

109<sup>TH</sup> CONGRESS  
1<sup>ST</sup> SESSION

# S. 1133

To authorize the Secretary of Energy to develop and implement an accelerated research, development, and demonstration program for advanced clean coal technologies for use in coal-based generation facilities and to provide financial incentives to encourage the early commercial deployment of advanced clean coal technologies through the retrofitting, repowering, replacement, and new construction of coal-based electricity generating facilities and industrial gasification facilities.

---

IN THE SENATE OF THE UNITED STATES

MAY 26, 2005

Mr. BYRD (for himself, Mr. ROCKEFELLER, and Mr. SPECTER) introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

---

## A BILL

To authorize the Secretary of Energy to develop and implement an accelerated research, development, and demonstration program for advanced clean coal technologies for use in coal-based generation facilities and to provide financial incentives to encourage the early commercial deployment of advanced clean coal technologies through the retrofitting, repowering, replacement, and new construction of coal-based electricity generating facilities and industrial gasification facilities.

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

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

2 (a) **SHORT TITLE.**—This Act may be cited as the  
 3 “Clean Coal Research, Development, Demonstration, and  
 4 Deployment Act of 2005”.

5 (b) **TABLE OF CONTENTS.**—The table of contents of  
 6 this Act is as follows:

Sec. 1. Short title; table of contents.  
 Sec. 2. Definitions.

**TITLE I—CLEAN COAL INITIATIVE**

Subtitle A—Clean Coal Research, Development, and Demonstration Program

Sec. 101. Clean coal power initiative.  
 Sec. 102. Research and development programs.  
 Sec. 103. Authorization of appropriations.

Subtitle B—Coal-Based Electric Generation Deployment Program

Sec. 111. Purpose.  
 Sec. 112. Definitions.  
 Sec. 113. Deployment incentive program.  
 Sec. 114. Election of Federal financial incentives.  
 Sec. 115. Qualifying advanced coal projects.  
 Sec. 116. Advanced coal-based generation technology.  
 Sec. 117. Federal project coordinator.  
 Sec. 118. Applicability.  
 Sec. 119. Investment tax credit and shortened recovery period.  
 Sec. 120. Credit to holders of clean energy bonds.

**TITLE II—INDUSTRIAL GASIFICATION INITIATIVE**

Sec. 201. Findings and purpose.  
 Sec. 202. Definitions.

Subtitle A—Industrial Gasification Research, Development, and  
 Demonstration Program

Sec. 211. Establishment.  
 Sec. 212. Cost and performance goals.  
 Sec. 213. Study.  
 Sec. 214. Authorization of appropriations.

Subtitle B—Industrial Gasification Deployment Program

Sec. 221. Establishment of certification program.  
 Sec. 222. Credit for production from certified industrial gasification projects.

7 **SEC. 2. DEFINITIONS.**

8 In this Act:

1           (1) DEPARTMENT.—The term “Department”  
2 means the Department of Energy.

3           (2) SECRETARY.—The term “Secretary” means  
4 the Secretary of Energy.

5                   **TITLE I—CLEAN COAL**  
6                   **INITIATIVE**  
7 **Subtitle A—Clean Coal Research,**  
8 **Development, and Demonstra-**  
9 **tion Program**

10 **SEC. 101. CLEAN COAL POWER INITIATIVE.**

11           (a) IN GENERAL.—

12           (1) ESTABLISHMENT.—The Secretary shall es-  
13 tablish a clean coal power initiative under which the  
14 Secretary shall provide assistance under this subtitle  
15 for projects described in paragraph (2).

16           (2) PROJECTS.—To be eligible to receive assist-  
17 ance under this subtitle, a project shall—

18                   (A) significantly advance efficiency, reli-  
19 ability, environmental performance, and cost  
20 competitiveness or develop alternative tech-  
21 nology pathways beyond the levels of tech-  
22 nologies that—

23                           (i) are in commercial service as of the  
24 date of enactment of this Act; or

1           (ii) have been demonstrated at scales  
2           sufficient to demonstrate that commercial  
3           service is viable, as determined by the Sec-  
4           retary; and

5           (B) be operated in the United States using  
6           United States coal.

7           (b) TECHNICAL CRITERIA.—

8           (1) GASIFICATION PROJECTS.—

9           (A) ALLOCATION OF FUNDS.—In allocating  
10          the funds made available under section 103(a),  
11          the Secretary shall ensure that at least 65 per-  
12          cent of the funds are used to fund projects  
13          using coal-based gasification technologies, in-  
14          cluding—

- 15               (i) gasification combined cycle;  
16               (ii) gasification fuel cells and turbine  
17               combined cycle;  
18               (iii) gasification coproduction; and  
19               (iv) hybrid gasification and combus-  
20               tion.

21          (B) TECHNICAL MILESTONES.—

22               (i) PERIODIC DETERMINATION.—

23                       (I) IN GENERAL.—The Secretary  
24                       shall periodically establish technical  
25                       milestones specifying the emission and

1 thermal efficiency levels to which  
2 power and coproduction projects  
3 under this subtitle shall be designed,  
4 and reasonably expected, to achieve.

5 (II) PRESCRIPTIVE MILE-  
6 STONES.—The technical milestones  
7 shall become more prescriptive during  
8 the period of the clean coal power ini-  
9 tiative.

10 (ii) 2020 GOALS.—The Secretary shall  
11 establish periodic milestones so as to  
12 achieve, by the year 2020, coal gasification  
13 projects able—

14 (I) to remove at least 99 percent  
15 of the sulfur compounds;

16 (II) to emit not more than .05  
17 lbs of NO<sub>x</sub> per million Btu;

18 (III) to achieve 95 percent reduc-  
19 tions in mercury emissions; and

20 (IV) to achieve thermal to elec-  
21 trical conversion efficiencies (also  
22 known as “higher heating value”) of  
23 at least—

24 (aa) 50 percent for coal of  
25 more than 9,000 Btu;

1 (bb) 48 percent for coal of  
2 7,000 to 9,000 Btu; and

3 (cc) 46 percent for coal of  
4 less than 7,000 Btu.

5 (2) OTHER PROJECTS.—

6 (A) ALLOCATION OF FUNDS.—The Sec-  
7 retary shall ensure that not more than 35 per-  
8 cent of the funds made available under section  
9 103(a) are used to fund projects other than  
10 those described in paragraph (1)(A).

11 (B) TECHNICAL MILESTONES.—

12 (i) PERIODIC DETERMINATION.—

13 (I) IN GENERAL.—The Secretary  
14 shall periodically establish technical  
15 milestones specifying the emission and  
16 thermal efficiency levels that projects  
17 other than those described in para-  
18 graph (1)(A) shall be designed, and  
19 reasonably expected, to achieve.

20 (II) PRESCRIPTIVE MILE-  
21 STONES.—The technical milestones  
22 shall become more prescriptive during  
23 the period of the clean coal power ini-  
24 tiative.

1 (ii) 2020 GOALS.—The Secretary shall  
2 establish the periodic milestones so as to  
3 achieve, by the year 2020, projects able—

4 (I) to remove at least 97 percent  
5 of sulfur dioxide;

6 (II) to emit not more than .08  
7 lbs of NO<sub>x</sub> per million Btu;

8 (III) to achieve 90 percent reduc-  
9 tions in mercury emissions; and

10 (IV) to achieve thermal to elec-  
11 trical conversion efficiencies (also  
12 known as “higher heating value”) of  
13 at least—

14 (aa) 43 percent for coal of  
15 more than 9,000 Btu;

16 (bb) 41 percent for coal of  
17 7,000 to 9,000 Btu; and

18 (cc) 39 percent for coal of  
19 less than 7,000 Btu.

20 (3) EXISTING UNITS.—In the case of projects  
21 at units in existence on the date of enactment of this  
22 Act, in lieu of the thermal efficiency requirements  
23 described in paragraphs (1)(B)(ii) and (2)(B)(ii),  
24 the milestones shall be designed to achieve an overall  
25 thermal design efficiency improvement, compared to

1 the efficiency of the unit as operated, of not less  
2 than—

3 (A) 7 percentage points for coal of more  
4 than 9,000 Btu;

5 (B) 6 percentage points for coal of 7,000  
6 to 9,000 Btu; or

7 (C) 4 percentage points for coal of less  
8 than 7,000 Btu.

9 (c) PROJECT SELECTION.—

10 (1) IN GENERAL.—In evaluating project pro-  
11 posals, the Secretary shall select those demonstra-  
12 tion projects that are expected to demonstrate  
13 progress toward achieving the milestones described  
14 in paragraphs (1) and (2) of subsection (b).

15 (2) SITE ELEVATION AND RANK OF COAL.—In  
16 evaluating project proposals to achieve the mile-  
17 stones described in paragraphs (1)(B)(i), (2)(B)(i),  
18 and (3) of subsection (b), and in determining  
19 progress toward achieving the milestones described  
20 in paragraph (4) and paragraphs (1)(B)(ii) and  
21 (2)(B)(ii) of subsection (b), the Secretary shall take  
22 into account and make adjustments for the Btu  
23 value of various coals and the elevation of the site  
24 at which a project is proposed to be constructed.



1           (3) CONSULTATION.—Before establishing the  
2 technical milestones under paragraphs (1)(B)(i)(I)  
3 and (2)(B)(i)(I) of subsection (b), the Secretary  
4 shall consult with—

5           (A) the Administrator of the Environ-  
6 mental Protection Agency; and

7           (B) interested persons, including—

8                 (i) coal producers;

9                 (ii) industries using coal;

10                (iii) organizations that promote coal  
11 or advanced coal technologies;

12                (iv) environmental organizations;

13                (v) organizations representing work-  
14 ers; and

15                (vi) organizations representing con-  
16 sumers.

17           (4) PERMITTED USES.—In carrying out this  
18 subtitle, the Secretary shall give high priority to  
19 projects that include, as part of the project—

20           (A) the separation or capture of carbon di-  
21 oxide; or

22           (B) the reduction of the demand for nat-  
23 ural gas if deployed.

