U.S.C. 1058(f))); and

15 “(B) an institution of higher education at  
 16 which more than 35 percent of all degrees are  
 17 awarded at the 2-year level or below.”;

18 (2) by redesignating subsection (d) as sub-  
 19 section (f); and

20 (3) by inserting after subsection (c) the fol-  
 21 lowing:

22 “(d) **CAREER COUNSELOR OUTREACH.**—The Sec-  
 23 retary, in consultation with the Secretary of Labor, shall  
 24 establish a program to communicate information collected  
 25 under subsection (b) on a nationwide basis to—

26 “(1) guidance counselors at secondary schools;



1           “(2) career development offices at community  
2 colleges and institutions of higher education; and

3           “(3) principals and district superintendents.

4           “(e) STUDENT AWARENESS OF ENERGY CAREER OP-  
5 PORTUNITIES.—The Secretary shall create and maintain  
6 a website, and interface with Federal Trio programs,  
7 GEAR UP programs, or similar programs, to provide sec-  
8 ondary and postsecondary school students with informa-  
9 tion on careers in energy technology industries, includ-  
10 ing—

11           “(1) career information and job descriptions for  
12 the energy technology industry;

13           “(2) projected workforce shortages in the en-  
14 ergy technology industry;

15           “(3) a comprehensive listing and description of  
16 institutions of higher education providing degrees  
17 with a specific focus on the energy technology indus-  
18 try;

19           “(4) a comprehensive listing and description of  
20 community colleges and career training programs  
21 with a particular focus on the energy technology in-  
22 dustry; and

23           “(5) sources of scholarships and other forms of  
24 financial aid with particular relevance to the energy  
25 technology industry.”.

1 **SEC. 435. COORDINATION OF ENERGY WORKFORCE TRAIN-**  
2 **ING PROGRAMS.**

3 (a) IN GENERAL.—Not later than 1 year after the  
4 date of enactment of this Act, the Director of the Office  
5 of Science and Technology Policy shall submit to Congress  
6 a report that surveys energy workforce training programs  
7 funded by Federal agencies, including—

8 (1) programs for training skilled technical per-  
9 sonnel (as defined in section 1101(a) of the Energy  
10 Policy Act of 2005 (42 U.S.C. 16411(a)));

11 (2) undergraduate and graduate degree pro-  
12 grams with course curricula related to the produc-  
13 tion, transmission, and use of energy; and

14 (3) secondary school programs with course cur-  
15 ricula relating to the production, transmission, and  
16 use of energy.

17 (b) COORDINATION PLAN.—The plan shall provide—

18 (1) a coordinated Federal strategy for sup-  
19 porting the training of a domestic workforce to sup-  
20 port the production, transmission, and use of energy  
21 in the United States; and

22 (2) a 5-year budget profile to support the strat-  
23 egy.

24 **SEC. 436. DIRECT HIRE AUTHORITY.**

25 (a) IN GENERAL.—Notwithstanding sections 3304  
26 and 3309 through 3318 of title 5, United States Code,

1 the Secretary may, upon a determination that there is a  
2 severe shortage of candidates or a critical hiring need for  
3 particular positions, recruit and directly appoint highly  
4 qualified scientists, engineers, or critical technical per-  
5 sonnel into the competitive service.

6 (b) EXCEPTION.—The authority granted under sub-  
7 section (a) shall not apply to positions in the excepted  
8 service or the Senior Executive Service.

9 (c) REQUIREMENTS.—In exercising the authority  
10 granted under subsection (a), the Secretary shall ensure  
11 that any action taken by the Secretary—

12 (1) is consistent with the merit principles of  
13 section 2301 of title 5, United States Code; and

14 (2) complies with the public notice requirements  
15 of section 3327 of title 5, United States Code.

16 (d) TERMINATION OF EFFECTIVENESS.—The au-  
17 thority provided by this section terminates effective on the  
18 date that is 2 years after the date of enactment of this  
19 Act.

20 **SEC. 437. CRITICAL PAY AUTHORITY.**

21 (a) IN GENERAL.—Notwithstanding section 5377 of  
22 title 5, United States Code, and without regard to the pro-  
23 visions of that title governing appointments in the com-  
24 petitive service or the Senior Executive Service and chap-  
25 ters 51 and 53 of that title (relating to classification and

1 pay rates), the Secretary may establish, fix the compensa-  
2 tion of, and appoint individuals to critical positions needed  
3 to carry out the functions of the Department of Energy,  
4 if the Secretary certifies that—

5 (1) the positions—

6 (A) require expertise of an extremely high  
7 level in a scientific or technical field; and

8 (B) the Department of Energy would not  
9 successfully accomplish an important mission  
10 without such an individual; and

11 (2) exercise of the authority is necessary to re-  
12 cruit an individual exceptionally well qualified for  
13 the position.

14 (b) LIMITATIONS.—The authority granted under sub-  
15 section (a) shall be subject to the following conditions:

16 (1) The number of critical positions authorized  
17 by subsection (a) may not exceed 40 at any 1 time  
18 in the Department of Energy.

19 (2) The term of an appointment under sub-  
20 section (a) may not exceed 4 years.

21 (3) An individual appointed under subsection  
22 (a) may not have been a Department of Energy em-  
23 ployee within the 2 years prior to the date of ap-  
24 pointment.

1           (4) Total annual compensation for any indi-  
2       vidual appointed under subsection (a) may not ex-  
3       ceed the highest total annual compensation payable  
4       at the rate determined under section 104 of title 3,  
5       United States Code.

6           (5) An individual appointed under subsection  
7       (a) may not be considered to be an employee for  
8       purposes of subchapter II of chapter 75 of title 5,  
9       United States Code.

10       (c) NOTIFICATION.—Each year, the Secretary shall  
11       submit to Congress a notification that lists each individual  
12       appointed under this section.

13       **SEC. 438. REEMPLOYMENT OF CIVILIAN RETIREES.**

14       (a) IN GENERAL.—Notwithstanding part 553 of title  
15       5, Code of Federal Regulations (relating to reemployment  
16       of civilian retirees to meet exceptional employment needs),  
17       or successor regulations, the Secretary may approve the  
18       reemployment of an individual to a particular position  
19       without reduction or termination of annuity if the hiring  
20       of the individual is necessary to carry out a critical func-  
21       tion of the Department of Energy for which suitably quali-  
22       fied candidates do not exist.

23       (b) LIMITATIONS.—An annuitant hired with full sal-  
24       ary and annuities under the authority granted by sub-  
25       section (a)—

1           (1) shall not be considered an employee for pur-  
 2           poses of subchapter III of chapter 83 and chapter  
 3           84 of title 5, United States Code;

4           (2) may not elect to have retirement contribu-  
 5           tions withheld from the pay of the annuitant;

6           (3) may not use any employment under this  
 7           section as a basis for a supplemental or recomputed  
 8           annuity; and

9           (4) may not participate in the Thrift Savings  
 10          Plan under subchapter III of chapter 84 of title 5,  
 11          United States Code.

12          (c) LIMITATION ON TERM.—The term of employment  
 13          of any individual hired under subsection (a) may not ex-  
 14          ceed an initial term of 2 years, with an additional 2-year  
 15          appointment under exceptional circumstances.

16   **SEC. 439. SUSTAINABLE ENERGY TRAINING PROGRAM FOR**  
 17                           **COMMUNITY COLLEGES.**

18          (a) DEFINITION OF COMMUNITY COLLEGE.—In this  
 19          Act, the term “community college” means an institution  
 20          of higher education, as defined in section 101(a) of the  
 21          Higher Education Act of 1965 (20 U.S.C. 1001(a)),  
 22          that—

23               (1) provides a 2-year program of instruction  
 24               for which the institution awards an associate degree;  
 25               and

1           (2) primarily awards associate degrees.

2           (b) WORKFORCE TRAINING AND EDUCATION IN SUS-  
3 TAINABLE ENERGY.—From funds made available under  
4 subsection (d), the Secretary of Energy, in coordination  
5 with the Secretary of Labor, shall carry out a joint sus-  
6 tainable energy workforce training and education pro-  
7 gram. In carrying out the program, the Secretary of En-  
8 ergy, in coordination with the Secretary of Labor, shall  
9 award grants to community colleges to provide workforce  
10 training and education in industries and practices such  
11 as—

12           (1) alternative energy, including wind, geo-  
13 thermal, biomass, ocean hydrokinetic energy, and  
14 solar energy;

15           (2) energy efficient construction, retrofitting,  
16 and design;

17           (3) sustainable energy technologies, including  
18 chemical technology, nanotechnology, and electrical  
19 technology;

20           (4) water and energy conservation;

21           (5) recycling and waste reduction;

22           (6) sustainable agriculture and farming; and

23           (7) nuclear energy technology.

24           (c) AWARD CONSIDERATIONS.—Of the funds made  
25 available under subsection (d) for a fiscal year, not less

1 than one-half of such funds shall be awarded to commu-  
 2 nity colleges with existing (as of the date of the award)  
 3 sustainability programs that lead to certificates or degrees  
 4 in 1 or more of the industries and practices described in  
 5 paragraphs (1) through (6) of subsection (b).

6 (d) AUTHORIZATION OF APPROPRIATIONS.—There is  
 7 authorized to be appropriated to carry out this section  
 8 \$100,000,000 for each of the fiscal years 2010 through  
 9 2015.

10 **Subtitle E—Strengthening Edu-**  
 11 **cation and Training in the Sub-**  
 12 **surface Geosciences and Engi-**  
 13 **neering for Energy Develop-**  
 14 **ment**

15 **SEC. 451. DEFINITIONS.**

16 In this subtitle:

17 (1) ABET.—The term “ABET” means ABET,  
 18 Inc., a nationally recognized accreditation organiza-  
 19 tion for college and university engineering programs.

20 (2) ADVISORY COMMITTEE.—The term “Advi-  
 21 sory Committee” means the Advisory Committee es-  
 22 tablished under section 457.

23 (3) CONSORTIUM.—The term “consortium”  
 24 means a research and educational partnership that  
 25 may include—



- 1 (A) institutions of higher education;
- 2 (B) professional societies or foundations;
- 3 (C) industry associations;
- 4 (D) individual business entities;
- 5 (E) State agencies;
- 6 (F) federally recognized multistate com-
- 7 missions and regional organizations;
- 8 (G) Federal agencies;
- 9 (H) national laboratories;
- 10 (I) nongovernmental organizations; and
- 11 (J) individuals.

12 (4) INSTITUTION OF HIGHER EDUCATION.—The  
13 term “institution of higher education” has the  
14 meaning given the term in section 101(a) of the  
15 Higher Education Act of 1965 (20 U.S.C. 1001(a)).

16 (5) MINORITY-SERVING INSTITUTION.—The  
17 term “minority-serving institution” means—

- 18 (A) a part B institution (as defined in sec-
- 19 tion 322 of the Higher Education Act of 1965
- 20 (20 U.S.C. 1061));
- 21 (B) a Hispanic-serving institution (as de-
- 22 fined in section 502(a) of that Act (20 U.S.C.
- 23 1101a(a)));
- 24 (C) a Tribal College or University;

1 (D) an Alaska Native-serving institution  
2 (as defined in section 317(b) of that Act (20  
3 U.S.C. 1059d(b)));

4 (E) a Native Hawaiian-serving institution  
5 (as defined in section 317(b) of that Act (20  
6 U.S.C. 1059d(b))); and

7 (F) a Native American-serving, nontribal  
8 institution (as defined in section 319(b) of that  
9 Act (20 U.S.C. 1059f(b))).

10 (6) RECOGNIZED PROGRAM.—The term “recog-  
11 nized program” means a program at an institution  
12 of higher education that is—

13 (A) an engineering program with sub-  
14 surface applications that is—

15 (i) accredited by the Engineering Ac-  
16 creditation Committee or Technology Ac-  
17 creditation Commission of ABET; and

18 (ii) focused on petroleum or natural  
19 gas production, ground water, geothermal  
20 resources, the production of mineral re-  
21 sources, the development of permanent un-  
22 derground workings, and the long-term  
23 storage of carbon dioxide in subsurface  
24 areas, as demonstrated by the curriculum  
25 and the expertise of its faculty; or

1 (B) a program in geology or geophysics  
2 that—

3 (i) includes undergraduate or grad-  
4 uate programs of research and education  
5 applicable to energy, ground water, and  
6 mineral development;

7 (ii) includes programs of research or  
8 education in exploration for, and produc-  
9 tion of, such deposits and resources; and

10 (iii) the Secretary, after review by the  
11 Advisory Committee of the program and  
12 its outcomes, determines to be appropriate  
13 for funding under this subtitle.

