

110TH CONGRESS
2D SESSION

S. 3345

To promote the capture and sequestration of carbon dioxide, to promote the use of energy produced from coal, and for other purposes.

IN THE SENATE OF THE UNITED STATES

JULY 26, 2008

Mr. ROCKEFELLER introduced the following bill; which was read twice and referred to the Committee on Finance

A BILL

To promote the capture and sequestration of carbon dioxide, to promote the use of energy produced from coal, 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.**

4 This Act may be cited as the “Future Fuels Act of
5 2008”.

6 **SEC. 2. FUTURE FUELS CORPORATION.**

7 Subtitle A of title XVI of the Energy Policy Act of
8 2005 (Public Law 109–58; 119 Stat. 1109) is amended
9 by adding at the end the following:

1 **“SEC. 1602. FUTURE FUELS CORPORATION.**

2 “(a) ESTABLISHMENT.—

3 “(1) IN GENERAL.—The Future Fuels Corpora-
4 tion (referred to in this section as the ‘Corporation’)
5 is established as a government corporation.

6 “(2) ADMINISTRATION.—The Corporation shall
7 be subject to—

8 “(A) this section; and

9 “(B) chapter 91 of title 31, United States
10 Code.

11 “(3) BOARD OF DIRECTORS.—

12 “(A) IN GENERAL.—The Corporation shall
13 be managed by a board of directors composed
14 of 7 individuals who are citizens of the United
15 States, appointed by the President, by and with
16 the advice and consent of the Senate.

17 “(B) CHAIRPERSON.—The board of direc-
18 tors shall annually elect a Chairperson from
19 among the members of the board of directors.

20 “(C) TERM.—The term of a member of the
21 board of directors shall be 4 years.

22 “(4) TRANSFERS.—The Secretary shall transfer
23 to the Corporation, from amounts appropriated and
24 allocated to it, such sums as may be necessary to
25 meet the requirements of this section.

1 “(b) USE OF FUNDS.—Beginning in fiscal year 2009,
 2 funds transferred by the Secretary to the Corporation
 3 under subsection (a)(4) shall be expended by the Corpora-
 4 tion to—

5 “(1) promote and deploy coal and coal cofired
 6 polygeneration technologies;

7 “(2) reduce—

8 “(A) the carbon footprint of coal consump-
 9 tion; and

10 “(B) the production of coal-based byprod-
 11 ucts; and

12 “(3) conduct widespread carbon sequestration
 13 research, development, and deployment activities.”.

14 **SEC. 3. CARBON CAPTURE AND STORAGE RESEARCH, DE-**
 15 **VELOPMENT, AND DEMONSTRATION PRO-**
 16 **GRAM.**

17 Section 963 of the Energy Policy Act of 2005 (42
 18 U.S.C. 16293) is amended—

19 (1) in the section heading, by striking “**AND**
 20 **SEQUESTRATION**” and inserting “**AND STOR-**
 21 **AGE**”;

22 (2) in subsection (a), by striking “and seques-
 23 tration” and inserting “and storage”; and

24 (3) by striking subsections (c) and (d) and in-
 25 serting the following:

1 “(c) PROGRAMMATIC ACTIVITIES.—

2 “(1) GOAL.—The Secretary shall establish a
3 program under which the Secretary shall conduct ac-
4 tivities necessary to achieve the goal of annually se-
5 questering at least 1,000,000 tons of carbon dioxide
6 by January 1, 2015.

7 “(2) REVIEW OF EXISTING DATA.—Not later
8 than 180 days after the date of enactment of the
9 Future Fuels Act of 2008, the Secretary shall—

10 “(A) verify and analyze the results of any
11 assessment conducted by any other Federal
12 agency or a State relating to geological storage
13 capacity and the potential for carbon injection
14 rates, including a risk analysis of any potential
15 geologic storage areas assessed; and

16 “(B) submit to the appropriate committees
17 of Congress a report that describes the results
18 of the verification and analyses under subpara-
19 graph (A).

20 “(3) RECOMMENDATIONS.—As soon as prac-
21 ticable after the date of enactment of the Future
22 Fuels Act of 2008, the Secretary shall submit to the
23 appropriate committees of Congress recommenda-
24 tions on appropriate regulatory and advisory mecha-
25 nisms for—

1 “(A) the determination of best tech-
2 nologies;

3 “(B) the identification and evaluation of
4 state-of-the-art research, development, and de-
5 ployment strategies for carbon capture and
6 storage technologies;

7 “(C) the selection and operation of carbon
8 dioxide sequestration sites; and

9 “(D) the transfer of liability for the sites
10 to the United States.

11 “(4) INTERSTATE COMPACTS.—As soon as
12 practicable after the date of enactment of this Act,
13 the Secretary shall develop model interstate com-
14 pacts to govern the transportation, injection, and
15 storage of carbon dioxide.