24           (d) FINANCIAL CRITERIA.—The Secretary shall not  
25 provide assistance under this subtitle for a project unless

1 the recipient documents to the satisfaction of the Sec-  
2 retary that—

3 (1) the recipient organization is financially re-  
4 sponsible;

5 (2) the recipient shall provide sufficient infor-  
6 mation to the Secretary to ensure the Secretary that  
7 the federally-awarded funds will be spent efficiently  
8 and effectively; and

9 (3) a market exists for the technology being  
10 demonstrated or applied, as evidenced by statements  
11 of interest in writing from potential purchasers of  
12 the technology.

13 (e) FINANCIAL ASSISTANCE.—The Secretary shall  
14 provide assistance to projects that, as determined by the  
15 Secretary—

16 (1) meet the requirements of subsections (a),  
17 (b), and (c); and

18 (2) are likely—

19 (A) to achieve overall cost reductions in  
20 the use of coal to generate useful forms of en-  
21 ergy or chemical feedstocks; and

22 (B) to improve the competitiveness of coal  
23 among various forms of energy in order to  
24 maintain a diversity of fuel choices in the

1 United States to meet electricity generation or  
2 chemical feedstock requirements.

3 (f) FEDERAL SHARE.—The Federal share of the cost  
4 of a coal or related technology project carried out using  
5 funds made available under this subtitle shall not exceed  
6 50 percent, as determined by the Secretary.

7 (g) SCHEDULED COMPLETION OF SELECTED  
8 PROJECTS.—

9 (1) IN GENERAL.—In selecting a project for fi-  
10 nancial assistance under this section, the Secretary  
11 shall establish a reasonable period of time during  
12 which the owner or operator of the project shall  
13 complete the construction or demonstration phase of  
14 the project, as the Secretary determines to be appro-  
15 priate.

16 (2) CONDITION OF FINANCIAL ASSISTANCE.—  
17 The Secretary shall require as a condition of receipt  
18 of any financial assistance under this subtitle that  
19 the recipient of the assistance enter into an agree-  
20 ment with the Secretary not to request an extension  
21 of the time period established for the project by the  
22 Secretary under paragraph (1).

23 (3) EXTENSION OF TIME PERIOD.—

24 (A) IN GENERAL.—Subject to subpara-  
25 graph (B), the Secretary may extend the time

1 period established under paragraph (1) if the  
2 Secretary determines, in the sole discretion of  
3 the Secretary, that the owner or operator of the  
4 project cannot complete the construction or  
5 demonstration phase of the project within the  
6 time period due to circumstances beyond the  
7 control of the owner or operator.

8 (B) LIMITATION.—The Secretary shall not  
9 extend a time period under subparagraph (A)  
10 by more than 4 years.

11 (h) REPAYMENT OF FEDERAL SHARE.—Notwith-  
12 standing any other provision of law, the Secretary shall  
13 not condition an award of financial assistance to a Clean  
14 Coal Power Initiative project under this subtitle on repay-  
15 ment of the Federal share of the cost of the project.

16 (i) APPLICABILITY.—No technology, or level of emis-  
17 sion reduction, solely by reason of the use of the tech-  
18 nology, or the achievement of the emission reduction by  
19 the demonstration of any technology or performance level  
20 by 1 or more facilities receiving assistance under this sub-  
21 title, shall be considered to indicate that the technology  
22 or performance level is—

23 (1) adequately demonstrated for purposes of  
24 section 111 of the Clean Air Act (42 U.S. C. 7411);

1 (2) achievable for purposes of section 169 of  
2 that Act (42 U.S. C. 7479); or

3 (3) achievable in practice for purposes of sec-  
4 tion 171 of that Act (42 U.S. C. 7501).

5 (j) REPORT.—Not later than 1 year after the date  
6 of enactment of this Act, and once every 2 years thereafter  
7 through 2013, the Secretary, in consultation with other  
8 appropriate Federal agencies, shall submit to Congress a  
9 report describing—

10 (1)(A) the technical milestones described in this  
11 section; and

12 (B) how those milestones ensure progress to-  
13 ward meeting the requirements of paragraphs  
14 (1)(B)(ii) and (2)(B)(ii) of subsection (b);

15 (2) how the technologies being demonstrated  
16 under the clean coal power initiative demonstrate  
17 methods and equipment that can be used in broader  
18 commercial applications in addition to electric power  
19 generation; and

20 (3) the status of projects that receive assistance  
21 under this subtitle.

22 (k) FEE TITLE.—The Secretary may vest fee title or  
23 other property interests acquired under cost-share Clean  
24 Coal Power Initiative agreements in any entity, including  
25 the United States.

1           (l) DATA PROTECTION.—For a period not exceeding  
2 5 years after completion of the operations phase of a coop-  
3 erative agreement, the Secretary may provide appropriate  
4 protections, including exemptions from subchapter II of  
5 chapter 5 of title 5, United States Code, against the dis-  
6 semination of information that results from demonstration  
7 activities carried out under the Clean Coal Power Initia-  
8 tive Program and that would be a trade secret or commer-  
9 cial or financial information that is privileged or confiden-  
10 tial if the information had been obtained from and first  
11 produced by a non-Federal party participating in a Clean  
12 Coal Power Initiative project.

13 **SEC. 102. RESEARCH AND DEVELOPMENT PROGRAMS.**

14           (a) OBJECTIVES.—The Secretary shall conduct a pro-  
15 gram of technology research, development, demonstration,  
16 and commercial application for coal and power systems,  
17 including programs to facilitate production and generation  
18 of coal-based energy through—

- 19           (1) innovations for existing plants;  
20           (2) gasification systems;  
21           (3) advanced combustion systems;  
22           (4) turbines for synthesis gas derived from coal;  
23           (5) carbon capture and sequestration research  
24           and development;

- 1           (6) coal-derived chemicals and liquid transpor-  
2           tation fuels;  
3           (7) solid fuels and feedstocks;  
4           (8) advanced coal-related research;  
5           (9) advanced separation technologies;  
6           (10) fuel cells for operation on synthesis gas de-  
7           rived from coal; and  
8           (11) projects for permeability enhancement in  
9           coals for natural gas production and carbon dioxide  
10          sequestration.

11          (b) CARBON CAPTURE RESEARCH AND DEVELOP-  
12          MENT PROGRAM.—

13           (1) IN GENERAL.—In addition to the research  
14           and development activities authorized under sub-  
15           section (a)(5), the Secretary shall carry out a 10-  
16           year carbon capture research and development pro-  
17           gram to develop carbon dioxide capture technologies  
18           for use—

19                   (A) in new coal utilization facilities; and

20                   (B) on the existing fleet of coal-based  
21           units.

22           (2) OBJECTIVES.—The program objectives shall  
23           be—

24                   (A) to develop carbon dioxide capture tech-  
25           nologies, including adsorption and absorption

1 techniques and chemical processes, to remove  
2 the carbon dioxide from gas streams containing  
3 carbon dioxide potentially amenable to seques-  
4 tration;

5 (B) to develop technologies that would di-  
6 rectly produce concentrated streams of carbon  
7 dioxide potentially amenable to sequestration;

8 (C) to increase the efficiency of the overall  
9 system to reduce the quantity of carbon dioxide  
10 emissions released from the system per mega-  
11 watt generated; and

12 (D) in conjunction with the carbon dioxide  
13 capture program, to promote a robust carbon  
14 sequestration program and continue the work of  
15 the Department in conjunction with the private  
16 sector, through regional carbon sequestration  
17 partnerships.

18 (c) COST AND PERFORMANCE GOALS.—

19 (1) IN GENERAL.—In carrying out programs  
20 under this section, in each of fiscal years 2008 and  
21 2016 and in each year following fiscal year 2021,  
22 the Secretary shall identify cost and performance  
23 goals for coal-based technologies that would permit  
24 the continued cost-competitive use of coal for the



1 production of electricity, chemical feedstocks, and  
2 liquid transportation fuels.

3 (2) ESTABLISHING GOALS.—In identifying cost  
4 and performance goals under paragraph (1), the  
5 Secretary shall—

6 (A) consider activities and studies under-  
7 taken as of the date of enactment of this Act  
8 by industry in cooperation with the Department  
9 in support of the goals;

10 (B) consult with interested persons, includ-  
11 ing—

12 (i) coal producers;

13 (ii) industries using coal;

14 (iii) organizations that promote coal  
15 and advanced coal technologies;

16 (iv) environmental organizations;

17 (v) organizations representing work-  
18 ers; and

19 (vi) organizations representing con-  
20 sumers;

21 (C) not later than 120 days after the date  
22 of enactment of this Act, publish in the Federal  
23 Register proposed draft cost and performance  
24 goals for public comment; and

1 (D) not later than 180 days after the date  
2 of enactment of this Act and every 4 years  
3 thereafter, submit to Congress a report that—

4 (i) describes final cost and perform-  
5 ance goals for technologies described in  
6 paragraph (1);

7 (ii) includes a list of technical mile-  
8 stones; and

9 (iii) explains how programs authorized  
10 in this section will not duplicate activities  
11 carried out under section 101.

12 **SEC. 103. AUTHORIZATION OF APPROPRIATIONS.**

13 (a) CLEAN COAL POWER INITIATIVE.—

14 (1) IN GENERAL.—There is authorized to be  
15 appropriated to the Secretary to carry out section  
16 101 \$200,000,000 for each of fiscal years 2006  
17 through 2012, to remain available until expended.

18 (2) REPORT.—Not later than March 31, 2006,  
19 the Secretary shall submit to Congress a report that  
20 includes a 10-year plan that includes—

21 (A) a detailed assessment of whether the  
22 aggregate assistance levels provided under para-  
23 graph (1) are the appropriate assistance levels  
24 for the clean coal power initiative;

1 (B) a detailed description of how proposals  
 2 for assistance under the clean coal power initia-  
 3 tive will be solicited and evaluated, including a  
 4 list of all activities expected to be undertaken;

5 (C) a detailed list of technical milestones  
 6 for each coal and related technology that will be  
 7 pursued; and

8 (D) a detailed description of how the clean  
 9 coal initiative will avoid problems enumerated in  
 10 Government Accountability Office reports on  
 11 the Clean Coal Technology Program of the De-  
 12 partment, including problems that have resulted  
 13 in unspent funds and projects that failed either  
 14 financially or scientifically.