14 (7) SECRETARY.—The term “Secretary” means  
15 the Secretary of the Interior.

16 (8) TRIBAL COLLEGE OR UNIVERSITY.—The  
17 term “Tribal College or University” has the meaning  
18 given the term in section 316(b) of the Higher Edu-  
19 cation Act of 1965 (20 U.S.C. 1059c(b)).

20 **SEC. 452. POLICY.**

21 It is the policy of the United States to maintain and  
22 expand the human capital needed to preserve and foster  
23 the security of economically viable clean energy, ground  
24 water, and mineral resources of the United States,  
25 through financial assistance for science and technology

1 programs that educate, train, and retrain the personnel  
2 needed for United States energy, ground water, and min-  
3 eral resources security.

4 **SEC. 453. RESEARCH PERSONNEL AND PROGRAMS.**

5 (a) IN GENERAL.—In support of the policy described  
6 in section 452, the Secretary shall provide research funds  
7 to institutions of higher education to assist recognized pro-  
8 grams in subsurface geosciences and engineering, includ-  
9 ing programs in energy (including geological carbon stor-  
10 age), petroleum, ground water, economic geology, mining,  
11 and mineral and geological engineering education and re-  
12 search.

13 (b) CONDITIONS.—All funds provided under sub-  
14 section (a) shall be—

15 (1) directed only to programs recognized by the  
16 Secretary; and

17 (2) subject to this subtitle.

18 (c) TYPES OF RESEARCH.—Research conducted  
19 using funds provided under subsection (a) shall include  
20 studies and research—

21 (1) to enhance basic science and engineering;

22 (2) to provide data to test and improve sci-  
23 entific or engineering hypotheses; and

24 (3) to determine scientific or engineering feasi-  
25 bility to enhance discovery, development, and pro-

1       duction of energy, ground water, and mineral re-  
2       sources while minimizing environmental impacts.

3       (d) DURATION OF PROGRAM; NUMBER OF STU-  
4 DENTS.—Each institution of higher education receiving  
5 funds under subsection (a) shall—

6           (1) maintain the program for which the funds  
7       are provided for a period of at least 10 years begin-  
8       ning on the date of the last receipt of those funds;  
9       and

10          (2) take steps described in the application for  
11       research funding submitted to the Secretary to in-  
12       crease the number of undergraduate students en-  
13       rolled in and completing the programs of study in  
14       recognized programs with subsurface applications.

15       (e) MINORITY-SERVING INSTITUTIONS.—The Sec-  
16 retary shall give particular consideration to minority-serv-  
17 ing institutions that have an established recognized pro-  
18 gram or that propose to establish a recognized program,  
19 including by—

20           (1) assigning appropriate employees to serve as  
21       mentors and adjunct faculty;

22           (2) transferring appropriate equipment to the  
23       programs; and

1           (3) allowing faculty or students at those institu-  
2           tions free access to appropriate Department train-  
3           ing.

4           (f) CONSORTIA.—Where appropriate, the Secretary  
5           may make funds available to consortia to conduct projects  
6           of broad application that could not otherwise be under-  
7           taken, including national and regional projects in sub-  
8           surface geosciences and engineering, on the condition that  
9           funds provided to any consortium shall be given only to  
10          a single eligible institution of higher education with a rec-  
11          ognized program which shall be responsible for distribu-  
12          tion, monitoring, and reporting on the activities of the con-  
13          sortium, as required by the Secretary.

14   **SEC. 454. SCHOLARSHIPS AND FELLOWSHIPS.**

15          (a) IN GENERAL.—The Secretary shall provide funds  
16          to institutions of higher education with recognized pro-  
17          grams for the purpose of providing merit-based scholar-  
18          ships for undergraduate geoscience or engineering edu-  
19          cation with general subsurface applications, and graduate  
20          fellowships in the applied geosciences and subsurface engi-  
21          neering, including applications relating to—

22                (1) petroleum, chemical, mining, geological  
23                (such as geological carbon storage), geophysical,  
24                ground water, or mineral engineering;

25                (2) petroleum geology;

- 1 (3) geothermal geology;
- 2 (4) mining and economic geology;
- 3 (5) petroleum, ground water, and mining geo-
- 4 physics;
- 5 (6) mineral economics;
- 6 (7) hydrogeology or ground water science; or
- 7 (8) produced water treatment and reuse.

8 (b) VETERANS AND SERVICE MEMBERS.—In award-  
9 ing scholarships and fellowships under this section, an in-  
10 stitution of higher education shall give preference to appli-  
11 cations from veterans and service members who have re-  
12 ceived or will receive the Afghanistan Campaign Medal or  
13 the Iraq Campaign Medal as authorized by Public Law  
14 108–234 (10 U.S.C. 1121 note; 118 Stat. 655) and Exec-  
15 utive Order No. 13363.

16 (c) REQUIREMENTS FOR RECEIPT OF SCHOLARSHIP  
17 OR FELLOWSHIP.—To receive a scholarship or a graduate  
18 fellowship, an individual student shall—

- 19 (1) be a lawful permanent resident of the  
20 United States or a United States citizen or national;  
21 and
- 22 (2) agree in writing to complete a course of  
23 studies and receive a degree in a recognized program  
24 in an area specified in subsection (a).

1       (d) REQUIREMENTS FOR RETENTION OF SCHOLAR-  
2 SHIP OR FELLOWSHIP.—

3           (1) IN GENERAL.—To retain a scholarship or  
4 graduate fellowship awarded under this section, an  
5 individual shall, as determined by the applicable in-  
6 stitution of higher education—

7               (A) continue in 1 of the courses of studies  
8 authorized by this section; and

9               (B) remain in good academic standing.

10          (2) REINSTATEMENT.—An institution of higher  
11 education may allow for reinstatement of a scholar-  
12 ship or graduate fellowship in a case in which an in-  
13 dividual failed to maintain good academic standing  
14 but subsequently regained such standing.

15       (e) APPLICATION OF INSTITUTION OF HIGHER EDU-  
16 CATION.—An institution of higher education seeking funds  
17 under this section shall describe, in the application of the  
18 institution of higher education submitted to the Secretary  
19 for the funding—

20           (1) the number of students that would be  
21 awarded scholarships or fellowships if the application  
22 were to be approved;

23           (2) the manner in which those students would  
24 be selected; and



1           (3) the ways in which the requirements of this  
2           section would be enforced.

3   **SEC. 455. CAREER TECHNICAL AND COMMUNITY COLLEGE**  
4           **EDUCATION.**

5           (a) IN GENERAL.—The Secretary shall support pro-  
6   grams in subsurface geosciences and engineering that—

7           (1) are focused on technology or skill develop-  
8           ment and the use of that technology or skills in en-  
9           ergy, ground water science or hydrogeology, and  
10          mineral production, and related maintenance, oper-  
11          ational safety, or energy infrastructure protection  
12          and security;

13          (2) prepare students for advanced or super-  
14          visory roles in the geothermal, petroleum, mining,  
15          geological carbon storage, ground water, or mineral  
16          mining industries;

17          (3) grant an associate's degree, a certificate, or  
18          a baccalaureate degree; and

19          (4) prepare students for further higher edu-  
20          cation in the recognized programs.

21          (b) ELIGIBLE PROGRAMS.—

22               (1) IN GENERAL.—Programs that are eligible to  
23               receive support under this section are those that  
24               provide training for individuals seeking to enter the  
25               industries described in subsection (a)(2), such as—

- 1 (A) joint apprenticeship programs;
- 2 (B) internships in industry, Federal, State,
- 3 or tribal offices;
- 4 (C) research experiences at national lab-
- 5 oratories authorized by Federal law; and
- 6 (D) other programs at institutions of high-
- 7 er education (including community colleges).

8 (2) CONSIDERATION.—The Secretary shall give  
9 particular consideration to supporting programs that  
10 provide training for a progressive career path in the  
11 industries described in subsection (a)(2).

12 (3) ESSENTIAL SUPPORT.—The Secretary, after  
13 consultation with the Advisory Committee, may offer  
14 support to programs that grant degrees or certifi-  
15 cates in programs that provide training in disciplines  
16 that provide essential support for the industries de-  
17 scribed in subsection (a)(2), including the disciplines  
18 listed in paragraph (4), even if those programs are  
19 not purposely designed to provide personnel for the  
20 industries described in subsection (a)(2).

21 (4) DISCIPLINES.—The disciplines referred to  
22 in paragraph (3) are—

- 23 (A) power transmission and operation;
- 24 (B) pipeline construction and operation;

- 1 (C) maintenance and maintenance logis-  
2 tics;  
3 (D) construction;  
4 (E) manufacturing;  
5 (F) transportation and warehousing;  
6 (G) technical support activities (including  
7 data collection, reduction, and analysis) and  
8 laboratory support; and  
9 (H) produced water treatment or distribu-  
10 tion.

11 (c) ADDITIONAL REQUIREMENTS.—An institution of  
12 higher education that receives funds under this section—

13 (1) shall demonstrate to the Secretary evi-  
14 dence—

15 (A) of an institutional commitment for the  
16 purposes of career technical education; and

17 (B) that the institution of higher education  
18 has received or will receive industry cooperation  
19 in the form of equipment, employee time, or do-  
20 nations of funds to support the activities car-  
21 ried out under this section;

22 (2) shall agree to maintain the programs for  
23 which the funding is sought for a period of 10 years  
24 beginning on the date on which the institution of  
25 higher education receives the funds, unless the Sec-

1       retary finds that a shorter period of time is appro-  
2       priate for the local labor market or is required by  
3       State authorities; and

4           (3) may combine the funds with State funds,  
5       and other Federal funds as allowed by applicable  
6       law, to carry out programs described in this section,  
7       on the condition that the use of funds received under  
8       this section is reported to the Secretary not less  
9       than annually.

10       (d) ADVICE.—The Secretary shall seek the advice of  
11   the Advisory Committee in determining the criteria used  
12   to carry out this section.

13   **SEC. 456. USE OF FUNDS BY INSTITUTIONS.**

14       (a) COST-SHARING.—The Secretary—

15           (1) shall not require cost-sharing by a non-Fed-  
16       eral source for—

17                (A) any research activity that is of a basic  
18                or fundamental nature, as determined by the  
19                appropriate officer of the Department of the In-  
20                terior; or

21                (B) any scholarship or fellowship program;  
22       and

23           (2) shall require appropriate cost-sharing for  
24       research and development activities that are of an

1 applied, demonstration, or commercial nature, as so  
2 determined.

3 (b) PROHIBITED USES OF FUNDS.—No funds made  
4 available under this subtitle shall be applied to—

5 (1) the acquisition by purchase or lease of any  
6 land or interest in land; or

7 (2) the rental, purchase, construction, preserva-  
8 tion, or repair of any building.

9 (c) MAINTENANCE AND UPGRADING.—Funds made  
10 available under this subtitle may be used—

11 (1) with the express approval of the Secretary,  
12 for proposals to maintain or upgrade existing labora-  
13 tories, laboratory equipment, or field equipment re-  
14 lated to the funded research; and

15 (2) for maintaining and upgrading mines, oil  
16 and gas drilling rigs, and other appropriate equip-  
17 ment that are used for undergraduate and graduate  
18 training and worker safety training and that are  
19 owned by—

20 (A) a recognized program funded under  
21 this subtitle; or

22 (B) by the institution of higher education  
23 in which the recognized program is located.

24 (d) OFFICER.—Each institution of higher education  
25 that receives funds under this subtitle shall have an officer

1 appointed by the governing authority of the institution of  
2 higher education who shall—

3 (1) receive and account for all funds paid under  
4 this subtitle; and

5 (2) submit to the Secretary, on or before the  
6 first day of September of each year, an annual re-  
7 port that includes—

8 (A) a description of work accomplished and  
9 the status of projects underway, together with  
10 a detailed statement of the amounts received  
11 under this subtitle, during the preceding fiscal  
12 year; and

13 (B) an accounting of amounts disbursed on  
14 schedules prescribed by the Secretary.

15 (e) PUBLIC AVAILABILITY OF INFORMATION.—All  
16 uses, products, processes, and other developments result-  
17 ing from any research, demonstration, or experiment fund-  
18 ed in whole or in part under this subtitle shall be made  
19 available promptly to the general public, subject to—

20 (1) such exceptions or limitations as the Sec-  
21 retary may determine to be necessary in the interest  
22 of national security; and

23 (2) the applicable Federal law governing pat-  
24 ents.