15 (b) RESEARCH AND DEVELOPMENT PROGRAMS.—

16 (1) IN GENERAL.—There are authorized to be  
 17 appropriated to the Secretary to carry out clean coal  
 18 technology research, development, demonstration,  
 19 and commercial application activities, including ac-  
 20 tivities described in section 102(a)—

21 (A) \$324,000,000 for fiscal year 2005;

22 (B) \$337,000,000 for fiscal year 2006;

23 (C) \$364,000,000 for fiscal year 2007;

24 (D) \$394,000,000 for fiscal year 2008;

25 and

1 (E) \$427,000,000 for fiscal year 2009.

2 (2) CARBON CAPTURE RESEARCH AND DEVEL-  
3 OPMENT PROGRAM.—In addition to the funds au-  
4 thorized to be appropriated to carry out section  
5 102(a)(5), there are authorized to be appropriated  
6 to the Secretary to carry out section 102(b)—

7 (A) \$20,000,000 for fiscal year 2006;

8 (B) \$25,000,000 for fiscal year 2007;

9 (C) \$30,000,000 for fiscal year 2008;

10 (D) \$35,000,000 for fiscal year 2009; and

11 (E) \$40,000,000 for fiscal year 2010.

12 **Subtitle B—Coal-Based Electric**  
13 **Generation Deployment Program**

14 **SEC. 111. PURPOSE.**

15 The purpose of this subtitle is to provide Federal fi-  
16 nancial assistance for projects that will use integrated gas-  
17 ification combined cycle or other advanced coal-based gen-  
18 eration technologies—

19 (1) in new electric generating units;

20 (2) to repower existing electric generation units;

21 or

22 (3) to retrofit existing natural gas combined  
23 cycle units to operate on coal instead of natural gas.

24 **SEC. 112. DEFINITIONS.**

25 In this subtitle:

1           (1)   ADVANCED   COAL-BASED   GENERATION  
2   TECHNOLOGY.—The term “advanced coal-based gen-  
3   eration technology” means a technology that meets  
4   the requirements of section 116.

5           (2)   CARBON CAPTURE CAPABILITY.—The term  
6   “carbon capture capability” means an integrated  
7   gasification combined cycle technology facility capa-  
8   ble of adding components that can capture, separate  
9   on a long-term basis, isolate, remove, and sequester  
10   greenhouse gases that result from the generation of  
11   electricity.

12          (3)   ELECTRIC GENERATION UNIT.—The term  
13   “electric generation unit” means any facility at least  
14   50 percent of the total annual net output of which  
15   is electrical power, including an otherwise eligible fa-  
16   cility that is used in an industrial application.

17          (4)   INTEGRATED   GASIFICATION   COMBINED  
18   CYCLE.—The term “integrated gasification combined  
19   cycle” means an electric generation unit that pro-  
20   duces electricity by converting coal to synthesis gas  
21   that is used to fuel a combined-cycle plant that pro-  
22   duces electricity from both a combustion turbine (in-  
23   cluding a combustion turbine/fuel cell hybrid) and a  
24   steam turbine.

1 (5) QUALIFYING ADVANCED COAL PROJECT.—

2 The term “qualifying advanced coal project” means  
3 a project that meets the requirements of section  
4 115.

5 **SEC. 113. DEPLOYMENT INCENTIVE PROGRAM.**

6 (a) ESTABLISHMENT.—Not later than 180 days after  
7 the date of enactment of this Act, the Secretary shall  
8 begin carrying out a program to provide Federal financial  
9 incentives for deployment of advanced coal-based genera-  
10 tion technologies.

11 (b) CERTIFICATION.—

12 (1) IN GENERAL.—The Secretary may certify a  
13 qualifying advanced coal project as eligible to receive  
14 1 of the Federal financial incentives provided under  
15 section 114.

16 (2) PERIOD OF ISSUANCE.—A certificate of eli-  
17 gibility under this subsection may be issued only  
18 during the 10 fiscal year period beginning on Octo-  
19 ber 1, 2005.

20 (3) AGGREGATE GENERATING CAPACITY.—

21 (A) IN GENERAL.—The aggregate gener-  
22 ating capacity of projects certified by the Sec-  
23 retary under paragraph (1) may not exceed  
24 10,000 megawatts.

1 (B) PARTICULAR PROJECTS.—Of the total  
2 megawatts of capacity that the Secretary is au-  
3 thorized to certify—

4 (i) 6,000 megawatts shall be available  
5 only for use for integrated gasification  
6 combined cycle projects; and

7 (ii) 4,000 megawatts shall be available  
8 only for use for projects that use other ad-  
9 vanced coal-based generation technologies.

10 (C) DETERMINATION OF CAPACITY.—In  
11 determining capacity under this paragraph in  
12 the case of a retrofitted or repowered plant, ca-  
13 pacity shall be determined based on total design  
14 capacity after the retrofit or repowering of the  
15 existing facility is accomplished.

16 (4) APPLICATIONS.—The Secretary shall act on  
17 applications for certification as the applications are  
18 received.

19 (5) DETERMINATION.—In determining whether  
20 to certify a qualifying advanced coal project, the  
21 Secretary shall take into account any written state-  
22 ment from the Governor of the State in which the  
23 project is to be sited that the construction and oper-  
24 ation of the project is consistent with State environ-  
25 mental and energy policy and requirements.

1           (6) APPLICATION REQUIREMENT.—An applica-  
2           tion for certification shall specify which of the incen-  
3           tives under section 114 the project sponsor will elect.

4           (7) REVIEW AND REDISTRIBUTION.—

5           (A) REVIEW.—Not later than 6 years after  
6           the date of enactment of this Act, the Secretary  
7           shall review the projects certified and  
8           megawatts allocated under this section as of the  
9           date that is 6 years after the date of enactment  
10          of this Act.

11          (B) REDISTRIBUTION.—The Secretary  
12          may reallocate the megawatts available under  
13          clauses (i) and (ii) of subsection (b)(3)(B) if the  
14          Secretary determines that—

15               (i) capacity cannot be used because  
16               there is an insufficient quantity of quali-  
17               fying applications for certification pending  
18               for any available capacity at the time of  
19               the review; or

20               (ii) any certification commitment  
21               made pursuant to section 115(d)(2) has  
22               not been revoked pursuant to section  
23               115(d)(2)(B)(ii) because the project sub-  
24               ject to the certification commitment has  
25               been delayed as a result of third party op-



1 position or litigation to the proposed  
2 project.

3 **SEC. 114. ELECTION OF FEDERAL FINANCIAL INCENTIVES.**

4 (a) IN GENERAL.—The project sponsor of a quali-  
5 fying advanced coal project certified under section 113(b)  
6 may elect to receive the Federal financial incentives de-  
7 scribed in either section 119 or 120.

8 (b) LIMITATION.—A project sponsor may not elect  
9 more than 1 section described in subsection (a).

10 **SEC. 115. QUALIFYING ADVANCED COAL PROJECTS.**

11 (a) REQUIREMENTS.—For the purpose of section  
12 113(b), a project shall be considered a qualifying advanced  
13 coal project that the Secretary may certify under section  
14 113(b) if the Secretary determines that, at a minimum—

15 (1) the project uses an advanced coal-based  
16 generation technology—

17 (A) to power a new electric generation or  
18 polygeneration unit; or

19 (B) to retrofit or repower an existing elec-  
20 tric generation unit (including an existing nat-  
21 ural gas-fired combined cycle unit);

22 (2) the fuel input for the project, when com-  
23 pleted, is at least 75 percent coal;

24 (3) the applicant provides an assurance satis-  
25 factory to the Secretary that—

1 (A) the project is technologically feasible;  
2 and

3 (B) the project is not financially feasible  
4 without the Federal financial incentives, after  
5 taking into account—

6 (i) regulatory approvals or power pur-  
7 chase contracts referred to in paragraph  
8 (4);

9 (ii) arrangements for the supply of  
10 fuel to the project;

11 (iii) contracts or other arrangements  
12 for construction of the project facilities;

13 (iv) any performance guarantees to be  
14 provided by contractors and equipment  
15 vendors; and

16 (v) evidence of the availability of  
17 funds to develop and construct the project;

18 (4) the applicant demonstrates that the appli-  
19 cant has obtained—

20 (A) approval by the appropriate regulatory  
21 commission of the recovery of the cost of the  
22 project; or

23 (B) a power purchase agreement (or letter  
24 of intent, subject to subsection (c)) that has

1           been approved by the board of directors of, and  
2           executed by, a creditworthy purchasing party;

3           (5) except as provided in subsection (d), the ap-  
4           plicant demonstrates that the applicant has, or will,  
5           obtain all project agreements and approvals; and

6           (6) the project will be operated in the United  
7           States using United States coal.

8           (b) PRIORITY FOR INTEGRATED GASIFICATION COM-  
9           BINES CYCLE PROJECTS.—In determining which quali-  
10          fying advanced coal projects to certify under section  
11          113(b)(3)(B)(i), the Secretary shall give high priority to  
12          projects that include, as determined by the Secretary—

13                 (1) carbon capture capability;

14                 (2) increased by-product utilization; and

15                 (3) other benefits.

16          (c) LETTER OF INTENT.—A letter of intent described  
17          in subsection (a)(4)(B) shall be replaced by a binding con-  
18          tract before a certificate may be issued.

19          (d) PROJECT AGREEMENTS AND APPROVALS.—

20                 (1) DEFINITION OF PROJECT AGREEMENTS AND  
21                 APPROVALS.—In this section, the term “project  
22                 agreements and approvals” means—

23                         (A) all necessary power purchase agree-  
24                         ments, and all other contracts, that the Sec-

1           retary determines are necessary to construct, fi-  
2           nance, and operate a project; and

3           (B) all authorizations by Federal, State,  
4           and local agencies that are required to con-  
5           struct, operate, and recover the cost of the  
6           project.

7           (2) CERTIFICATION COMMITMENT.—

8           (A) IN GENERAL.—If the applicant has not  
9           obtained all agreements and approvals prior to  
10          application, the Secretary may issue a certifi-  
11          cation commitment.

12          (B) REQUIREMENTS.—

13           (i) IN GENERAL.—An applicant that  
14           receives a certification commitment shall  
15           obtain any remaining project agreements  
16           and approvals not later than 4 years after  
17           the issuance of the certification commit-  
18           ment.

19           (ii) REVOCATION.—If all project  
20           agreements and approvals are not obtained  
21           during the 4-year period described in  
22           clause (i), the certification commitment is  
23           terminated without any other action by the  
24           Secretary.

1 (iii) FINAL CERTIFICATE.—No certifi-  
 2 cate may be issued until all project agree-  
 3 ments and approvals are obtained.

4 **SEC. 116. ADVANCED COAL-BASED GENERATION TECH-**  
 5 **NOLOGY.**

6 (a) IN GENERAL.—For the purpose of this subtitle,  
 7 an electric generation unit uses advanced coal-based gen-  
 8 eration technology if—

9 (1) the unit—

10 (A) uses integrated gasification combined  
 11 cycle technology; or

12 (B) has a design net heat rate of 8530  
 13 Btu/kWh (40 percent efficiency); and

14 (2) the vendor warrants that the unit is de-  
 15 signed to meet the performance requirements in the  
 16 following table:

<b>Performance characteristic:</b>	<b>Design level for project:</b>
SO <sub>2</sub> (percent removal) .....	99 percent
NO <sub>x</sub> (emissions) .....	0.07 lbs/MMBTU
PM* (emissions) .....	0.015 lbs/MMBTU
Hg (percent removal) .....	90 percent

17 (b) DESIGN NET HEAT RATE.—For purposes of this  
 18 section, design net heat rate with respect to an electric  
 19 generation unit shall—

20 (1) be measured in Btu per kilowatt hour (high-  
 21 er heating value);

1           (2) be based on the design annual heat input to  
 2 the unit and the rated net electrical power, fuels,  
 3 and chemicals output of the unit (determined with-  
 4 out regard to the cogeneration of steam by the unit);

5           (3) be adjusted for the heat content of the de-  
 6 sign coal to be used by the unit—

7           (A) if the heat content is less than 13,500  
 8 Btu per pound, but greater than 7,000 Btu per  
 9 pound, according to the following formula: de-  
 10 sign net heat rate = unit net heat rate x [1-  
 11 {((13,500-design coal heat content, Btu per  
 12 pound)/1,000)\* 0.013}]; and

13           (B) if the heat content is less than or  
 14 equal to 7,000 Btu per pound, according to the  
 15 following formula: design net heat rate = unit  
 16 net heat rate x [1-{((13,500-design coal heat  
 17 content, Btu per pound)/1,000)\* 0.018}]; and

18           (4) be corrected for the site reference conditions  
 19 of—

20           (A) elevation above sea level of 500 feet;

21           (B) air pressure of 14.4 pounds per square  
 22 inch absolute;

23           (C) temperature, dry bulb of 63°F;

24           (D) temperature, wet bulb of 54°F; and

25           (E) relative humidity of 55 percent.

1 **SEC. 117. FEDERAL PROJECT COORDINATOR.**

2 The Secretary shall designate a Federal project coor-  
3 dinator to facilitate any Federal agency approvals of eligi-  
4 ble advanced coal-generation projects.

5 **SEC. 118. APPLICABILITY.**

6 No technology, or level of emission reduction, solely  
7 by reason of the use of the technology, or the achievement  
8 of the emission reduction by the demonstration of any  
9 technology or performance level by 1 or more facilities re-  
10 ceiving assistance under this subtitle, shall be considered  
11 to indicate that the technology or performance level is—

12 (1) adequately demonstrated for purposes of  
13 section 111 of the Clean Air Act (42 U.S. C. 7411);

14 (2) achievable for purposes of section 169 of  
15 that Act (42 U.S. C. 7479); or

16 (3) achievable in practice for purposes of sec-  
17 tion 171 of that Act (42 U.S. C. 7501).

18 **SEC. 119. INVESTMENT TAX CREDIT AND SHORTENED RE-**  
19 **COVERY PERIOD.**

20 (a) IN GENERAL.—Section 48(a)(3)(A) of the Inter-  
21 nal Revenue Code of 1986 (relating to energy property)  
22 is amended—

23 (1) by striking “or” at the end of clause (i),

24 (2) by inserting “or” at the end of clause (ii),

25 and

1           (3) by adding at the end the following new  
2       clause:

3                       “(iii) certified coal property,”.

4       (b) CREDIT RATE.—Section 48(a)(2)(A) of such  
5       Code (relating to energy percentage) is amended by strik-  
6       ing “10 percent” and inserting “10 percent for energy  
7       property other than certified coal property, and 20 percent  
8       for certified coal property”.

9       (c) DEFINITION.—Section 48 of such Code (relating  
10      to energy credit) is amended by adding at the end the fol-  
11     lowing new subsection:

12           “(c) CERTIFIED COAL PROPERTY.—For purposes of  
13     this section, the term ‘certified coal property’ means any  
14     property that is part of a qualifying advanced coal project  
15     that the Secretary of Energy has certified under section  
16     113(b) of the Clean Coal Research, Development, Dem-  
17     onstration, and Deployment Act of 2005, if the project  
18     sponsor has elected the application of this section for such  
19     project under section 114(a) of such Act.”.

20     **SEC. 120. CREDIT TO HOLDERS OF CLEAN ENERGY BONDS.**

21       (a) IN GENERAL.—Part IV of subchapter A of chap-  
22     ter 1 of the Internal Revenue Code of 1986 (relating to  
23     credits against tax) is amended by adding at the end the  
24     following new subpart:



1     **“Subpart H—Nonrefundable Credit to Holders of**  
 2                                   **Clean Energy Bonds**

“Sec. 54. Credit to holders of clean energy bonds.

3     **“SEC. 54. CREDIT TO HOLDERS OF CLEAN ENERGY BONDS.**

4             “(a) ALLOWANCE OF CREDIT.—In the case of a tax-  
 5 payer who holds a clean energy bond on a credit allowance  
 6 date of such bond, which occurs during the taxable year,  
 7 there shall be allowed as a credit against the tax imposed  
 8 by this chapter for such taxable year an amount equal to  
 9 the sum of the credits determined under subsection (b)  
 10 with respect to credit allowance dates during such year  
 11 on which the taxpayer holds such bond.

12           “(b) AMOUNT OF CREDIT.—

13                 “(1) IN GENERAL.—The amount of the credit  
 14 determined under this subsection with respect to any  
 15 credit allowance date for a clean energy bond is 25  
 16 percent of the annual credit determined with respect  
 17 to such bond.

18                 “(2) ANNUAL CREDIT.—The annual credit de-  
 19 termined with respect to any clean energy bond is  
 20 the product of—

21                         “(A) the credit rate determined by the Sec-  
 22 retary under paragraph (3) for the day on  
 23 which such bond was sold, multiplied by

24                                 “(B) the outstanding face amount of the  
 25 bond.

1           “(3) DETERMINATION.—For purposes of para-  
2 graph (2), with respect to any clean energy bond,  
3 the Secretary shall determine daily or caused to be  
4 determined daily a credit rate which shall apply to  
5 the first day on which there is a binding, written  
6 contract for the sale or exchange of the bond. The  
7 credit rate for any day is the credit rate which the  
8 Secretary or the Secretary’s designee estimates will  
9 permit the issuance of clean energy bonds with a  
10 specified maturity or redemption date without dis-  
11 count and without interest cost to the qualified  
12 issuer.

13           “(4) CREDIT ALLOWANCE DATE.—For purposes  
14 of this section, the term ‘credit allowance date’  
15 means—

16                   “(A) March 15,

17                   “(B) June 15,

18                   “(C) September 15, and

19                   “(D) December 15.

20           Such term also includes the last day on which the  
21 bond is outstanding.

22           “(5) SPECIAL RULE FOR ISSUANCE AND RE-  
23 DEMPTION.—In the case of a bond which is issued  
24 during the 3-month period ending on a credit allow-  
25 ance date, the amount of the credit determined

1 under this subsection with respect to such credit al-  
2 lowance date shall be a ratable portion of the credit  
3 otherwise determined based on the portion of the 3-  
4 month period during which the bond is outstanding.  
5 A similar rule shall apply when the bond is redeemed  
6 or matures.

7 “(c) LIMITATION BASED ON AMOUNT OF TAX.—

8 “(1) IN GENERAL.—The credit allowed under  
9 subsection (a) for any taxable year shall not exceed  
10 the excess of—

11 “(A) the sum of the regular tax liability  
12 (as defined in section 26(b)) plus the tax im-  
13 posed by section 55, over

14 “(B) the sum of the credits allowable  
15 under this part (other than subpart C thereof,  
16 relating to refundable credits).

17 “(2) CARRYOVER OF UNUSED CREDIT.—If the  
18 credit allowable under subsection (a) exceeds the  
19 limitation imposed by paragraph (1) for such taxable  
20 year, the difference shall be carried to the suc-  
21 ceeding taxable year and added to the credit allow-  
22 able under subsection (a) for such taxable year.

23 “(d) CLEAN ENERGY BOND.—For purposes of this  
24 section—

1           “(1) IN GENERAL.—The term ‘clean energy  
2           bond’ means any bond issued as part of an issue  
3           if—

4                   “(A) the bond is issued by a qualified  
5           issuer,

6                   “(B) 95 percent or more of the proceeds  
7           from the sale of such issue are to be used for  
8           capital expenditures incurred by qualified bor-  
9           rowers for 1 or more qualified projects,

10                   “(C) the qualified issuer designates such  
11           bond for purposes of this section and the bond  
12           is in registered form, and

13                   “(D) the issue meets the requirements of  
14           subsections (e), (g), and (h).

15           “(2) QUALIFIED PROJECT; SPECIAL USE  
16           RULES.—

17                   “(A) IN GENERAL.—The term ‘qualified  
18           project’ means a certified coal property (as de-  
19           fined in section 48(c)(1)) placed in service by a  
20           qualified borrower.

21                   “(B) REFINANCING RULES.—For purposes  
22           of paragraph (1)(B), a qualified project may be  
23           refinanced with proceeds of a clean energy bond  
24           only if the indebtedness being refinanced (in-  
25           cluding any obligation directly or indirectly refi-

1 nanced by such indebtedness) was originally in-  
2 curred by a qualified borrower after the date of  
3 the enactment of this section.