1 **SEC. 457. ADVISORY COMMITTEE.**

2 (a) ESTABLISHMENT OF ADVISORY COMMITTEE.—

3 (1) IN GENERAL.—The Secretary shall establish  
4 an Advisory Committee on Geosciences and  
5 Geoengineering Education to advise the Secretary in  
6 carrying out this subtitle.

7 (2) MEMBERSHIP.—

8 (A) VOTING MEMBERS.—The Advisory  
9 Committee shall be composed of 19 voting  
10 members, including—

11 (i) the Deputy Secretary of the Inte-  
12 rior who shall serve as the Chairperson of  
13 the Advisory Committee; and

14 (ii) not more than 18 additional indi-  
15 viduals, appointed by the Secretary, in con-  
16 sultation with interested parties, who are  
17 knowledgeable in the fields of energy, pe-  
18 troleum, geothermal, ground water, min-  
19 ing, and mineral resources research, in-  
20 cluding—

21 (I) 2 individuals who are univer-  
22 sity leaders from an institution of  
23 higher education with at least 1 recog-  
24 nized program;

25 (II) 1 individual who is a commu-  
26 nity or technical college administrator;

1 (III) 1 individual who is a Tribal  
2 College or University administrator;

3 (IV) 1 individual who is a career  
4 technical education educator;

5 (V) 5 individuals who are rep-  
6 resentatives equally distributed from  
7 the energy, mining, and aggregate or  
8 ground water industries;

9 (VI) 1 individual who is a work-  
10 ing miner;

11 (VII) 1 individual who is a work-  
12 ing oilfield worker;

13 (VIII) 1 individual who is a rep-  
14 resentative of the Interstate Oil and  
15 Gas Compact Commission;

16 (IX) 1 individual who is a rep-  
17 resentative of the Interstate Mining  
18 Compact Commission;

19 (X) 1 individual who is a rep-  
20 resentative of State geologists;

21 (XI) 2 individuals who are rep-  
22 resentatives of the general public; and

23 (XII) 1 individual who is an ad-  
24 ministrator of a part B institution (as  
25 defined in section 322 of the Higher



1 Education Act of 1965 (20 U.S.C.  
2 1061)).

3 (B) NONVOTING ADVISORS.—The Chair-  
4 person of the Advisory Committee may have  
5 present during meetings individuals who shall  
6 serve as nonvoting, technical advisors to the  
7 Advisory Committee, such as representatives of  
8 Federal agencies with responsibility for—

9 (i) energy, ground water, and min-  
10 erals resources management;

11 (ii) energy, ground water, and mineral  
12 resource investigations;

13 (iii) energy, ground water, and min-  
14 eral commodity information;

15 (iv) international trade in energy,  
16 ground water, and mineral commodities;

17 (v) mining safety regulation and mine  
18 safety research; and

19 (vi) research into the development,  
20 production, and use of energy, ground  
21 water, and mineral commodities.

22 (C) PROHIBITION ON FEDERAL GOVERN-  
23 MENT EMPLOYMENT.—The member of the Ad-  
24 visory Committee appointed under subpara-

1 graph (A)(ii) shall not be an employee of the  
2 Federal Government.

3 (3) TERM; VACANCIES.—

4 (A) TERM.—Subject to subparagraph (B),  
5 the term of a member the Advisory Committee  
6 shall be 3 years.

7 (B) REAPPOINTMENT.—A member of the  
8 Advisory Committee may be appointed for not  
9 more than 2 3-year terms.

10 (C) VACANCIES.—A vacancy on the Advi-  
11 sory Committee—

12 (i) shall not affect the powers of the  
13 Advisory Committee; and

14 (ii) shall be filled in the same manner  
15 as the original appointment was made.

16 (4) INITIAL MEETING.—Not later than 45 days  
17 after the date on which all members of the Advisory  
18 Committee have been appointed, the Advisory Com-  
19 mittee shall hold the initial meeting of the Advisory  
20 Committee.

21 (5) MEETINGS.—The Advisory Committee shall  
22 meet at the call of the Chairperson but not less than  
23 once per year.

24 (6) QUORUM.—A majority of the members of  
25 the Advisory Committee shall constitute a quorum,

1 but a lesser number of members may hold meetings  
2 and hearings.

3 (b) DUTIES.—The Advisory Committee—

4 (1) shall advise the Secretary on the develop-  
5 ment and implementation of programs under this  
6 subtitle;

7 (2) shall, following completion of the report re-  
8 quired by section 385(c) of the Energy Policy Act of  
9 2005 (Public Law 109–58; 119 Stat. 744)—

10 (A) consider the recommendations of the  
11 report;

12 (B) formulate and recommend a national  
13 plan for using the fiscal resources provided  
14 under this subtitle; and

15 (C) submit the plan to the Secretary for  
16 approval and use by the Secretary, as deter-  
17 mined by the Secretary, in carrying out this  
18 subtitle;

19 (3) shall make recommendations to the Sec-  
20 retary regarding the long-term and short-term viabil-  
21 ity of the faculty at schools with recognized pro-  
22 grams; and

23 (4) may recommend the awarding of graduate  
24 fellowships and postdoctoral fellowships to those stu-

1       dents who declare their intent to seek roles as future  
2       faculty at the recognized programs.

3       (c) INFORMATION FROM FEDERAL AGENCIES.—

4           (1) IN GENERAL.—The Advisory Committee  
5       may secure directly from a Federal agency such in-  
6       formation as the Advisory Committee considers nec-  
7       essary to carry out this subtitle.

8           (2) PROVISION OF INFORMATION.—On request  
9       of the Chairperson of the Advisory Committee, the  
10      head of the agency shall provide the information to  
11      the Advisory Committee.

12      (d) ADVISORY COMMITTEE PERSONNEL MATTERS.—

13           (1) TRAVEL EXPENSES.—A member of the Ad-  
14      visory Committee shall be allowed travel expenses,  
15      including per diem in lieu of subsistence, at rates  
16      authorized for an employee of an agency under sub-  
17      chapter I of chapter 57 of title 5, United States  
18      Code, while away from the home or regular place of  
19      business of the member in the performance of the  
20      duties of the Advisory Committee.

21           (2) DETAIL OF FEDERAL GOVERNMENT EM-  
22      PLOYEES.—

23           (A) IN GENERAL.—An employee of the  
24      Federal Government may be detailed to the Ad-  
25      visory Committee without reimbursement.

1 (B) CIVIL SERVICE STATUS.—The detail of  
2 the employee shall be without interruption or  
3 loss of civil service status or privilege.

4 (3) PROCUREMENT OF TEMPORARY AND INTER-  
5 MITTENT SERVICES.—The Chairperson of the Advi-  
6 sory Committee may procure temporary and inter-  
7 mittent services in accordance with section 3109(b)  
8 of title 5, United States Code, at rates for individ-  
9 uals that do not exceed the daily equivalent of the  
10 annual rate of basic pay prescribed for level V of the  
11 Executive Schedule under section 5316 of that title.

12 **SEC. 458. OFFICE; REGULATIONS.**

13 Not later than 1 year after the date of enactment  
14 of this Act, the Secretary shall establish a separate office  
15 to administer, and to promulgate such regulations as are  
16 necessary to carry out, this subtitle.

17 **SEC. 459. AUTHORIZATION OF APPROPRIATIONS.**

18 There is authorized to be appropriated to carry out  
19 this subtitle \$200,000,000 for each of fiscal years 2010  
20 through 2020, to remain available until expended.

21 **SEC. 460. STUDY OF AVAILABILITY OF SKILLED WORKERS.**

22 Section 1830 of the Energy Policy Act of 2005 (Pub-  
23 lic Law 109–58; 119 Stat. 1137) is amended to read as  
24 follows:

1   **“SEC. 1830. STUDY OF AVAILABILITY OF SKILLED WORK-**  
2                           **ERS.**

3           “(a) IN GENERAL.—The Secretary of the Interior, in  
4 cooperation with the Secretary of Labor, shall enter into  
5 an arrangement with the National Academies under which  
6 the National Academies shall conduct a study of the short-  
7 term and long-term availability of skilled workers to meet  
8 the energy and mineral security requirements of the  
9 United States.

10          “(b) INCLUSIONS.—The study shall include—

11               “(1) an analysis of the need for and availability  
12 of workers for the oil, natural gas, coal, nonfuel  
13 mineral, ground water, nuclear, geothermal, solar,  
14 wind, and electric utility industries;

15               “(2) an analysis of the availability of skilled  
16 labor at both entry level and more senior levels;

17               “(3) recommendations for actions needed to  
18 meet future labor requirements;

19               “(4) a description of current and projected edu-  
20 cation and training programs for those workers at  
21 community and technical colleges and universities or  
22 through other job-specific training initiatives;

23               “(5) an analysis of the potential for skilled for-  
24 eign labor to meet projected sectoral labor require-  
25 ments;

1           “(6) an assessment of potential job health and  
 2           safety impacts, national security, and domestic eco-  
 3           nomic impacts of a long-term workforce shortage or  
 4           surplus; and

5           “(7) a description and evaluation of data  
 6           sources available, Federal data collection and coordi-  
 7           nation, and potential research initiatives for future  
 8           decisionmaking relating to workforce issues.

9           “(c) REPORT.—Not later than December 31, 2012,  
 10          the Secretary shall submit to Congress a report that de-  
 11          scribes the results of the study.

12          “(d) AUTHORIZATION OF APPROPRIATIONS.—There  
 13          is authorized to be appropriated to the Secretary to carry  
 14          out this section \$2,000,000.”.

## 15           **Subtitle F—Miscellaneous**

### 16          **SEC. 471. OTHER TRANSACTIONS AUTHORITY.**

17          (a) IN GENERAL.—Section 646 of the Department of  
 18          Energy Organization Act (42 U.S.C. 7256) is amended  
 19          by striking subsection (g) and inserting the following:

20          “(g) AUTHORITY TO ENTER INTO OTHER TRANS-  
 21          ACTIONS.—

22               “(1) IN GENERAL.—In addition to any other  
 23               authority granted to the Secretary to enter into pro-  
 24               curement contracts, leases, cooperative agreements,  
 25               grants, and certain arrangements, the Secretary may

1 enter into other transactions with public agencies,  
2 private organizations, or other persons on such  
3 terms as the Secretary considers appropriate to fur-  
4 ther functions vested in the Secretary, including re-  
5 search, development, or demonstration projects.

6 “(2) ADVANCE PROJECTS.—Notwithstanding  
7 any other provision of law, the Secretary may exer-  
8 cise authority provided under paragraph (1) without  
9 regard to section 3324 of title 31, United States  
10 Code.

11 “(3) RELATIONSHIP TO OTHER LAW.—The au-  
12 thority of the Secretary under paragraph (1) shall  
13 not be subject to—

14 “(A) section 9 of the Federal Nonnuclear  
15 Energy Research and Development Act of 1974  
16 (42 U.S.C. 5908); or

17 “(B) section 152 of the Atomic Energy Act  
18 of 1954 (42 U.S.C. 2182).

19 “(4) PROTECTION OF CERTAIN INFORMATION  
20 FROM DISCLOSURE.—

21 “(A) IN GENERAL.—Notwithstanding any  
22 other provision of law, disclosure of information  
23 described in subparagraph (B) is not required,  
24 and may not be compelled, under section 552 of  
25 title 5, United States Code, during the 5-year



1 period beginning on the date on which the in-  
 2 formation is received by the Department.

3 “(B) AWARD INFORMATION.—The infor-  
 4 mation described in this subparagraph is infor-  
 5 mation in the records of the Department that—

6 “(i) was submitted—

7 “(I) to the Department as part  
 8 of a competitive or noncompetitive  
 9 process with the potential to result in  
 10 an award to the person submitting the  
 11 information; and

12 “(II) in conjunction with a trans-  
 13 action entered into by the Secretary  
 14 pursuant to paragraph (1); and

15 “(ii) is—

16 “(I) a proposal, proposal ab-  
 17 stract, and supporting documents;

18 “(II) a business plan submitted  
 19 on a confidential basis; or

20 “(III) technical information sub-  
 21 mitted on a confidential basis.

22 “(5) REQUIREMENTS.—

23 “(A) SELECTION PROCEDURES.—In enter-  
 24 ing into transactions under paragraph (1), the  
 25 Secretary shall use such competitive, merit-

1 based selection procedures as the Secretary de-  
2 termines in writing to be practicable.

3 “(B) DETERMINATION.—Before entering  
4 into a transaction under paragraph (1), the  
5 Secretary shall determine in writing that the  
6 use of a standard contract, grant, or coopera-  
7 tive agreement for the project is not feasible or  
8 appropriate.