4 “(C) REIMBURSEMENT.—For purposes of  
5 paragraph (1)(B), a clean energy bond may be  
6 issued to reimburse a qualified borrower for  
7 amounts paid after the date of the enactment  
8 of this section with respect to a qualified  
9 project, but only if prior to the payment of such  
10 expenditure, the qualified borrower declared its  
11 intent to reimburse such expenditure with the  
12 proceeds of a clean energy bond.

13 “(D) TREATMENT OF CHANGES IN USE.—  
14 For purposes of paragraph (1)(B), the proceeds  
15 of an issue shall not be treated as used for a  
16 qualified project to the extent that a qualified  
17 borrower takes any action within its control  
18 which causes such proceeds not to be used for  
19 a qualified project. The Secretary shall pre-  
20 scribe regulations specifying remedial actions  
21 that may be taken (including conditions to tak-  
22 ing such remedial actions) to prevent an action  
23 described in the preceding sentence from caus-  
24 ing a bond to fail to be a clean energy bond.

25 “(e) MATURITY LIMITATIONS.—

1           “(1) DURATION OF TERM.—A bond shall not be  
2           treated as a clean energy bond if such bond is issued  
3           as part of an issue and—

4                   “(A) the average maturity of bonds issued  
5                   as a part of such issue, exceeds

6                   “(B) 120 percent of the average reasonable  
7                   expected economic life of the facilities being fi-  
8                   nanced with the proceeds from the sale of such  
9                   issue.

10           “(2) DETERMINATION OF AVERAGES.—For pur-  
11           poses of paragraph (1), the determination of aver-  
12           ages of an issue and economic life of any facility  
13           shall be determined in accordance with section  
14           147(b).

15           “(3) RATABLE PRINCIPAL AMORTIZATION RE-  
16           QUIRED.—A bond shall not be treated as a clean en-  
17           ergy bond unless it is part of an issue which pro-  
18           vides for an equal amount of principal to be paid by  
19           the qualified issuer during each calendar year that  
20           the issue is outstanding.

21           “(f) CREDIT INCLUDED IN GROSS INCOME.—Gross  
22           income includes the amount of the credit allowed to the  
23           taxpayer under this section (determined without regard to  
24           subsection (e)) and the amount so included shall be treat-  
25           ed as interest income.

1       “(g) SPECIAL RULES RELATING TO EXPENDI-  
2 TURES.—

3               “(1) IN GENERAL.—An issue shall be treated as  
4 meeting the requirements of this subsection if, as of  
5 the date of issuance, the qualified issuer reasonably  
6 expects—

7                       “(A) at least 95 percent of the proceeds  
8 from the sale of the issue are to be spent for  
9 1 or more qualified projects within the 5-year  
10 period beginning on such date,

11                      “(B) a binding commitment with a third  
12 party to spend at least 10 percent of the pro-  
13 ceeds from the sale of the issue will be incurred  
14 within the 6-month period beginning on the  
15 date of issuance of the clean energy bond or, in  
16 the case of a clean energy bond, the proceeds  
17 of which are to be loaned to 2 or more qualified  
18 borrowers, such binding commitment will be in-  
19 curred within the 6-month period beginning on  
20 the date of the loan of such proceeds to a quali-  
21 fied borrower, and

22                      “(C) such projects will be completed with  
23 due diligence and the proceeds from the sale of  
24 the issue will be spent with due diligence.

1           “(2) EXTENSION OF PERIOD.—Upon submis-  
2           sion of a request prior to the expiration of the period  
3           described in paragraph (1)(A), the Secretary may  
4           extend such period if the qualified issuer establishes  
5           that the failure to satisfy the 5-year requirement is  
6           due to reasonable cause and the related projects will  
7           continue to proceed with due diligence.

8           “(3) FAILURE TO SPEND REQUIRED AMOUNT  
9           OF BOND PROCEEDS WITHIN 5 YEARS.—To the ex-  
10          tent that less than 95 percent of the proceeds of  
11          such issue are expended within such 5-year period  
12          (and no extension has been obtained under para-  
13          graph (2)), the qualified issuer shall redeem all of  
14          the nonqualified bonds on the earliest call date sub-  
15          sequent to the expiration of the 5-year period. If  
16          such earliest call date is more than 90 days subse-  
17          quent to the expiration of the 5-year period, the  
18          qualified issuer shall establish a yield-restricted de-  
19          feasance escrow within such 90 days to retire such  
20          nonqualified bonds on the earlier of the date which  
21          is 10 years after the issue date or the first call date.  
22          For purposes of this paragraph, the term ‘non-  
23          qualified bonds’ means the portion of the out-  
24          standing bonds in an amount that, if the remaining  
25          bonds were issued on the fifth anniversary of the



1 date of the issuance of the issue, at least 95 percent  
2 of the proceeds of the remaining bonds would be  
3 used to provide qualified projects.

4 “(h) SPECIAL RULES RELATING TO ARBITRAGE.—

5 “(1) IN GENERAL.—A bond which is part of an  
6 issue shall not be treated as a clean energy bond un-  
7 less, with respect to the issue of which the bond is  
8 a part, the issuer satisfies the arbitrage rebate re-  
9 quirements of section 148 with respect to gross pro-  
10 ceeds of the issue (other than any amounts applied  
11 in accordance with subsection (g)). For purposes of  
12 such requirements, yield over the term of an issue  
13 shall be determined under the principles of section  
14 148 based on the qualified issuer’s payments of  
15 principal, interest (if any), and fees for guarantees  
16 on such issue.

17 “(2) EXCEPTION.—Amounts on deposit in a  
18 bona fide debt service fund with regard to any clean  
19 energy bond are not subject to the arbitrage rebate  
20 requirements of section 148.

21 “(i) COOPERATIVE ELECTRIC COMPANY; CLEAN EN-  
22 ERGY BOND LENDER; GOVERNMENTAL BODY; QUALIFIED  
23 BORROWER.—For purposes of this section—

24 “(1) COOPERATIVE ELECTRIC COMPANY.—The  
25 term ‘cooperative electric company’ means a mutual

1 or cooperative electric company described in section  
 2 501(c)(12) or section 1381(a)(2)(C), or a not-for-  
 3 profit electric utility which has received a loan or  
 4 loan guarantee under the Rural Electrification Act.

5 “(2) CLEAN ENERGY BOND LENDER.—The  
 6 term ‘clean energy bond lender’ means a lender  
 7 which is a cooperative which is owned by, or has out-  
 8 standing loans to, 100 or more cooperative electric  
 9 companies and is in existence on February 1, 2002,  
 10 and shall include any affiliated entity which is con-  
 11 trolled by such lender.

12 “(3) GOVERNMENTAL BODY.—The term ‘gov-  
 13 ernmental body’ means any State, territory, posses-  
 14 sion of the United States, the District of Columbia,  
 15 Indian tribal government, and any political subdivi-  
 16 sion thereof.

17 “(4) QUALIFIED ISSUER.—The term ‘qualified  
 18 issuer’ means—

19 “(A) a clean energy bond lender,

20 “(B) a cooperative electric company,

21 “(C) a governmental body, or

22 “(D) the Tennessee Valley Authority.

23 “(5) QUALIFIED BORROWER.—The term ‘quali-  
 24 fied borrower’ means—

25 “(A) a cooperative electric company,

1                   “(B) a governmental body, or

2                   “(C) the Tennessee Valley Authority.

3           “(j) POOL BONDS.—The portion of a clean energy  
4 bond issue allocable to each loan, if any, shall be deemed  
5 to be (and treated as) a separate issue of clean energy  
6 bonds and the failure of any such deemed separate clean  
7 energy bond issue to satisfy the requirements set forth  
8 under this section shall not affect the qualification of any  
9 other deemed separate clean energy bond issue.

10          “(k) OTHER DEFINITIONS AND SPECIAL RULES.—

11 For purposes of this section—

12                   “(1) BOND.—The term ‘bond’ includes any ob-  
13 ligation.

14                   “(2) PARTNERSHIP; S CORPORATION; AND  
15 OTHER PASS-THRU ENTITIES.—Under regulations  
16 prescribed by the Secretary, in the case of a partner-  
17 ship, trust, S corporation, or other pass-thru entity,  
18 rules similar to the rules of section 41(g) shall apply  
19 with respect to the credit allowable under subsection  
20 (a).

21                   “(3) BONDS HELD BY REGULATED INVEST-  
22 MENT COMPANIES.—If any clean energy bond is held  
23 by a regulated investment company, the credit deter-  
24 mined under subsection (a) shall be allowed to

1 shareholders of such company under procedures pre-  
2 scribed by the Secretary.

3 “(4) TREATMENT FOR ESTIMATED TAX PUR-  
4 POSES.—Solely for purposes of sections 6654 and  
5 6655, the credit allowed by this section to a tax-  
6 payer by reason of holding a clean energy bond on  
7 a credit allowance date shall be treated as if it were  
8 a payment of estimated tax made by the taxpayer on  
9 such date.

10 “(5) REPORTING.—Issuers of clean energy  
11 bonds shall submit reports similar to the reports re-  
12 quired under section 149(e).

13 “(l) TERMINATION.—This section shall not apply  
14 with respect to any bond issued after December 31,  
15 2008.”

16 (b) REPORTING.—Subsection (d) of section 6049 of  
17 the Internal Revenue Code of 1986 (relating to returns  
18 regarding payments of interest) is amended by adding at  
19 the end the following new paragraph:

20 “(8) REPORTING OF CREDIT ON CLEAN ENERGY  
21 BONDS.—

22 “(A) IN GENERAL.—For purposes of sub-  
23 section (a), the term ‘interest’ includes amounts  
24 includible in gross income under section 54(f)  
25 and such amounts shall be treated as paid on

1 the credit allowance date (as defined in section  
2 54(b)(4)).

3 “(B) REPORTING TO CORPORATIONS,  
4 ETC.—Except as otherwise provided in regula-  
5 tions, in the case of any interest described in  
6 subparagraph (A), subsection (b)(4) shall be  
7 applied without regard to subparagraphs (A),  
8 (H), (I), (J), (K), and (L)(i) of such subsection.

9 “(C) REGULATORY AUTHORITY.—The Sec-  
10 retary may prescribe such regulations as are  
11 necessary or appropriate to carry out the pur-  
12 poses of this paragraph, including regulations  
13 which require more frequent or more detailed  
14 reporting.”.

15 (c) CLERICAL AMENDMENTS.—

16 (1) The table of subparts for part IV of sub-  
17 chapter A of chapter 1 of the Internal Revenue Code  
18 of 1986 is amended by adding at the end the fol-  
19 lowing new item:

“SUBPART H. NONREFUNDABLE CREDIT TO HOLDERS OF CLEAN ENERGY  
BONDS.”.

20 (2) Section 6401(b)(1) of such Code is amend-  
21 ed by striking “and G” and inserting “G, and H”.

22 (d) ISSUANCE OF REGULATIONS.—The Secretary of  
23 Treasury shall issue regulations required under section 54  
24 of the Internal Revenue Code of 1986 (as added by this

1 section) not later than 120 days after the date of the en-  
2 actment of this Act.

3 **TITLE II—INDUSTRIAL**  
4 **GASIFICATION INITIATIVE**

5 **SEC. 201. FINDINGS AND PURPOSE.**

6 (a) FINDINGS.—Congress finds that widespread do-  
7 mestic use of gasification technologies can make signifi-  
8 cant contributions to the economy, environmental  
9 beneficitation, and the general welfare of the citizens of the  
10 United States.

11 (b) PURPOSE.—The purpose of the industrial gasifi-  
12 cation research, development, and demonstration program  
13 shall be to support a significant acceleration of gasifi-  
14 cation technology deployment in industrial applications  
15 to—

16 (1) reduce the demand pressure on domestic  
17 natural gas prices and supply for all consumers by  
18 promoting the use of synthesis gas derived from do-  
19 mestic coal, biomass, petroleum residues, and other  
20 domestic fuel sources for industrial use;

21 (2) promote the use of those fuel sources in an  
22 environmentally benign manner;

23 (3) preserve domestic jobs;

24 (4) reduce the deficit of the United States as of  
25 the date of enactment of this Act;

1           (5) reduce imports of energy from foreign  
2 sources;

3           (6) avoid dependence on remote foreign sources  
4 for chemicals, ammonia-based fertilizers, and other  
5 strategic products for which natural gas has tradi-  
6 tionally been a significant component in the manu-  
7 facturing process;

8           (7) promote the position of the United States  
9 as a global leader in advanced gasification tech-  
10 nology development and sales of related products;

11           (8) promote the potential for future use or se-  
12 questration of industrial carbon emissions in an effi-  
13 cient manner;

14           (9) provide coordination within the Department  
15 for research, development, and demonstration of in-  
16 dustrial gasification technologies using a diverse fuel  
17 mix; and

18           (10) support the deployment of industrial gas-  
19 ification technologies that will produce or displace,  
20 by 2020, the equivalent of 1.5 trillion cubic feet of  
21 natural gas annually.

22 **SEC. 202. DEFINITIONS.**

23 In this title:

24           (1) BIOMASS.—

1 (A) IN GENERAL.—The term “biomass”  
2 means—

3 (i) any agricultural or plant waste;

4 (ii) byproduct of wood or paper mill  
5 operations, including lignin in spent  
6 pulping liquors; and

7 (iii) other products of forestry mainte-  
8 nance.

9 (B) EXCLUSION.—The term “biomass”  
10 does not include paper that is commonly recy-  
11 cled.

12 (2) CARBON CAPTURE CAPABILITY.—The term  
13 “carbon capture capability” means an industrial gas-  
14 ification plant design that is determined by the Sec-  
15 retary to reflect reasonable consideration for, and be  
16 capable of, accommodating the equipment likely to  
17 be necessary to capture carbon dioxide from the gas-  
18 eous stream, for later use or sequestration, that  
19 would otherwise be emitted in the flue gas from a  
20 project that uses a nonrenewable fuel.

21 (3) COAL.—The term “coal” means any carbon-  
22 ized or semicarbonized matter, including peat.

23 (4) COPRODUCED POWER.—The term “copro-  
24 duced power” means heat, steam, or electricity de-  
25 rived from a plant or plant product.



1           (5) ELIGIBLE ENTITY.—The term “eligible enti-  
2           ty” means any person whose application for Federal  
3           assistance under subtitle A, or whose application for  
4           certification under subtitle B, is principally intended  
5           for use in a domestic project that employs domestic  
6           gasification applications related to—

7                   (A) chemicals;

8                   (B) fertilizers;

9                   (C) glass;

10                  (D) steel;

11                  (E) petroleum residues;

12                  (F) forest products; and

13                  (G) agriculture, including feedlots and  
14                  dairy operations.

15           (6) GASIFICATION TECHNOLOGY.—The term  
16           “gasification technology” means any process that  
17           converts a solid or liquid product from coal, petro-  
18           leum residue, biomass, or other materials that are  
19           recovered for their energy or feedstock value into a  
20           synthesis gas composed primarily of carbon mon-  
21           oxide and hydrogen for direct use or subsequent  
22           chemical or physical conversion.

23           (7) INDUSTRIAL GASIFICATION PROJECT.—The  
24           term “industrial gasification project” means any  
25           project that—

1 (A) employs gasification technology; and

2 (B) will be carried out by an eligible entity.

3 (8) PETROLEUM RESIDUE.—The term “petro-  
4 leum residue” means the carbonized product of high-  
5 boiling hydrocarbon fractions obtained in petroleum  
6 processing.

7 (9) TOTAL PLANT INVESTMENT.—The term  
8 “total plant investment” means the total project cost  
9 for engineering, design, procurement, construction,  
10 project development and financing, and reasonable  
11 contingency reserves as agreed upon by the Sec-  
12 retary and the project sponsor.

13 **Subtitle A—Industrial Gasification**  
14 **Research, Development, and**  
15 **Demonstration Program**

16 **SEC. 211. ESTABLISHMENT.**

17 (a) IN GENERAL.—The Secretary shall establish an  
18 industrial gasification technology research, development,  
19 and demonstration program to facilitate production of  
20 synthesis gas, chemical feedstocks, ammonia-based fer-  
21 tilizers, or liquid transportation fuels and generation of  
22 coproduced power, through methods and equipment  
23 under—

24 (1) this subtitle;

1           (2) the Federal Nonnuclear Energy Research  
2           and Development Act of 1974 (42 U.S.C. 5901 et  
3           seq.);

4           (3) the Energy Reorganization Act of 1974 (42  
5           U.S.C. 5801 et seq.); and

6           (4) title XVI of the Energy Policy Act of 1992  
7           (42 U.S.C. 13381 et seq.).

8           (b) CONDITIONS.—The program described in sub-  
9           section (a) shall be designed to achieve the cost and per-  
10          formance goals established under section 212.

11          (c) OFFICE OF INDUSTRIAL GASIFICATION COORDI-  
12          NATION.—The Secretary shall establish an Office of In-  
13          dustrial Gasification Coordination that shall—

14                 (1) report directly to the Secretary;

15                 (2) analyze the strategic and economic con-  
16                 sequences of natural gas dependency in the indus-  
17                 trial and agricultural sectors;

18                 (3) prepare biannual plans for the development  
19                 and deployment of industrial gasification tech-  
20                 nologies that may be capable of reducing this de-  
21                 pendence in a manner that is cost-effective for the  
22                 United States as a whole;

23                 (4) not later than 180 days after the date of  
24                 enactment of this Act and thereafter not later than  
25                 the first day of March every 2 years through 2016,

1 in coordination with the study under section 213,  
2 submit the biannual plan to—

3 (A) the Committee on Energy and Com-  
4 merce of the House of Representatives;

5 (B) the Committee on Energy and Natural  
6 Resources of the Senate; and

7 (C) the Committees on Appropriations;  
8 and

9 (5) make recommendations to the Secretary to  
10 coordinate gasification research and associated ex-  
11 penditures among the several relevant programs of  
12 the Department.

13 **SEC. 212. COST AND PERFORMANCE GOALS.**

14 (a) IN GENERAL.—The Secretary shall perform an  
15 assessment that identifies cost and performance goals of  
16 industrial gasification technologies the deployment of  
17 which would permit the continued cost-competitive gasifi-  
18 cation of the fuels identified in section 202(6) to—

19 (1) produce chemical feedstocks or ammonia-  
20 based fertilizers;

21 (2) produce liquid transportation fuels; and

22 (3) coproduce power.

23 (b) CONSULTATION.—In establishing the cost and  
24 performance goals, the Secretary shall—

1           (1) consider activities and studies undertaken  
2 to date by industry in cooperation with the Depart-  
3 ment in support of the assessment described in sub-  
4 section (a);

5           (2) consult with interested entities, including—

6                 (A) coal producers;

7                 (B) industries using the fuels identified in  
8 section 202(6);

9                 (C) organizations that promote fuels iden-  
10 tified in section 202(6) and advanced gasifi-  
11 cation technologies that use those fuels;

12                 (D) environmental organizations;

13                 (E) organizations representing workers;

14                 (F) organizations representing consumers;

15           and

16           (3) consult with the Administrator of the Envi-  
17 ronmental Protection Agency and the Secretary of  
18 Agriculture.

19           (c) TIMING.—The Secretary shall—

20                 (1) not later than 120 days after the date of  
21 enactment of this Act, issue a set of draft cost and  
22 performance goals for public comment; and

23                 (2) not later than 180 days after the date of  
24 enactment of this Act, after taking into consider-  
25 ation any public comments received, submit to Con-

1       gress a description of the final cost and performance  
2       goals.