9 “(C) COST SHARING.—A transaction under  
10 paragraph (1) shall be subject to cost sharing  
11 in accordance with section 988 of the Energy  
12 Policy Act of 2005 (42 U.S.C. 16352).

13 “(D) LIMITATION ON DELEGATION.—The  
14 authority of the Secretary under this subsection  
15 may be delegated only to an officer of the De-  
16 partment who is appointed by the President by  
17 and with the advice and consent of the Senate  
18 and may not be redelegated to any other per-  
19 son.

20 “(6) ANNUAL REPORTS.—The Secretary shall  
21 submit to Congress an annual report on the use by  
22 the Department of authorities under this section.

23 “(7) REPORT.—

24 “(A) DEFINITION OF NONTRADITIONAL  
25 GOVERNMENT CONTRACTOR.—In this para-

graph, the term ‘nontraditional Government contractor’ has the meaning given the term ‘nontraditional defense contractor’ in section 845(f) of the National Defense Authorization Act for Fiscal Year 1994 (Public Law 103–160; 10 U.S.C. 2371 note).

“(B) REPORT.—Not later than 2 years after the date of enactment of this subparagraph, and 2 years thereafter, the Comptroller General of the United States shall submit to Congress a report describing—

“(i) the use by the Department of authorities under this section, including the ability to attract nontraditional Government contractors; and

“(ii) whether additional safeguards are necessary to carry out the authorities.”.

(b) IMPLEMENTATION.—

(1) IN GENERAL.—The final rule of the Department of Energy entitled “Assistance Regulations” (71 Fed. Reg. 27158 (May 9, 2006)) shall be applicable to transactions under section 646 of the Department of Energy Organization Act (42 U.S.C. 7256) (as amended by subsection (a)).

1           (2) REGULATIONS.—The Secretary may revise,  
2           supplement, or replace such regulations as the Sec-  
3           retary determines necessary to implement the  
4           amendment made by subsection (a).

5 **SEC. 472. DEFINITION OF NATIONAL LABORATORY.**

6           Section 2(3) of the Energy Policy Act of 2005 (42  
7 U.S.C. 15801(3)) is amended by striking subparagraph  
8 (P) and inserting the following:

9                   “(P) SLAC National Accelerator Labora-  
10                  tory.”.

11 **SEC. 473. PROTECTION OF RESULTS.**

12           (a) IN GENERAL.—Subject to subsection (b) and not-  
13 withstanding any other provision of law, during a period  
14 of not more than 5 years after the development of infor-  
15 mation in any transaction authorized to be entered into  
16 by the Department of Energy, the Secretary may provide  
17 appropriate protections against the dissemination of the  
18 information, including exemption from subchapter II of  
19 chapter 5 of title 5, United States Code.

20           (b) APPLICABLE INFORMATION.—This section ap-  
21 plies to information that—

22                   (1) results from a transaction entered into by  
23           the Secretary pursuant to this title or an amend-  
24           ment made by this title; and

1           (2) is of a character that would be protected  
 2           from disclosure under section 552(b)(4) of title 5,  
 3           United States Code, if the information had been ob-  
 4           tained from a person other than an agent or em-  
 5           ployee of the Federal Government.

6 **SEC. 474. MARINE AND HYDROKINETIC RENEWABLE EN-**  
 7 **ERGY RESEARCH AND DEVELOPMENT.**

8           (a) DEFINITION OF MARINE AND HYDROKINETIC  
 9 RENEWABLE ENERGY.—In this section, the term “marine  
 10 and hydrokinetic renewable energy” has the meaning  
 11 given the term in section 632 of the Energy Independence  
 12 and Security Act of 2007 (42 U.S.C. 17211).

13           (b) RESEARCH AND DEVELOPMENT PROGRAM.—Sec-  
 14 tion 633(a) of the Energy Independence and Security Act  
 15 of 2007 (42 U.S.C. 17212(a)) is amended—

16           (1) in paragraph (13), by striking “; and” and  
 17           inserting a semicolon;

18           (2) in paragraph (14), by striking the period at  
 19           the end and inserting “; and”; and

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

21           “(15)(A) apply advanced systems engineering  
 22           and system integration methods to identify critical  
 23           interfaces and develop open standards for marine  
 24           and hydrokinetic renewable energy;

1           “(B) transfer the resulting intellectual property  
2           to industry stakeholders as public information  
3           through published interface definitions, standards,  
4           and demonstration projects; and

5           “(C) develop incentives for industry to comply  
6           with the standards.”.

7           (c) MARINE-BASED ENERGY DEVICE VERIFICATION  
8 PROGRAM.—

9           (1) ESTABLISHMENT.—The Secretary shall es-  
10          tablish a marine-based energy device verification  
11          program to provide a bridge from the marine and  
12          hydrokinetic renewable energy capture device design  
13          and development efforts underway across the indus-  
14          try to commercial deployment of marine and  
15          hydrokinetic renewable energy devices.

16          (2) PURPOSES.—The purposes of the program  
17          are to fund, facilitate the development and installa-  
18          tion of, and evaluate marine and hydrokinetic renew-  
19          able energy projects, in partnership with Federally  
20          Funded Research and Development Centers, and in  
21          conjunction with universities and other institutions  
22          of higher education, private business entities, and  
23          other appropriate organizations, in order—

24                  (A) to increase marine and hydrokinetic re-  
25                  newable energy experience; and

1 (B) to build and operate enough candidate  
2 devices to obtain statistically significant oper-  
3 ating and maintenance data.

4 (3) OBJECTIVES.—The objectives of the pro-  
5 gram include—

6 (A) verifying the performance, reliability,  
7 maintainability, and cost of new marine and  
8 hydrokinetic renewable energy device designs  
9 and system components in an operating envi-  
10 ronment;

11 (B) providing States, regulators, utilities,  
12 and other stakeholders with a valid opportunity  
13 to test and evaluate marine and hydrokinetic  
14 renewable energy technology in new areas;

15 (C) documenting and communicating the  
16 experience from those projects for the benefit of  
17 utilities, independent power producers, other  
18 nonutility generators, device suppliers, and oth-  
19 ers in the marine and hydrokinetic renewable  
20 energy development community; and

21 (D) resolving environmental issues through  
22 robust characterization, reliable impact pre-  
23 diction, effective monitoring, development and  
24 use of adaptive management, and informing en-

1           gineering design to improve environmental per-  
2           formance.

3           (d) ADAPTIVE MANAGEMENT AND ENVIRONMENTAL  
4 GRANT PROGRAM.—

5           (1) FINDINGS.—Congress finds that—

6                   (A) the use of marine and hydrokinetic re-  
7           newable energy technologies can reduce con-  
8           tributions to global warming;

9                   (B) marine and hydrokinetic renewable en-  
10          ergy technologies can be produced domestically;

11                  (C) marine and hydrokinetic renewable en-  
12          ergy is a nascent industry; and

13                  (D) the United States must work to pro-  
14          mote new renewable energy technologies that  
15          reduce contributions to global warming gases  
16          and improve domestic energy production.

17          (2) GRANT PROGRAM.—

18                  (A) IN GENERAL.—As soon as practicable  
19          after the date of enactment of this Act, the Sec-  
20          retary shall establish a program under which  
21          the Secretary shall award grants to eligible en-  
22          tities—

23                          (i) to advance the development of ma-  
24          rine and hydrokinetic renewable energy;



1 (ii) to help fund the costs of evalu-  
2 ating the environmental effects of marine  
3 and hydrokinetic renewables before and  
4 during the deployment of demonstration  
5 projects;

6 (iii) to help enable the eligible enti-  
7 ties—

8 (I) to gather and collect the types  
9 of environmental data that are re-  
10 quired when working in a public re-  
11 source (including the waterways and  
12 oceans of the United States); and

13 (II) to monitor the impacts of  
14 demonstration projects and make the  
15 resulting information available for  
16 widespread dissemination to aid fu-  
17 ture projects; and

18 (iv) to help fund the cost of advancing  
19 renewable marine and hydrokinetic tech-  
20 nologies in ocean and riverine environ-  
21 ments from demonstration projects to de-  
22 velopment and deployment.

23 (B) APPLICATION.—To be eligible to re-  
24 ceive a grant under this paragraph, an entity  
25 shall submit to the Secretary an application at

1           such time, in such manner, and containing such  
2           information as the Secretary may require.

3           (e) AUTHORIZATION OF APPROPRIATIONS.—There is  
4 authorized to be appropriated to carry out this section  
5 \$250,000,000 for each of fiscal years 2010 through 2021.

## 6           **TITLE V—ENERGY MARKETS**

### 7           **SEC. 501. ENHANCED INFORMATION ON CRITICAL ENERGY** 8                               **SUPPLIES.**

9           (a) IN GENERAL.—Section 205 of the Department of  
10 Energy Organization Act (42 U.S.C. 7135) (as amended  
11 by section 145) is amended by adding at the end the fol-  
12 lowing:

13           “(o) COLLECTION OF INFORMATION ON CRITICAL  
14 ENERGY SUPPLIES.—

15                       “(1) IN GENERAL.—To ensure transparency of  
16 information relating to energy infrastructure and  
17 product ownership in the United States and improve  
18 the ability to evaluate the energy security of the  
19 United States, the Administrator, in consultation  
20 with other Federal agencies (as necessary), shall—

21                               “(A) not later than 120 days after the date  
22 of enactment of this subsection, develop and  
23 provide notice of a plan to collect, in coopera-  
24 tion with the Commodity Futures Trade Com-  
25 mission, information identifying all oil inven-

1           tories, and other physical oil assets (including  
 2           all petroleum-based products and the storage of  
 3           such products in off-shore tankers), that are  
 4           owned by the 50 largest traders of oil contracts  
 5           (including derivative contracts), as determined  
 6           by the Commodity Futures Trade Commission;  
 7           and

8           “(B) not later than 90 days after the date  
 9           on which notice is provided under subparagraph  
 10          (A), implement the plan described in that sub-  
 11          paragraph.

12          “(2) INFORMATION.—The plan required under  
 13          paragraph (1) shall include a description of the plan  
 14          of the Administrator for collecting company-specific  
 15          data, including—

16                 “(A) volumes of product under ownership;  
 17                 and

18                 “(B) storage and transportation capacity  
 19                 (including owned and leased capacity).

20          “(3) PROTECTION OF PROPRIETARY INFORMA-  
 21          TION.—Section 12(f) of the Federal Energy Admin-  
 22          istration Act of 1974 (15 U.S.C. 771(f)) shall apply  
 23          to information collected under this subsection.

24          “(p) COLLECTION OF INFORMATION ON STORAGE  
 25          CAPACITY FOR OIL AND NATURAL GAS.—

1           “(1) IN GENERAL.—Not later than 90 days  
 2 after the date of enactment of this subsection, the  
 3 Administrator of the Energy Information Adminis-  
 4 tration shall collect information quantifying the com-  
 5 mercial storage capacity for oil and natural gas in  
 6 the United States.

7           “(2) UPDATES.—The Administrator shall up-  
 8 date annually the information required under para-  
 9 graph (1).

10           “(3) PROTECTION OF PROPRIETARY INFORMA-  
 11 TION.—Section 12(f) of the Federal Energy Admin-  
 12 istration Act of 1974 (15 U.S.C. 771(f)) shall apply  
 13 to information collected under this subsection.

14           “(q) FINANCIAL MARKET ANALYSIS OFFICE.—

15           “(1) ESTABLISHMENT.—There shall be within  
 16 the Energy Information Administration a Financial  
 17 Market Analysis Office, headed by a director, who  
 18 shall report directly to the Administrator of the En-  
 19 ergy Information Administration.

20           “(2) DUTIES.—The Office shall—

21           “(A) be responsible for analysis of the fi-  
 22 nancial aspects of energy markets;

23           “(B) review the reports required by section  
 24 503(c) of the American Clean Energy Leader-

1 ship Act of 2009 in advance of the submission  
2 of the reports to Congress; and

3 “(C) not later than 1 year after the date  
4 of enactment of this subsection—

5 “(i) make recommendations to the  
6 Administrator of the Energy Information  
7 Administration that identify and quantify  
8 any additional resources that are required  
9 to improve the ability of the Energy Infor-  
10 mation Administration to more fully inte-  
11 grate financial market information into the  
12 analyses and forecasts of the Energy Infor-  
13 mation Administration, including the role  
14 of energy futures contracts, energy com-  
15 modity swaps, and derivatives in price for-  
16 mation for oil; and

17 “(ii) notify the Committee on Energy  
18 and Natural Resources, and the Committee  
19 on Appropriations, of the Senate and the  
20 Committee on Energy and Commerce, and  
21 the Committee on Appropriations, of the  
22 House of Representatives of the rec-  
23 ommendations described in clause (i).

24 “(3) ANALYSES.—The Administrator of the En-  
25 ergy Information Administration shall take analyses

1 by the Office into account in conducting analyses  
2 and forecasting of energy prices.”.

3 (b) CONFORMING AMENDMENT.—Section 645 of the  
4 Department of Energy Organization Act (42 U.S.C. 7255)  
5 is amended by inserting “(15 U.S.C. 3301 et seq.) and  
6 the Natural Gas Act (15 U.S.C. 717 et seq.)” after “Nat-  
7 ural Gas Policy Act of 1978”.

8 **SEC. 502. WORKING GROUP ON ENERGY MARKETS.**

9 (a) ESTABLISHMENT.—There is established a Work-  
10 ing Group on Energy Markets (referred to in this title as  
11 the “Working Group”).

12 (b) COMPOSITION.—The Working Group shall be  
13 composed of—

14 (1) the Secretary;

15 (2) the Secretary of the Treasury;

16 (3) the Chairman of the Federal Energy Regu-  
17 latory Commission;

18 (4) the Chairman of Federal Trade Commis-  
19 sion;

20 (5) the Chairman of the Securities and Ex-  
21 change Commission;

22 (6) the Chairman of the Commodity Futures  
23 Trading Commission; and

24 (7) the Administrator of the Energy Informa-  
25 tion Administration.

1       (c) CHAIRPERSON.—The Secretary shall serve as the  
2 Chairperson of the Working Group.

3       (d) COMPENSATION.—A member of the Working  
4 Group shall serve without additional compensation for the  
5 work of the member of the Working Group.

6       (e) PURPOSE AND FUNCTION.—The Working Group  
7 shall—

8           (1) investigate the effect of increased financial  
9 investment in energy commodities on energy prices  
10 and the energy security of the United States;

11          (2) recommend to the President and Congress  
12 laws (including regulations) that may be needed to  
13 prevent excessive speculation in energy commodity  
14 markets in order to prevent or minimize the adverse  
15 impact of excessive speculation on energy prices on  
16 consumers and the economy of the United States;  
17 and

18          (3) review energy security implications of devel-  
19 opments in international energy markets.

20       (f) ADMINISTRATION.—The Secretary shall provide  
21 the Working Group with such administrative and support  
22 services as may be necessary for the performance of the  
23 functions of the Working Group.

24       (g) COOPERATION OF OTHER AGENCIES.—The heads  
25 of Executive departments, agencies, and independent in-

1 strumentalities shall, to the extent permitted by law, pro-  
2 vide the Working Group with such information as the  
3 Working Group requires to carry out this section.

4 (h) CONSULTATION.—The Working Group shall con-  
5 sult, as appropriate, with representatives of the various  
6 exchanges, clearinghouses, self-regulatory bodies, other  
7 major market participants, consumers, and the general  
8 public.

9 **SEC. 503. STUDY OF REGULATORY FRAMEWORK FOR EN-**  
10 **ERGY MARKETS.**

11 (a) STUDY.—The Working Group shall conduct a  
12 study—

13 (1) to identify the factors that affect the pricing  
14 of crude oil and refined petroleum products, includ-  
15 ing an examination of the effects of market specula-  
16 tion on prices; and

17 (2) to review and assess—

18 (A) existing statutory authorities relating  
19 to the oversight and regulation of markets crit-  
20 ical to the energy security of the United States;  
21 and

22 (B) the need for additional statutory au-  
23 thority for the Federal Government to effec-  
24 tively oversee and regulate markets critical to  
25 the energy security of the United States.



1       (b) ELEMENTS OF STUDY.—The study shall in-  
2 clude—

3           (1) an examination of price formation of crude  
4 oil and refined petroleum products;

5           (2) an examination of relevant international  
6 regulatory regimes; and

7           (3) an examination of the degree to which  
8 changes in energy market transparency, liquidity,  
9 and structure have influenced or driven abuse, ma-  
10 nipulation, excessive speculation, or inefficient price  
11 formation.

12       (c) REPORT AND RECOMMENDATIONS.—The Sec-  
13 retary shall submit to the Committee on Energy and Nat-  
14 ural Resources of the Senate and the Committee on En-  
15 ergy and Commerce of the House of Representatives quar-  
16 terly progress reports during the conduct of the study  
17 under this section, and a final report not later than 1 year  
18 after the date of enactment of this Act, that—

19           (1) describes the results of the study; and

20           (2) provides options and the recommendations  
21 of the Working Group for appropriate Federal co-  
22 ordination of oversight and regulatory actions to en-  
23 sure transparency of crude oil and refined petroleum  
24 product pricing and the elimination of excessive  
25 speculation, including recommendations on data col-

1       lection and analysis to be carried out by the Finan-  
2       cial Market Analysis Office established by section  
3       205(p) of the Department of Energy Organization  
4       Act (42 U.S.C. 7135(p)).

5       (d) AUTHORIZATION OF APPROPRIATIONS.—There  
6       are authorized to be appropriated such sums as are nec-  
7       essary to carry out this section.

8       **SEC. 504. METADATA FORMATS FOR ENERGY PRICES.**

9       (a) PURPOSE.—The purpose of this section is to im-  
10      prove the ability of retail rate utility customers to compare  
11      tariff options by making the most up-to-date electric util-  
12      ity tariffs available in an online format that can be read  
13      and manipulated electronically.

14      (b) TARIFF ANALYSIS PROJECT EXPANSION.—The  
15      Secretary shall expand the Tariff Analysis Project—

16           (1) to ensure that the online database of that  
17      project can be periodically updated and expanded, as  
18      necessary; and

19           (2) by redesigning the web interface for the  
20      Tariff Analysis Project database (including nec-  
21      essary security) to allow individuals and institutions  
22      other than the Lawrence Berkeley National Labora-  
23      tory to enter tariff data.

1       (c) METADATA FORMATS.—The Secretary and the  
2 Federal Energy Regulatory Commission shall coordinate  
3 to—

4           (1) not later than 14 months after the date of  
5 enactment of this Act, develop metadata formats for  
6 online publication in consultation with the National  
7 Laboratories, the utility industry, large energy con-  
8 sumers, the information technology industry, regu-  
9 latory commissions, and nongovernmental organiza-  
10 tions;

11          (2) after formats are developed, assist States in  
12 adopting and implementing the metadata formats  
13 for utility reporting of rate data in the jurisdictions  
14 of the utilities (including by working with State pub-  
15 lic utility commissions and other potential early  
16 adopters of the standards);

17          (3) develop procedures and supporting software  
18 to incorporate tariff data submitted by utilities on a  
19 regular basis, convert the tariff data to a metadata  
20 format, and compile all available data in a central  
21 database based on metadata formats; and

22          (4) develop an online web interface site to make  
23 available to the public, at no cost, the metadata for-  
24 mats and all data converted to those formats.

1 (d) AUTHORIZATION OF APPROPRIATIONS.—There  
 2 are authorized to be appropriated to the Secretary—

3 (1) to carry out subsection (b) \$500,000 for  
 4 each of fiscal years 2010 and 2011; and

5 (2) to carry out subsection (c) such sums as are  
 6 necessary for each fiscal year.

7 **SEC. 505. EMERGENCY ORDERS UNDER THE FEDERAL**  
 8 **POWER ACT.**

9 Section 202 of the Federal Power Act (16 U.S.C.  
 10 824a) is amended by adding at the end the following:

11 “(h) EMERGENCY ORDERS.—

12 “(1) DEFINITION OF EMERGENCY.—In this  
 13 subsection, the term ‘emergency’ means a major dis-  
 14 turbance in wholesale electric markets regulated by  
 15 the Commission that—

16 “(A) substantially disrupts, or threatens to  
 17 substantially disrupt, the reliability of service to  
 18 electric consumers; or

19 “(B) is characterized by sudden and exces-  
 20 sive price fluctuations in wholesale electric mar-  
 21 kets regulated by the Commission.

22 “(2) ORDERS.—In an emergency, the Commis-  
 23 sion may, either on the motion of the Commission or  
 24 on complaint, without notice or hearing, require by  
 25 order the temporary suspension or modification of

1 any rate, term, or condition of service on file with  
2 the Commission pursuant to this Act that the Com-  
3 mission determines to be necessary—

4 “(A) to ensure reliability of service to elec-  
5 tric consumers; or

6 “(B) to protect electric consumers from  
7 potential abuse of market power or market ma-  
8 nipulation in wholesale electric markets regu-  
9 lated by the Commission.

10 “(3) EFFECTIVE PERIOD.—An order under this  
11 subsection may remain in effect for not more than  
12 10 days unless extended under paragraph (4).

13 “(4) EXTENSION.—An order under this sub-  
14 section may be extended for additional periods of not  
15 more than 10 days if the Commission determines  
16 that—

17 “(A) the emergency still exists; and

18 “(B) the continuation of the order is nec-  
19 essary—

20 “(i) to ensure reliability of service to  
21 electric consumers; or

22 “(ii) to protect electric consumers  
23 from potential abuse of market power or  
24 market manipulation in wholesale electric  
25 markets regulated by the Commission.

1           “(5) LIMITATION.—In no event shall an order  
2           of the Commission under this subsection continue in  
3           effect for more than 30 days.

4           “(6) REVIEW OF ORDERS.—

5                 “(A) IN GENERAL.—An order under this  
6                 subsection shall be subject to review as provided  
7                 in section 313(b).

8                 “(B) STANDARD OF REVIEW.—The review-  
9                 ing court shall not enter a stay, writ of man-  
10                damus, or similar relief unless the court finds,  
11                after notice and hearing before a panel of the  
12                court, that the action of the Commission is ar-  
13                bitrary, capricious, an abuse of discretion, or  
14                otherwise not in accordance with law.

15           “(7) TERMINATION BY PRESIDENT.—The Presi-  
16           dent may direct that action taken by the Commis-  
17           sion under this subsection shall not continue in ef-  
18           fect.”.

19   **SEC. 506. CEASE-AND-DESIST AUTHORITY UNDER THE FED-**  
20                           **ERAL POWER ACT.**

21           Section 222 of the Federal Power Act (16 U.S.C.  
22   824v) is amended by adding at the end the following:

23           “(c) CEASE-AND-DESIST ORDERS.—

24                 “(1) IN GENERAL.—If the Commission finds,  
25                 on a proper showing, after notice and opportunity

1 for a hearing, that any entity is manipulating or at-  
2 tempting to manipulate or has manipulated or at-  
3 tempted to manipulate any market for the sale of  
4 electric energy at wholesale in interstate commerce  
5 in violation of a rule or regulation prescribed by the  
6 Commission under subsection (a), the Commission  
7 may enter an order requiring the entity to cease and  
8 desist from committing the violation.

9 “(2) PROPER SHOWING REQUIRED.—For pur-  
10 poses of this subsection, a proper showing is made  
11 by demonstrating that—

12 “(A) an entity has violated a rule or regu-  
13 lation under subsection (a); and

14 “(B) there is a likelihood of future viola-  
15 tions in the absence of an order under this sub-  
16 section.

17 “(d) TEMPORARY ORDERS.—

18 “(1) IN GENERAL.—If, in any proceeding under  
19 subsection (c), the Commission finds that a violation  
20 of a rule or regulation prescribed under subsection  
21 (a) is likely to result in significant dissipation or  
22 conversion of assets, significant harm to electric con-  
23 sumers, or substantial harm to the public interest,  
24 the Commission may enter a temporary order requir-  
25 ing the respondent—

1           “(A) to cease and desist from the violation;  
2           and

3           “(B) to take such action as the Commis-  
4           sion determines appropriate pending completion  
5           of the proceeding—

6           “(i) to prevent the violation; and

7           “(ii) to prevent dissipation or conver-  
8           sion of assets, significant harm to electric  
9           consumers, or substantial harm to the pub-  
10          lic interest.

11          “(2) NOTICE AND HEARING.—A temporary  
12          order under this subsection shall be entered only  
13          after notice and opportunity for a hearing unless the  
14          Commission determines that notice and hearing  
15          prior to entry would be impracticable or contrary to  
16          the public interest.