3 **SEC. 213. STUDY.**

4       (a) IN GENERAL.—Not later than 1 year after the  
5 date of enactment of this Act, and once every 2 years  
6 thereafter through 2016, the Secretary, in cooperation  
7 with other appropriate Federal agencies, shall conduct a  
8 study to—

9           (1) identify industrial gasification technologies  
10       that, alone or in combination with other tech-  
11       nologies, may be capable of achieving the cost and  
12       performance goals;

13           (2) assess the costs that would be incurred by,  
14       and the period of time that would be required for,  
15       the development and demonstration of industrial  
16       gasification technologies that, alone or in combina-  
17       tion with other technologies, contribute to the  
18       achievement of the cost and performance goals;

19           (3) develop recommendations for industrial gas-  
20       ification technology development programs that the  
21       Department could carry out in cooperation with in-  
22       dustry, to develop, demonstrate, and deploy tech-  
23       nologies that, alone or in combination with other  
24       technologies, achieve the cost and performance goals;  
25       and

1           (4) develop recommendations for additional au-  
2           thorities required to achieve the industrial gasifi-  
3           cation cost and performance goals, and review and  
4           recommend changes, if any, to those cost and per-  
5           formance goals if the Secretary determines that the  
6           changes are necessary as a result of ongoing re-  
7           search, development, demonstration, and deployment  
8           of technologies.

9           (b) COOPERATION.—In carrying out this section, the  
10          Secretary shall give due weight to the expert advice of rep-  
11          resentatives of the entities described in section 212(b)(2).

12          **SEC. 214. AUTHORIZATION OF APPROPRIATIONS.**

13          (a) AUTHORIZATION.—

14               (1) IN GENERAL.—There are authorized to be  
15               appropriated to the Secretary to carry out activities  
16               described in paragraph (2), to remain available until  
17               expended—

18                       (A) \$80,000,000 for fiscal year 2006;

19                       (B) \$100,000,000 for fiscal year 2007;

20                       (C) \$150,000,000 for fiscal year 2008;

21                       (D) \$160,000,000 for fiscal year 2009;

22                       and

23                       (E) \$120,000,000 for fiscal year 2010.

24               (2) ACTIVITIES.—Activities covered by para-  
25               graph (1) are industrial gasification and related

1 technologies research, development, and demonstra-  
2 tion programs, including—

3 (A) innovations for existing plants;

4 (B) industrial-scale turbines (less than  
5 50MW) for synthesis gas derived from the fuels  
6 identified in section 202(6);

7 (C) synthesis gas, chemicals feedstocks,  
8 ammonia-based fertilizers, and transportation  
9 liquid fuels derived from the fuels identified in  
10 section 202(6); and

11 (D) collection and gasification of biomass.

12 (b) LIMIT ON USE OF FUNDS.—

13 (1) IN GENERAL.—Before the use of funds au-  
14 thorized by subsection (a), the Secretary shall sub-  
15 mit to Congress a report that—

16 (A) describes the proposed use of funds;

17 and

18 (B) contains a plan that includes—

19 (i) a detailed description of how any  
20 proposals will be solicited and evaluated,  
21 including a list of all activities expected to  
22 be undertaken;

23 (ii) a detailed list of technical mile-  
24 stones for each fuel application and related  
25 technology that will be pursued; and



1 (iii) a description of how the programs  
2 authorized by this section will be carried  
3 out so as to complement and not duplicate  
4 activities authorized under—

5 (I) the Industries of the Future  
6 Program;

7 (II) the Biomass Program;

8 (III) the Clean Coal Power Ini-  
9 tiative; and

10 (IV) other programs and authori-  
11 ties being carried out by the Sec-  
12 retary.

13 (2) WAITING PERIOD.—The Secretary may not  
14 use any funds authorized by subsection (a) before  
15 the date that is 30 days after the date of receipt by  
16 Congress of the report required by paragraph (1).

17 **Subtitle B—Industrial Gasification**  
18 **Deployment Program**

19 **SEC. 221. ESTABLISHMENT OF CERTIFICATION PROGRAM.**

20 (a) IN GENERAL.—The Secretary shall establish a  
21 competitive program to consider and award certifications  
22 for investment and production tax credits to industrial  
23 gasification project sponsors.

24 (b) COMPETITIVE AWARDS.—

1           (1) IN GENERAL.—Not later than 270 days  
2 after the date of enactment of this Act, and every  
3 2 years thereafter through 2016, the Secretary, in  
4 consultation with the Secretary of the Treasury and  
5 the Secretary of Agriculture, shall carry out a com-  
6 petitive solicitation for the award of certifications  
7 that entitle the recipients to specific investment and  
8 production tax credits associated with the year of  
9 certification as described in section 45J of the Inter-  
10 nal Revenue Code of 1986 (as added by section  
11 222(a)).

12           (2) COMPETITIVE CERTIFICATION PROCESS.—  
13 Notwithstanding the limitations imposed in section  
14 45J of the Internal Revenue Code of 1986 (as added  
15 by section 222(a)), the Secretary may during a bian-  
16 nual competitive certification process deem that a  
17 certification award be considered as having been  
18 awarded up to 4 years earlier than the actual date  
19 of certification for not more than 2 projects that the  
20 Secretary determines use a technology that has not  
21 previously been deployed.

22           (c) APPLICATIONS LIMITED TO ELIGIBLE ENTI-  
23 TIES.—A project sponsor shall be eligible to compete for  
24 the tax credit certifications awarded competitively by the  
25 Secretary under subsection (a) only if—

1 (1) the project sponsor is an eligible entity; and

2 (2) the project of the project sponsor advances  
3 the purposes described in section 201.

4 (d) SELECTION CRITERIA.—The Secretary shall not  
5 make a competitive certification award for production tax  
6 credit eligibility unless the recipient has documented to the  
7 satisfaction of the Secretary that—

8 (1) the award recipient is financially viable  
9 without the receipt of additional Federal funding as-  
10 sociated with the proposed project;

11 (2) the recipient will provide sufficient informa-  
12 tion to the Secretary for the Secretary to ensure  
13 that the award funds are spent efficiently and effec-  
14 tively;

15 (3) a market exists for the products of the pro-  
16 posed deployment project as evidenced by contracts  
17 or written statements of intent from potential cus-  
18 tomers;

19 (4) the fuels identified in section 202(6) will  
20 comprise at least 90 percent of the fuels required by  
21 the project for the production of chemical feedstocks,  
22 liquid transportation fuels, or coproduction of elec-  
23 tricity;

24 (5) the award recipient's project team is com-  
25 petent in the construction and operation of the gas-

1       ification technology proposed, with preference given  
 2       to those recipients with experience that demonstrates  
 3       successful and reliable operations of the technology  
 4       on domestic fuels identified in section 202(6); and

5               (6) the award recipient has met other criteria  
 6       established and published by the Secretary.

7       (e) **COMBINED LIMIT FOR THE USE OF MORE THAN**  
 8 **ONE FEDERAL CREDIT, LOAN OR LOAN GUARANTEE.—**  
 9 The allowable combined value of all credits, loans or loan  
 10 guarantees claimed in association with any single certified  
 11 industrial gasification property is limited to the project  
 12 total credit limit associated with the project’s year of cer-  
 13 tification or deemed year of certification as determined  
 14 under section 221 of the Clean Coal Research, Develop-  
 15 ment, Demonstration, and Deployment Act of 2005.

16 **SEC. 222. CREDIT FOR PRODUCTION FROM CERTIFIED IN-**  
 17 **DUSTRIAL GASIFICATION PROJECTS.**

18       (a) **IN GENERAL.—**Subpart D of part IV of sub-  
 19 chapter A of chapter 1 of the Internal Revenue Code of  
 20 1986 (relating to business related credits) is amended by  
 21 adding at the end the following new section:

22 **“SEC. 45J. CREDIT FOR PRODUCTION FROM CERTIFIED IN-**  
 23 **DUSTRIAL GASIFICATION PROJECTS.**

24       “(a) **IN GENERAL.—**For purposes of section 38, the  
 25 synthesis gas production tax credit for any taxable year

1 is determined by the year in which the taxpayer’s indus-  
 2 trial gasification project is certified or deemed certified in  
 3 accordance with the provisions of section 221 of the Clean  
 4 Coal Research, Development, Demonstration, and Deploy-  
 5 ment Act of 2005.

6 “(b) DETERMINATION OF CREDIT AMOUNT.—

7 “(1) IN GENERAL.—

8 “(A) IN GENERAL.—With respect to each  
 9 industrial gasification project sponsor, the syn-  
 10 thesis gas production tax credit for all taxable  
 11 years shall not exceed the credit value per-mil-  
 12 lion-Btu’s and project total credit limitation as-  
 13 sociated with the project’s year of certification  
 14 or deemed year of certification as specified in  
 15 the following table:

Year of certifi- cation	Number of project certifications	Credit value per million Btu’s	Project total credit limit
2006 .....	3 .....	\$.62 .....	\$174,000,000
2008 .....	3 .....	\$.496 .....	\$116,725,000
2010 .....	4 .....	\$.397 .....	\$77,855,575
2012 .....	7 .....	\$.317 .....	\$51,929,669
2014 .....	10 .....	\$.254 .....	\$34,637,089
2016 .....	14 .....	\$.203 .....	\$23,102,938

16 “(B) INFLATION ADJUSTMENT.—

17 “(i) IN GENERAL.—For calendar  
 18 years after 2006, each amount in the third  
 19 and fourth columns of the table contained  
 20 in subparagraph (A) shall be adjusted by

1 multiplying such amount by the inflation  
2 adjustment factor for the calendar year in  
3 which the amount is applied. If any  
4 amount in such third column as increased  
5 under the preceding sentence is not a mul-  
6 tiple of 0.01 cent, such amount shall be  
7 rounded to the nearest multiple of 0.01  
8 cent. If any amount in such fourth column  
9 is increased under the preceding sentence  
10 is not a multiple of \$50, such amount shall  
11 be rounded to the nearest multiple of \$50.

12 “(ii) INFLATION ADJUSTMENT FAC-  
13 TOR.—For purposes of clause (i)—

14 “(I) IN GENERAL.—The term ‘in-  
15 flation adjustment factor’ means, with  
16 respect to a calendar year, a fraction  
17 the numerator of which is the GDP  
18 implicit price deflator for the pre-  
19 ceding calendar year and the denomi-  
20 nator of which is the GDP implicit  
21 price deflator for the calendar year  
22 2005.

23 “(II) GDP IMPLICIT PRICE  
24 DEFLATOR.—The term ‘GDP implicit  
25 price deflator’ means, for any cal-

1           endar year, the most recent revision of  
2           the implicit price deflator for the  
3           gross domestic product as of June 30  
4           of such calendar year as computed by  
5           the Department of Commerce before  
6           October 1 of such calendar year.