17          “(3) EFFECTIVE DATE.—A temporary order  
18          shall—

19               “(A) become effective on the date of serv-  
20               ice on the respondent; and

21               “(B) unless set aside, limited, or sus-  
22               pended by the Commission or a court of com-  
23               petent jurisdiction, remain effective and en-  
24               forceable pending the completion of the pro-  
25               ceedings.



1 “(4) COMMISSION REVIEW.—

2 “(A) IN GENERAL.—At any time after the  
3 respondent has been served with a temporary  
4 order under this subsection, the respondent  
5 may apply to the Commission to have the order  
6 set aside, limited, or suspended.

7 “(B) TEMPORARY ORDERS WITHOUT  
8 HEARINGS.—If the respondent has been served  
9 with a temporary order entered without a prior  
10 Commission hearing—

11 “(i) the respondent may, within 10  
12 days after the date on which the order was  
13 served, request a hearing on the applica-  
14 tion; and

15 “(ii) the Commission shall hold a  
16 hearing and render a decision on the appli-  
17 cation at the earliest possible time.

18 “(5) JUDICIAL REVIEW.—

19 “(A) IN GENERAL.—The respondent may  
20 apply to an appropriate United States district  
21 court for an order setting aside, limiting, or  
22 suspending the effectiveness or enforcement of  
23 the order, within—

24 “(i) 10 days after the date the re-  
25 spondent was served with a temporary

1 order entered with a prior Commission  
 2 hearing; or

3 “(ii) 10 days after the Commission  
 4 renders a decision on an application and  
 5 hearing under paragraph (4) with respect  
 6 to any temporary order entered without a  
 7 prior Commission hearing.

8 “(B) JURISDICTION.—The United States  
 9 District Court for the district in which the re-  
 10 spondent resides or has its principal place of  
 11 business, or for the District of Columbia, shall  
 12 have jurisdiction to enter an order under this  
 13 paragraph.”.

14 **SEC. 507. CEASE-AND-DESIST AUTHORITY UNDER THE NAT-**  
 15 **URAL GAS ACT.**

16 Section 4A of the Natural Gas Act (15 U.S.C. 717c–  
 17 1) is amended—

18 (1) by striking the section heading and all that  
 19 follows through “It” and inserting the following:

20 **“SEC. 4A. PROHIBITION ON MARKET MANIPULATION.**

21 “(a) IN GENERAL.—It”; and

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

23 “(b) CEASE-AND-DESIST ORDERS.—

24 “(1) IN GENERAL.—If the Commission finds,  
 25 on a proper showing, after notice and opportunity

1 for a hearing, that any entity is manipulating or at-  
2 tempting to manipulate or has manipulated or at-  
3 tempted to manipulate the market for the purchase  
4 or sale of natural gas or the purchase or sale of  
5 transportation services subject to the jurisdiction of  
6 the Commission in violation of a rule or regulation  
7 prescribed by the Commission under subsection (a),  
8 the Commission may make and enter an order re-  
9 quiring the entity to cease and desist from commit-  
10 ting the violation.

11 “(2) PROPER SHOWING REQUIRED.—For pur-  
12 poses of this subsection, a proper showing is made  
13 by demonstrating that—

14 “(A) an entity has violated a rule or regu-  
15 lation under subsection (a); and

16 “(B) there is a likelihood of future viola-  
17 tions in the absence of an order under this sub-  
18 section.

19 “(c) TEMPORARY ORDERS.—

20 “(1) IN GENERAL.—If, in any proceeding under  
21 subsection (b), the Commission finds that a violation  
22 of a rule or regulation prescribed under subsection  
23 (a) is likely to result in significant dissipation or  
24 conversion of assets, significant harm to natural gas  
25 consumers, or substantial harm to the public inter-

1 est, the Commission may enter a temporary order  
2 requiring the respondent—

3 “(A) to cease and desist from the violation;

4 and

5 “(B) to take such action as the Commis-  
6 sion determines appropriate pending completion  
7 of the proceeding—

8 “(i) to prevent the violation; and

9 “(ii) to prevent dissipation or conver-  
10 sion of assets, significant harm to natural  
11 gas consumers, or substantial harm to the  
12 public interest.

13 “(2) NOTICE AND HEARING.—A temporary  
14 order under this subsection shall be entered only  
15 after notice and opportunity for a hearing unless the  
16 Commission determines that notice and hearing  
17 prior to entry would be impracticable or contrary to  
18 the public interest.

19 “(3) EFFECTIVE DATE.—A temporary order  
20 shall—

21 “(A) become effective on the date of serv-  
22 ice on the respondent; and

23 “(B) unless set aside, limited, or sus-  
24 pended by the Commission or a court of com-  
25 petent jurisdiction, remain effective and en-

1 forceable pending the completion of the pro-  
2 ceedings.

3 “(4) COMMISSION REVIEW.—

4 “(A) IN GENERAL.—At any time after the  
5 respondent has been served with a temporary  
6 order under this subsection, the respondent  
7 may apply to the Commission to have the order  
8 set aside, limited, or suspended.

9 “(B) TEMPORARY ORDERS WITHOUT  
10 HEARINGS.—If the respondent has been served  
11 with a temporary order entered without a prior  
12 Commission hearing—

13 “(i) the respondent may, within 10  
14 days after the date on which the order was  
15 served, request a hearing on the applica-  
16 tion; and

17 “(ii) the Commission shall hold a  
18 hearing and render a decision on such ap-  
19 plication at the earliest possible time.

20 “(5) JUDICIAL REVIEW.—

21 “(A) IN GENERAL.—The respondent may  
22 apply to an appropriate United States district  
23 court for an order setting aside, limiting, or  
24 suspending the effectiveness or enforcement of  
25 the order, within—

1 “(i) 10 days after the date the re-  
2 spondent was served with a temporary  
3 order entered with a prior Commission  
4 hearing; or

5 “(ii) 10 days after the Commission  
6 renders a decision on an application and  
7 hearing under paragraph (4) with respect  
8 to any temporary order entered without a  
9 prior Commission hearing.

10 “(B) JURISDICTION.—The United States  
11 District Court for the district in which the re-  
12 spondent resides or has its principal place of  
13 business, or for the District of Columbia, shall  
14 have jurisdiction to enter an order under this  
15 paragraph.”.

16 **SEC. 508. DE NOVO REVIEW OF CIVIL PENALTIES UNDER**  
17 **THE NATURAL GAS ACT.**

18 Section 22(b) of the Natural Gas Act (15 U.S.C.  
19 717t–1(b)) is amended by inserting before the period at  
20 the end the following: “, in accordance with the same pro-  
21 visions as are applicable under section 31(d) of the Fed-  
22 eral Power Act (16 U.S.C. 823b(d)) in the case of civil  
23 penalties assessed under section 31 of the Federal Power  
24 Act (16 U.S.C. 823b)”.

1   **TITLE VI—POLICY STUDIES AND**  
2                   **REPORTS**

3   **SEC. 601. HELIUM GAS RESOURCE ASSESSMENT.**

4           (a) IN GENERAL.—Not later than 2 years after the  
5 date of enactment of this Act, the Secretary of the Inte-  
6 rior, acting through the Director of the United States Geo-  
7 logical Survey, shall—

8                   (1) in coordination with appropriate heads of  
9 State geological surveys, complete a comprehensive  
10 national helium gas assessment that identifies and  
11 quantifies the quantity of helium in each reservoir,  
12 including assessments of the constituent gases found  
13 in each helium resource, such as carbon dioxide, ni-  
14 trogen, and natural gas; and

15                   (2) submit to the Committee on Energy and  
16 Natural Resources of the Senate and the Committee  
17 on Natural Resources of the House of Representa-  
18 tives a report describing the results of the assess-  
19 ment.

20           (b) AUTHORIZATION OF APPROPRIATIONS.—There is  
21 authorized to be appropriated to the Secretary of the Inte-  
22 rior to carry out this section \$10,000,000 for the period  
23 of fiscal years 2010 through 2012.

1 **SEC. 602. POTASH MINERAL RESOURCE ASSESSMENT.**

2 (a) IN GENERAL.—The Secretary of the Interior, act-  
3 ing through the Director of the United States Geological  
4 Survey (referred to in this section as the “Secretary”),  
5 shall, in coordination with appropriate heads of State geo-  
6 logical surveys, complete a comprehensive national potash  
7 assessment that—

8 (1) identifies and quantifies known potash de-  
9 posits; and

10 (2) provides a quantitative assessment of the lo-  
11 cation and size of undiscovered potash deposits  
12 throughout the United States using all available  
13 public and private information and data sets.

14 (b) DRILLING PROGRAM.—As part of the assessment  
15 under this section, the Secretary may carry out a drilling  
16 program to supplement the geological data relevant to de-  
17 termining the existence of potash.

18 (c) REVIEW OF METHODOLOGY.—As part of the as-  
19 sessment, the Secretary, in consultation with the National  
20 Academies, shall—

21 (1) review the current methodology used to de-  
22 termine measured and indicated reserves of potash  
23 on public land; and

24 (2) provide recommendations for updating the  
25 methodology using the best available technology.



1 (d) REPORT.—Not later than 2 years after the date  
2 of enactment of this Act, the Secretary shall submit to  
3 the Committee on Energy and Natural Resources, and the  
4 Committee on Agriculture, Nutrition, and Forestry, of the  
5 Senate and the Committee on Natural Resources, and the  
6 Committee on Agriculture, of the House of Representa-  
7 tives a report describing the results of the assessment  
8 under this section.

9 (e) AUTHORIZATION OF APPROPRIATIONS.—There  
10 are authorized to be appropriated to the Secretary such  
11 sums as are necessary to carry out this section for each  
12 of fiscal years 2010 through 2012.

13 **SEC. 603. BETTER ENERGY STRATEGY FOR TOMORROW.**

14 (a) IMPROVED ENERGY POLICY PLANNING.—Section  
15 801 of the Department of Energy Organization Act (42  
16 U.S.C. 7321) is amended—

17 (1) in subsection (a)—

18 (A) in paragraph (2), by inserting “and”  
19 after the semicolon at the end; and

20 (B) by striking paragraph (3) and insert-  
21 ing the following:

22 “(3) ensure the participation and cooperation of  
23 all relevant Federal agencies in the preparation of  
24 the proposed Plan.”;

25 (2) in subsection (b)—

1 (A) in the matter preceding paragraph (1),  
2 by striking “April 1, 1979, and biennially there-  
3 after,” and inserting “February 1, 2010, and  
4 quadrennially thereafter,”;

5 (B) in paragraph (1)—

6 (i) by striking “conservation” and in-  
7 serting “energy efficiency”; and

8 (ii) by inserting “reduction or seques-  
9 tration of greenhouse gas emissions,” after  
10 “environmental protection,”;

11 (C) in paragraph (2), by striking “con-  
12 servation” and inserting “efficiency”;

13 (D) by redesignating paragraphs (2) and  
14 (3) as paragraphs (3) and (4), respectively; and

15 (E) by inserting after paragraph (1) the  
16 following:

17 “(2) analyze the policies of the Federal Govern-  
18 ment (including mandates, subsidies, tariffs, and tax  
19 policies) that encourage, or have the potential to en-  
20 courage—

21 “(A) energy production in the United  
22 States;

23 “(B) energy efficiency in the United  
24 States;

1           “(C) the reduction, avoidance, or seques-  
2           tration of greenhouse gases in the United  
3           States; or

4           “(D) the reduction of air pollutants in the  
5           environment;”;

6           (3) in subsection (c)(4), by striking “conserva-  
7           tion practices,” and inserting “energy efficiency  
8           practices, to reduce or sequester greenhouse gas  
9           emissions, to reduce the quantity of air pollutants in  
10          the environment, to promote domestic energy pro-  
11          duction,”;

12          (4) in subsection (d), by striking “insure” and  
13          inserting “ensure”; and

14          (5) by adding at the end the following:

15          “(e) NATIONAL ACADEMY OF SCIENCES.—The Presi-  
16          dent, acting through the Secretary, shall enter into appro-  
17          priate arrangements with the National Academy of  
18          Sciences under which the Academy shall—

19               “(1) prepare reports and analyses that may  
20               contribute to the development of the proposed Plan;

21               “(2) review the proposed Plan; and

22               “(3) submit to the President and to Congress  
23               a report that describes the results of the review of  
24               the proposed Plan by the Academy.”.

1 (b) AUTHORIZATION OF APPROPRIATIONS.—Title  
 2 VIII of the Department of Energy Organization Act (42  
 3 U.S.C. 7321 et seq.) is amended by adding at the end  
 4 the following:

5 **“SEC. 803. AUTHORIZATION OF APPROPRIATIONS.**

6 “There are authorized to be appropriated—

7 “(1) to the Executive Office of the President,  
 8 such sums as may be necessary to carry out—

9 “(A) this title; and

10 “(B) other activities to provide coordina-  
 11 tion and integration of national energy and cli-  
 12 mate policy; and

13 “(2) to the Secretary, such sums as are nec-  
 14 essary to carry out section 801(e).”.

15 (c) CONFORMING AMENDMENTS.—The table of con-  
 16 tents of the Department of Energy Organization Act (42  
 17 U.S.C. prec. 7101) is amended by adding at the end of  
 18 the items relating to title VIII the following:

“Sec. 803. Authorization of appropriations.”.

19 **SEC. 604. ADDRESSING CLIMATE CHANGE IN CHINA AND**  
 20 **INDIA.**

21 (a) FINDINGS.—Congress finds that—

22 (1) the United States, the People’s Republic of  
 23 China, and the Republic of India are some of the  
 24 world’s largest emitters of greenhouse gases;

1           (2) a global solution to climate change requires  
2           action by all 3 countries that is commensurate with  
3           their national circumstances and level of economic  
4           development;

5           (3) awareness of steps each country is taking to  
6           reducing emissions is critical in building confidence  
7           in a cooperative approach to climate change; and

8           (4) understanding challenges each country faces  
9           in reducing emissions can help identify areas of po-  
10          tential collaboration.

11       (b) PURPOSES.—The purposes of this section are—

12           (1) to provide Congress and the American pub-  
13           lic with a better understanding of the steps China  
14           and India are taking to reduce greenhouse gas emis-  
15           sions; and

16           (2) to identify the means by which the United  
17           States can assist China and India in achieving such  
18           a reduction.

19       (c) REPORT.—The Secretary, working with the inter-  
20       agency task force established under subsection (d), shall  
21       prepare an interagency report on climate change and en-  
22       ergy policy in the People’s Republic of China and in the  
23       Republic of India.

24       (d) INTERAGENCY TASK FORCE.—

1           (1) COMPOSITION.—The Secretary shall estab-  
2       lish an interagency task force, which shall consist  
3       of—

4                   (A) the Secretary;

5                   (B) the Secretary of State;

6                   (C) the Secretary of Commerce;

7                   (D) the Administrator of the Environ-  
8       mental Protection Agency;

9                   (E) the Secretary of the Treasury; and

10                  (F) the head of any other agency or de-  
11       partment who has been selected by the Sec-  
12       retary to participate in the task force.

13           (2) CHAIRPERSON.—The Secretary shall serve  
14       as chairperson of the interagency task force.

15       (e) REPORT CONTENTS.—In preparing the report  
16       under subsection (c), the interagency task force shall  
17       evaluate and include in the report, with respect to the Peo-  
18       ple’s Republic of China and the Republic of India—

19                  (1) the national or subnational plans, policies,  
20       programs, laws, regulations, incentive mechanisms,  
21       and other measures that are expected to result in,  
22       or have resulted in, reductions in energy use and  
23       greenhouse gas emissions, including—

1 (A) a list of such plans, policies, programs,  
2 laws, regulations, incentive mechanisms, and  
3 other measures;

4 (B) a description of progress made or ex-  
5 pected in implementing such plans, policies,  
6 programs, laws, regulations, incentive mecha-  
7 nisms, and other measures;

8 (C) estimates of the reductions in energy  
9 use and greenhouse gas emissions achieved or  
10 expected to be achieved as a result of such  
11 plans, policies, programs, laws, regulations, in-  
12 centive mechanisms, and other measures; and

13 (D) recommended areas in which United  
14 States capacity building or other support could  
15 assist the People's Republic of China and the  
16 Republic of India to improve implementation or  
17 compliance with such plans, policies, programs,  
18 laws, regulations, incentive mechanisms, or  
19 other measures, including proposals for funding  
20 such joint activities;

21 (2) estimates, based on the most recent infor-  
22 mation available to the interagency task force from  
23 reliable public sources, of the quantity and types of  
24 energy used and greenhouse gas emissions;

1           (3) a description of the tools, methods, and pro-  
2           cedures that are used for collecting and analyzing  
3           data regarding energy use and greenhouse gas emis-  
4           sions at the national, provincial, sectoral, and facility  
5           level, including—

6                   (A) a comparison to the methodologies  
7                   used by the United States and prevailing inter-  
8                   national practices;

9                   (B) the expected levels of uncertainty re-  
10                  garding the data so collected;

11                  (C) the current transparency of such tools,  
12                  methods, and procedures; and

13                  (D) recommended areas in which United  
14                  States capacity building or other support could  
15                  assist the People’s Republic of China and the  
16                  Republic of India to improve such tools, meth-  
17                  ods, and procedures, increase data trans-  
18                  parency, and strengthen the relevant govern-  
19                  ance framework, including proposals for fund-  
20                  ing such joint activities;

21           (4) an assessment of the state of knowledge of  
22           international, Chinese, and Indian best and current  
23           technologies and practices to—

24                   (A) improve the efficiency of coal use in  
25                   electricity generation;



1 (B) reduce the energy use in industrial fa-  
2 cilities, buildings, appliances, electronic equip-  
3 ment, and other sectors, as appropriate;

4 (C) capture and store carbon from facili-  
5 ties that utilize fossil fuels for energy produc-  
6 tion;

7 (D) produce renewable energy, including  
8 wind, solar, small hydro, and geothermal en-  
9 ergy; and

10 (E) implement more sustainable transport  
11 systems and technologies; and

12 (5) the current status of, and opportunities and  
13 recommendations for—

14 (A) cooperation on technology transfer,  
15 joint research, development, deployment, and  
16 clean energy technology trade between the  
17 United States, the People's Republic of China,  
18 and the Republic of India; and

19 (B) joint opportunities for the development  
20 of intellectual property, including proposals for  
21 financing such joint activities.

22 (f) SUBMISSION TO CONGRESS.—Not later than 6  
23 months after the date of enactment of this Act, the Sec-  
24 retary shall submit the report prepared under this section  
25 to—

1           (1) the Committee on Energy and Natural Re-  
2 sources of the Senate;

3           (2) the Committee on Commerce, Science, and  
4 Transportation of the Senate;

5           (3) the Committee on Environment and Public  
6 Works of the Senate;

7           (4) the Committee on Foreign Relations of the  
8 Senate;

9           (5) the Committee on Energy and Commerce of  
10 the House of Representatives;

11           (6) the Committee on Natural Resources of the  
12 House of Representatives; and

13           (7) the Committee on Foreign Affairs of the  
14 House of Representatives.

15       (g) AUTHORIZATION OF APPROPRIATIONS.—There  
16 are authorized to be appropriated to the Secretary such  
17 sums as may be necessary to carry out this section.

18 **SEC. 605. CARBON LEAKAGE MITIGATION STUDY.**

19       (a) DEFINITIONS.—In this section:

20           (1) CAP-AND-TRADE PROGRAM.—The term  
21 “cap-and-trade program” means an economy-wide  
22 program enacted by Congress under which green-  
23 house gas emission allowances are distributed or  
24 auctioned to control those emissions under the Clean  
25 Air Act (42 U.S.C. 7401 et seq.).

1           (2) CARBON LEAKAGE.—The term “carbon  
2       leakage” means any substantial increase (as deter-  
3       mined by the Secretary) in greenhouse gas emis-  
4       sions—

5           (A) by a manufacturing facility located in  
6       a country without a greenhouse gas emission  
7       regulation commensurate to a cap-and-trade  
8       program; or

9           (B) that is caused by an incremental cost  
10      of production increase in the United States as  
11      a result of a domestic cap-and-trade program.

12          (3) GREENHOUSE GAS.—The term “greenhouse  
13      gas” means any gas designated as a greenhouse gas  
14      under a cap-and-trade program.

15          (4) OUTPUT.—The term “output” means the  
16      total tonnage or other standard unit of production  
17      (as determined by the Secretary) produced by a  
18      manufacturing facility.

19          (b) INDUSTRY PRODUCTIVITY AND CARBON LEAK-  
20      AGE STUDY.—

21          (1) IN GENERAL.—Not later than 120 days  
22      after the date of enactment of this Act, the Sec-  
23      retary, in consultation with the Secretary of Com-  
24      merce, the Administrator of the Environmental Pro-  
25      tection Agency, and the heads of other appropriate

1 Federal departments and agencies, shall conduct a  
2 study to characterize the relative risk of carbon leak-  
3 age and changes in output and investment in United  
4 States industrial sectors and subsectors caused by a  
5 potential cap-and-trade program implemented in the  
6 United States, in the absence of commensurate  
7 greenhouse gas emission regulations in other coun-  
8 tries.

9 (2) INCLUSIONS.—To the maximum extent  
10 practicable, the study under paragraph (1) shall in-  
11 clude an assessment of—

12 (A) the direct and indirect energy intensity  
13 and greenhouse gas intensity of United States  
14 industries in relation to gross value-added, cost  
15 of production, and total shipment values;

16 (B) the price elasticity of United States in-  
17 dustries;

18 (C) the trade elasticity of United States in-  
19 dustries;

20 (D) the trade intensity (calculated as im-  
21 ports plus exports, relative to domestic con-  
22 sumption) of United States industries;

23 (E) other qualitative indicators of the abil-  
24 ity of United States industries to pass on cost  
25 increases to consumers, such as—

1 (i) market structure and concentra-  
2 tion;

3 (ii) level of product differentiation;

4 (iii) the availability of close sub-  
5 stitutes for customers; and

6 (iv) factors that constrain the re-  
7 sponse of foreign producers to an increase  
8 in United States production costs;

9 (F) the overall risk of carbon leakage, ex-  
10 pressed in list form by sector and subsector of  
11 the United States economy, resulting from a  
12 cap-and-trade program;

13 (G) the manner in which the economic im-  
14 pacts of climate change policies compare to  
15 changes over time in other factors affecting  
16 production and investment by industries, such  
17 as currency exchange rates and other factors  
18 the Secretary determines to be relevant; and

19 (H) the highest-priority trading partners  
20 of the industries at risk of carbon leakage, list-  
21 ed in order of priority.

22 (3) REPORT.—On completion of the study  
23 under this subsection, the Secretary shall submit to  
24 Congress a report describing the results of the  
25 study, including recommendations regarding data

1 collection activities and subsequent studies by the  
2 Secretary, if any.

3 (c) STUDY OF MEASURES TO MITIGATE CARBON  
4 LEAKAGE.—

5 (1) IN GENERAL.—Not later than 180 days  
6 after the date of enactment of this Act, but not ear-  
7 lier than the date of submission to Congress of the  
8 report regarding the competitiveness study under  
9 subsection (b)(3), the Secretary, in consultation with  
10 the Secretary of Commerce, the Administrator of the  
11 Environmental Protection Agency, and the heads of  
12 other appropriate Federal departments and agencies,  
13 shall conduct a study to evaluate the impact of po-  
14 tential measures, such as emission allowance alloca-  
15 tion, border tax adjustments, or other measures, to  
16 prevent carbon leakage resulting from a cap-and-  
17 trade program.

18 (2) INCLUSIONS.—The study under paragraph  
19 (1) shall include an assessment of—

20 (A) measures used by other jurisdictions to  
21 prevent carbon leakage under regional, national,  
22 or multinational climate policies;

23 (B)(i) the projected risk of carbon leakage  
24 from United States industries under potential  
25 prices on greenhouse gas emissions;

1 (ii) the potential for that risk to be miti-  
2 gated using measures to prevent leakage; and

3 (iii) realistic scenarios for international cli-  
4 mate policy; and

5 (C) the consistency of measures with inter-  
6 national trade commitments (including prin-  
7 ciples of the World Trade Organization).

8 (3) REPORT.—On completion of the study  
9 under this subsection, the Secretary shall submit to  
10 Congress a report describing the results of the  
11 study, including recommendations of the Secretary,  
12 if any.

13 **SEC. 606. STUDY OF FOREIGN FUEL SUBSIDIES.**

14 (a) IN GENERAL.—The Secretary in consultation  
15 with the Secretary of State and the Secretary of Com-  
16 merce, shall conduct a study of foreign fuel subsidies, in-  
17 cluding—

18 (1) the impact of the subsidies on global energy  
19 supplies, global energy demand, and global economic  
20 impacts; and

21 (2) recommendations on actions that should be  
22 taken to reduce the impact of the subsidies.