7           “(2) LIMITATIONS.—

8                   “(A) CREDIT LIMITED BY PROJECT IN-  
9           VESTMENT.—The credit amount for any indus-  
10          trial gasification project otherwise determined  
11          under this section shall not exceed an amount  
12          equal to 20 percent of the total plant invest-  
13          ment made in such project.

14                   “(B) CREDIT LIMITED BY BTU’S CON-  
15          SUMED IN PRODUCTION OF ELECTRICITY.—Not  
16          more than 60 percent of the credit amount for  
17          any industrial gasification project otherwise de-  
18          termined under this section for any taxable year  
19          may be attributable to Btu’s consumed in the  
20          production of electricity.

21                   “(3) ADDITIONAL CREDIT AMOUNT.—The credit  
22          amount and project total credit limit for any indus-  
23          trial gasification project otherwise determined under  
24          this section (determined without regard to para-  
25          graph (2)) shall be increased by 30 percent for any

1       synthesises gas produced and used for purposes other  
2       than coproduced power (as defined in section 202(4)  
3       of the Clean Coal Research, Development, Dem-  
4       onstration, and Deployment Act of 2005.

5       “(c) EXCEPTION FOR DEPLOYMENT OF NEW TECH-  
6       NOLOGIES.—Notwithstanding subsection (b), the Sec-  
7       retary may during a competitive certification process as-  
8       sign credit values and total project credit value limitations  
9       associated with certification periods not to exceed 4 years  
10      prior to the current year of awards to not more than 2  
11      industrial gasification projects which the Secretary deter-  
12      mines are particularly consistent with the program pur-  
13      poses in section 201(b) of the Clean Coal Research, Devel-  
14      opment, Demonstration, and Deployment Act of 2005 and  
15      which utilize a technology that has not previously been de-  
16      ployed.

17      “(d) TREATMENT OF PERSON NOT ABLE TO USE  
18      ENTIRE CREDIT.—

19              “(1) ALLOWANCE OF CREDITS.—

20                      “(A) IN GENERAL.—Any credit allowable  
21                      under this section or section 46(2) by reason of  
22                      section 48(a)(3)(A)(iv) with respect to a facility  
23                      owned by a person described in subparagraph  
24                      (B) may be transferred or used as provided in  
25                      this subsection, and the determination as to



1           whether the credit is allowable shall be made  
2           without regard to the tax-exempt status of the  
3           person.

4           “(B) PERSONS DESCRIBED.—A person is  
5           described in this subparagraph if the person  
6           is—

7                   “(i) an organization described in sec-  
8                   tion 501(c)(12)(C) and exempt from tax  
9                   under section 501(a),

10                   “(ii) an organization described in sec-  
11                   tion 1381(a)(2)(C),

12                   “(iii) a public utility (as defined in  
13                   section 136(c)(2)(B)),

14                   “(iv) any State or political subdivision  
15                   thereof, the District of Columbia, or any  
16                   agency or instrumentality of any of the  
17                   foregoing,

18                   “(v) any Indian tribal government  
19                   (within the meaning of section 7871) or  
20                   any agency or instrumentality thereof, or

21                   “(vi) the Tennessee Valley Authority.

22           “(2) TRANSFER OF CREDIT.—

23                   “(A) IN GENERAL.—A person described in  
24                   clause (i), (ii), (iii), (iv), or (v) of paragraph  
25                   (1)(B) may transfer any credit to which para-

1 graph (1)(A) applies through an assignment to  
2 any other person not described in paragraph  
3 (1)(B). Such transfer may be revoked only with  
4 the consent of the Secretary.

5 “(B) REGULATIONS.—The Secretary shall  
6 prescribe such regulations as necessary to en-  
7 sure that any credit described in subparagraph  
8 (A) is claimed once and not reassigned by such  
9 other person.

10 “(C) TRANSFER PROCEEDS TREATED AS  
11 ARISING FROM ESSENTIAL GOVERNMENT FUNC-  
12 TION.—Any proceeds derived by a person de-  
13 scribed in clause (iii), (iv), or (v) of paragraph  
14 (1)(B) from the transfer of any credit under  
15 subparagraph (A) shall be treated as arising  
16 from the exercise of an essential government  
17 function.

18 “(D) CREDIT NOT INCOME.—Any transfer  
19 under subparagraph (A) of any credit to which  
20 paragraph (1)(A) applies shall not be treated as  
21 income for purposes of section 501(c)(12).

22 “(3) USE BY TVA.—

23 “(A) IN GENERAL.—Notwithstanding any  
24 other provision of law, in the case of a person  
25 described in paragraph (1)(B)(vi), any credit to

1 which paragraph (1)(A) applies may be applied  
2 as a credit against the payments required to be  
3 made in any fiscal year under section 15d(e) of  
4 the Tennessee Valley Authority Act of 1933 (16  
5 U.S.C. 831n-4(e)) as an annual return on the  
6 appropriations investment and an annual repay-  
7 ment sum.

8 “(B) TREATMENT OF CREDITS.—The ag-  
9 gregate amount of credits described in para-  
10 graph (1)(A) with respect to such person shall  
11 be treated in the same manner and to the same  
12 extent as if such credits were a payment in cash  
13 and shall be applied first against the annual re-  
14 turn on the appropriations investment.

15 “(C) CREDIT CARRYOVER.—With respect  
16 to any fiscal year, if the aggregate amount of  
17 credits described paragraph (1)(A) with respect  
18 to such person exceeds the aggregate amount of  
19 payment obligations described in subparagraph  
20 (A), the excess amount shall remain available  
21 for application as credits against the amounts  
22 of such payment obligations in succeeding fiscal  
23 years in the same manner as described in this  
24 paragraph.

1           “(4) TREATMENT OF UNRELATED PERSONS.—

2           For purposes of this subsection, transfers among  
3           and between persons described in clauses (i), (ii),  
4           (iii), (iv), and (v) of paragraph (1)(B) shall be treat-  
5           ed as transfers between unrelated parties.

6           “(e) APPLICABLE RULES.—For purposes of this sec-  
7           tion, the rules of paragraphs (3), (4), and (5) of section  
8           45(e) shall apply.”.

9           (b) CREDIT TREATED AS BUSINESS CREDIT.—Sec-  
10          tion 38(b) of the Internal Revenue Code of 1986 (relating  
11          to current year business credit) is amended by striking  
12          “plus” at the end of paragraph (18), by striking the period  
13          at the end of paragraph (19) and inserting “, plus”, and  
14          by adding at the end the following new paragraph:

15                 “(20) the synthesis gas production tax credit  
16                 determined under section 45J(a).”.

17          (c) DENIAL OF DOUBLE BENEFIT.—Section 29(d) of  
18          the Internal Revenue Code of 1986 (relating to other defi-  
19          nitions and special rules) is amended by adding at the end  
20          the following new paragraph:

21                 “(9) DENIAL OF DOUBLE BENEFIT.—This sec-  
22                 tion shall not apply with respect to any qualified fuel  
23                 the production of which may be taken into account  
24                 for purposes of determining the credit under section  
25                 45J.”.

1 (d) CLERICAL AMENDMENT.—The table of sections  
 2 for subpart D of part IV of subchapter A of chapter 1  
 3 of the Internal Revenue Code of 1986 is amended by add-  
 4 ing at the end the following new item:

“Sec. 45J. Credit for production from certified industrial gasification  
 projects.”.

5 (e) EFFECTIVE DATE.—The amendments made by  
 6 this section shall apply to production after the date of the  
 7 enactment of this Act, in taxable years ending after such  
 8 date.

9 **SEC. 223. INVESTMENT TAX CREDIT FOR CERTIFIED INDUS-**  
 10 **TRIAL GASIFICATION PROJECTS.**

11 (a) IN GENERAL.—Section 48 (a)(3)(A) of the Inter-  
 12 nal Revenue Code of 1986 (relating to energy property),  
 13 as amended by this Act, is amended—

14 (1) by striking “or” at the end of clause (ii),

15 (2) by inserting “or” at the end of clause (iii),

16 and

17 (3) by adding at the end the following new  
 18 clause:

19 “(iv) certified industrial gasification  
 20 property,”.

21 (b) CREDIT RATE.—Section 48(a)(2)(A) of the Inter-  
 22 nal Revenue Code of 1986 (relating to energy percentage),  
 23 as amended by this Act, is amended by inserting “or a

1 certified industrial gasification property” after “certified  
2 coal property” both places it appears.

3 (c) DEFINITIONS.—Section 48 of the Internal Rev-  
4 enue Code of 1986 (relating to energy credit), as amended  
5 by this Act, is amended by adding the following new sub-  
6 section:

7 “(d) CERTIFIED INDUSTRIAL GASIFICATION PROP-  
8 erty.—For purposes of this section—

9 “(1) IN GENERAL.—The term ‘certified indus-  
10 trial gasification property’ means any property that  
11 is part of an industrial gasification project as de-  
12 fined in section 202(7) of the Clean Coal Research,  
13 Development, Demonstration, and Deployment Act  
14 of 2005 and that has been certified by the Secretary  
15 of Energy under section 221 of that Act.

16 “(2) LIMIT ON USE OF CREDITS.—Any credit  
17 claimed by a taxpayer under section 46(2) by reason  
18 of subsection (a)(3)(A)(iv) shall be limited to the  
19 project total credit limit associated with the project’s  
20 year of certification or deemed year of certification  
21 as determined under section 221 of the Clean Coal  
22 Research, Development, Demonstration, and Deploy-  
23 ment Act of 2005.”.

○

1        fined in section 202(7) of the Clean Coal Research,  
2        Development, Demonstration, and Deployment Act  
3        of 2005 and that has been certified by the Secretary  
4        of Energy under section 221 of that Act.

5            “(2) LIMIT ON USE OF CREDITS.—Any credit  
6        claimed by a taxpayer under section 46(2) by reason  
7        of subsection (a)(3)(A)(iv) shall be limited to the  
8        project total credit limit associated with the project’s  
9        year of certification or deemed year of certification  
10       as determined under section 221 of the Clean Coal  
11       Research, Development, Demonstration, and Deploy-  
12       ment Act of 2005.”.

○