23 (b) REPORT.—Not later than 18 months after the  
24 date of enactment of this Act, the Secretary shall submit  
25 to the appropriate committees of Congress a report that

1 describes the results of the study conducted under this sec-  
2 tion, including any recommendations.

3 **SEC. 607. ASSESSMENT OF RENEWABLE ENERGY RE-**  
4 **SOURCES.**

5 Section 201(b) of the Energy Policy Act of 2005 (42  
6 U.S.C. 15851(b)) is amended—

7 (1) in paragraph (1), by striking “; and” and  
8 inserting a semicolon;

9 (2) by redesignating paragraph (2) as para-  
10 graph (4); and

11 (3) by inserting after paragraph (1) the fol-  
12 lowing:

13 “(2) with respect to biomass energy resources,  
14 consideration of—

15 “(A) the quantity of biomass needed for  
16 thermal applications, biofuels, and biomass-  
17 based electricity;

18 “(B) the highest efficiency energy use of  
19 biomass resources; and

20 “(C) the requirements and costs associated  
21 with deployment of biomass energy resources  
22 for each application described in subparagraph  
23 (A);

24 “(3) estimates of the market penetration for  
25 each renewable energy resource that could be accom-



plished by January 1, 2030, by investigating multiple alternative scenarios, including—

“(A) estimates with respect to each renewable energy resource;

“(B) an analysis of the potential of all renewable energy resources; and

“(C) potential impacts associated with the development of each resource and all renewable energy resources in combination; and”.

**SEC. 608. EFFICIENCY REVIEW OF ELECTRIC GENERATION FACILITIES.**

(a) DEFINITIONS.—In this section:

(1) EFFICIENCY.—The term “efficiency” means the operating efficiency of an electric generation facility as determined by the average annual heat rate of the facility, measured in British thermal units required to generate a kilowatt-hour of electricity from the facility.

(2) ELECTRIC GENERATION FACILITY.—The term “electric generation facility” means a coal-fired or natural gas-fired electric generation facility in the United States with a generating capacity that is greater than 50 megawatts.

(b) REVIEW.—

1           (1) IN GENERAL.—Not later than 120 days  
2           after the date of enactment of this Act, the Sec-  
3           retary, in consultation with relevant stakeholders,  
4           shall complete an efficiency review to quantify the  
5           efficiencies of, and annual carbon dioxide and other  
6           emissions from, electric generation facilities in the  
7           United States.

8           (2) ADMINISTRATION.—In conducting the re-  
9           view, the Secretary shall—

10                   (A) analyze efficiency trends over the 5-  
11                   year period ending on December 31 of the year  
12                   preceding the year of enactment of this Act;  
13                   and

14                   (B) to the maximum extent practicable,  
15                   use existing data and information.

16           (3) CONFIDENTIALITY OF INFORMATION.—

17                   (A) IN GENERAL.—In the case of informa-  
18                   tion obtained under this section, the Secretary  
19                   (including any other officer, employee, or agent  
20                   of the Department of Energy) and any other  
21                   person shall not—

22                           (i) use the information for a purpose  
23                           other than the development or reporting of  
24                           aggregate data in a manner such that—

1 (I) the identity of the person who  
 2 supplied the information is not dis-  
 3 cernible and is not material to the in-  
 4 tended uses of the information; and

5 (II) no proprietary information,  
 6 trade secret, or other confidential in-  
 7 formation is disclosed; or

8 (ii) disclose the information to the  
 9 public, unless the information has been  
 10 transformed into a statistical or aggregate  
 11 form that does not—

12 (I) allow the identification of the  
 13 person who supplied particular infor-  
 14 mation; or

15 (II) disclose any proprietary in-  
 16 formation, trade secret, or other con-  
 17 fidential information.

18 (B) PENALTY.—Any person that violates  
 19 subparagraph (A) shall be fined or imprisoned,  
 20 and removed from office or employment, in ac-  
 21 cordance with section 1905 of title 18, United  
 22 States Code.

23 (c) REPORT.—After providing notice and an oppor-  
 24 tunity for comment but not later than 120 days after the  
 25 date of completion of the review under subsection (b), the

1 Secretary, in consultation with the Administrator of the  
2 Environmental Protection Agency, shall submit to the  
3 Committee on Energy and Natural Resources and the  
4 Committee on Environment and Public Works of the Sen-  
5 ate and the Committee on Energy and Commerce and the  
6 Committee on Science and Technology of the House of  
7 Representatives a report that—

8           (1) identifies technologies, equipment, and proc-  
9           esses that are adequately demonstrated to be com-  
10          mercially deployed and could increase the efficiency  
11          of the electric generation facilities reviewed;

12          (2) identifies the technical, economic, regu-  
13          latory, environmental, and other obstacles to electric  
14          generation facilities undertaking the installation or  
15          implementation of the technologies, equipment, or  
16          processes described in paragraph (1);

17          (3) identifies legislative, administrative, and  
18          other actions that could reduce or eliminate the ob-  
19          stacles identified under paragraph (2);

20          (4) calculates the effect on total greenhouse gas  
21          and other emissions from electric generation facili-  
22          ties that would result from installation or implemen-  
23          tation of the technologies, equipment, and processes  
24          identified under paragraph (1), assuming output is  
25          held constant for the United States in the aggregate

1 and the obstacles identified under paragraph (2) are  
2 reduced or eliminated; and

3 (5) calculates the effect on greenhouse gas and  
4 other emissions per megawatt-hour from electric  
5 generation facilities that would result from installa-  
6 tion or implementation of the technologies, equip-  
7 ment, and processes identified under paragraph (1),  
8 assuming the obstacles identified under paragraph  
9 (2) are reduced or eliminated.

10 (d) AUTHORIZATION OF APPROPRIATIONS.—There is  
11 authorized to be appropriated to carry out this section  
12 \$3,000,000 to remain available until expended.

13 **SEC. 609. REPORT ON EMISSIONS OF ALTERNATIVE TRANS-**  
14 **PORTATION FUELS.**

15 (a) IN GENERAL.—In cooperation with the Adminis-  
16 trator of the Environmental Protection Agency, the Sec-  
17 retary of Defense, the Administrator of the Federal Avia-  
18 tion Administration, and the Secretary of Health and  
19 Human Services, the Secretary shall—

20 (1) carry out a research and demonstration pro-  
21 gram to evaluate the emissions from the use of alter-  
22 native transportation fuels;

23 (2) evaluate the effect of using alternative  
24 transportation fuels on land and air engine exhaust  
25 emissions; and

1           (3) in accordance with subsection (e), submit to  
2       Congress a report on the effect on air quality and  
3       public health of using alternative fuels in the trans-  
4       portation sector.

5       (b) GUIDANCE AND TECHNICAL SUPPORT.—The Sec-  
6       retary shall issue any guidance or technical support docu-  
7       ments necessary to facilitate the effective use of alter-  
8       native transportation fuels and blends under this section.

9       (c) FACILITIES.—For the purpose of evaluating the  
10      emissions of alternative transportation fuels, the Secretary  
11      shall engage research centers for alternative fuels in the  
12      evaluation and preparation of the report required under  
13      subsection (a)(3).

14      (d) REQUIREMENTS.—The program described in sub-  
15      section (a)(1) shall consider—

16           (1) the use of alternative transportation fuels  
17           and blends for heavy-duty and light-duty diesel en-  
18           gines and the aviation sector; and

19           (2) the production costs associated with domes-  
20           tic production of those fuels and prices for con-  
21           sumers.

22      (e) REPORTS.—The Secretary shall submit to the  
23      Committee on Energy and Natural Resources of the Sen-  
24      ate and the Committee on Energy and Commerce of the  
25      House of Representatives—

1           (1) not later than 180 days after the date of  
2           enactment of this Act, an interim report on actions  
3           taken to carry out this section; and

4           (2) not later than 1 year after the date of en-  
5           actment of this Act, a final report on actions taken  
6           to carry out this section.

7           (f) AUTHORIZATION OF APPROPRIATIONS.—There  
8           are authorized to be appropriated such sums as are nec-  
9           essary to carry out this section.

10 **SEC. 610. OIL SAVINGS.**

11           (a) FINDINGS.—Congress finds that—

12           (1) the United States imports more foreign oil  
13           from the Middle East today than before the attacks  
14           on the United States on September 11, 2001;

15           (2) the United States remains the most oil-de-  
16           pendent industrialized nation in the world, con-  
17           suming approximately 25 percent of the oil supply of  
18           the world;

19           (3) the ongoing dependence of the United  
20           States on foreign oil is one of the greatest threats  
21           to the national security and economy of the United  
22           States; and

23           (4) the United States needs to take trans-  
24           formative steps to wean itself from its addiction to  
25           foreign oil.

1 (b) POLICY ON REDUCING OIL DEPENDENCE.—It is  
2 the policy of the United States to reduce the dependence  
3 of the United States on foreign oil, and thereby—

4 (1) alleviate the strategic dependence of the  
5 United States on foreign oil-producing countries;

6 (2) reduce the economic vulnerability of the  
7 United States; and

8 (3) reduce the greenhouse gas emissions associ-  
9 ated with oil use.

10 (c) OIL SAVINGS REPORT.—

11 (1) IN GENERAL.—Not later than 270 days  
12 after the date of enactment of this Act and every 3  
13 years thereafter, an interagency task force composed  
14 of the Secretary of Energy and the head of any  
15 other agency that the President determines to be ap-  
16 propriate (referred to in this section as the “Inter-  
17 agency Task Force”) shall submit to Congress a re-  
18 port that—

19 (A) describes options for agency action  
20 that, when taken together, would save from the  
21 baseline determined under paragraph (4)—

22 (i) 2,500,000 barrels of oil per day on  
23 average during calendar year 2016;

24 (ii) 7,000,000 barrels of oil per day  
25 on average during calendar year 2026; and



1 (iii) 10,000,000 barrels of oil per day  
2 on average during calendar year 2030; and

3 (B) analyzes for all Federal agencies—

4 (i) the expected oil savings from the  
5 baseline to be accomplished by—

6 (I) chapter 329 of title 49,  
7 United States Code (including regula-  
8 tions promulgated to carry out that  
9 chapter); and

10 (II) section 211(o) of the Clean  
11 Air Act (42 U.S.C. 7545(o)) (includ-  
12 ing regulations promulgated to carry  
13 out section 211(o) of that Act); and

14 (ii) whether the options described in  
15 subparagraph (A), taken together with ex-  
16 pected oil savings described in clause (i),  
17 will achieve the oil savings specified in sub-  
18 paragraph (A).

19 (2) CONTENTS.—Each report shall—

20 (A) be consistent with the policy under  
21 subsection (b);

22 (B) include only options directly related to  
23 reduced oil consumption;

1 (C) include a description of the advantages  
2 and disadvantages (including implications for  
3 national security) for each option; and

4 (D) not include options that would increase  
5 lifecycle greenhouse gas emissions above levels  
6 in effect on the date of enactment of this Act.

7 (3) ADDITIONAL LEGISLATIVE AUTHORITY.—

8 Each report may include a request to Congress for  
9 any additional legislative authority that is necessary  
10 to implement any recommendations made in the re-  
11 port.

12 (4) BASELINE.—In performing the analyses re-  
13 quired for the report, the Interagency Task Force  
14 shall—

15 (A) determine oil savings as the projected  
16 reduction in oil consumption from the baseline  
17 established by the reference case contained in  
18 the report of the Energy Information Adminis-  
19 tration entitled “Annual Energy Outlook  
20 2009”;

21 (B) determine the oil savings projections  
22 required on an annual basis for each of cal-  
23 endar years 2009 through 2030; and

24 (C) account for any overlap among imple-  
25 mentation actions to ensure that the projected

1           oil savings from all the recommendations, taken  
2           together, are as accurate as practicable.

3       (d) ANNUAL REPORT ON OIL SAVINGS MEASURES.—

4 Not later than 1 year after the date of initial oil savings  
5 report under subsection (c) and annually thereafter, the  
6 Secretary of Energy shall submit to Congress a report that  
7 estimates the quantity of oil actually saved by the oil sav-  
8 ings measures that the Federal Government has imple-  
9 mented during the prior year.

10       (e) RELATIONSHIP TO OTHER LAWS.—Nothing in  
11 this section affects the authority provided or responsibility  
12 delegated under any other law.

Calendar No. 110

11<sup>TH</sup> CONGRESS  
1<sup>ST</sup> Session

**S. 1462**

[Report No. 111-48]

**A BILL**

To promote clean energy technology development, enhanced energy efficiency, improved energy security, and energy innovation and workforce development, and for other purposes.

JULY 16, 2009

Read twice and placed on the calendar