16 “(5) DEMONSTRATION PROJECT.—The Sec-
17 retary shall conduct geological sequestration dem-
18 onstration projects involving carbon dioxide seques-
19 tration operations in a variety of candidate geologi-
20 cal settings, including—

21 “(A) oil and gas reservoirs;

22 “(B) unmineable coal seams;

23 “(C) deep saline aquifers;

24 “(D) basalt and shale formations; and

1 “(E) terrestrial sequestration, including
2 restoration project sites provided assistance by
3 the Abandoned Mine Reclamation Fund estab-
4 lished by section 401 of the Surface Mining
5 Control and Reclamation Act of 1977 (30
6 U.S.C. 1231).

7 “(d) AUTHORIZATION OF APPROPRIATIONS.—

8 “(1) IN GENERAL.—There are authorized to be
9 appropriated to carry out this section—

10 “(A) \$100,000,000 for each of fiscal years
11 2009 and 2010;

12 “(B) \$105,000,000 for fiscal year 2011;

13 “(C) \$110,000,000 for fiscal year 2012;

14 “(D) \$115,000,000 for fiscal year 2013;

15 and

16 “(E) \$120,000,000 for fiscal year 2014.

17 “(2) AVAILABILITY OF FUNDS.—Funds made
18 available for a fiscal year under paragraph (1)—

19 “(A) shall remain available until expended,
20 but not later than September 30, 2014; and

21 “(B) may be reprogrammed, at the discre-
22 tion of the Secretary, for expenditure for other
23 demonstration projects under this title only
24 after—

25 “(i) September 30, 2010; and

1 “(ii) the Secretary provides notice of
2 the proposed reprogramming to the appro-
3 priate committees of Congress.”.

4 **SEC. 4. STANDBY LOANS FOR QUALIFYING COAL-TO-LIQUID**
5 **PROJECTS.**

6 Section 1702 of the Energy Policy Act of 2005 (42
7 U.S.C. 16512) is amended by adding at the end the fol-
8 lowing:

9 “(k) STANDBY LOANS FOR QUALIFYING COAL-TO-
10 LIQUID PROJECTS.—

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

12 “(A) CAP PRICE.—The term ‘cap price’
13 means the market price specified in a standby
14 loan agreement above which the qualifying CTL
15 project is required to make payments to the
16 United States.

17 “(B) CONVENTIONAL BASELINE EMIS-
18 SIONS.—The term ‘conventional baseline emis-
19 sions’ means—

20 “(i) the lifecycle greenhouse gas emis-
21 sions of a facility that produces combus-
22 tible end products, using petroleum as a
23 feedstock, that are equivalent to combus-
24 tible end products produced by a facility of

1 comparable size through a qualifying CTL
2 project;

3 “(ii) in the case of noncombustible
4 products produced through a qualifying
5 CTL project, the average lifecycle green-
6 house gas emissions emitted by projects
7 that—

8 “(I) are of comparable size; and

9 “(II) produce equivalent products
10 using conventional feedstocks; and

11 “(iii) in the case of synthesized gas
12 intended for use as a combustible fuel in
13 lieu of natural gas produced by a quali-
14 fying CTL project, the lifecycle greenhouse
15 gas emissions that would result from
16 equivalent use of natural gas.

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

21 “(D) ELIGIBLE ENTITY.—The term ‘eligi-
22 ble entity’ means an entity that conducts a
23 qualifying CTL project.

1 “(E) FACILITY.—The term ‘facility’ means
2 a facility at which the conversion of feedstocks
3 to end products takes place.

4 “(F) FULL TERM.—The term ‘full term’
5 means the full term of a standby loan agree-
6 ment, as specified in the standby loan agree-
7 ment under paragraph (2)(A)(ii)(III), which
8 shall not be more than the lesser of—

9 “(i) 30 years; or

10 “(ii) 90 percent of the projected use-
11 ful life of the qualifying CTL project, as
12 determined by the Secretary.

13 “(G) LIFECYCLE GREENHOUSE GAS EMIS-
14 SIONS.—The term ‘lifecycle greenhouse gas
15 emissions’ means the difference between—

16 “(i) the aggregate quantity of green-
17 house gases attributable to the production
18 and transportation of end products at a fa-
19 cility, including the production, extraction,
20 cultivation, distribution, marketing, and
21 transportation of feedstocks, and the sub-
22 sequent distribution and use of any com-
23 bustible end products; and

24 “(ii)(I) any greenhouse gases captured
25 at the facility and sequestered;

1 “(II) the carbon content, expressed in
2 units of carbon dioxide equivalent, of any
3 feedstock that is a renewable biomass; and

4 “(III) the carbon content, expressed
5 in units of carbon dioxide equivalent, of
6 any end products that do not result in the
7 release of carbon dioxide to the atmos-
8 phere.

9 “(H) LONG-TERM STORAGE.—The term
10 ‘long-term storage’ means sequestration with an
11 expected maximum rate of carbon dioxide leak-
12 age over a specified period of time that is con-
13 sistent with the objective of reducing atmos-
14 pheric concentrations of carbon dioxide, subject
15 to a permit issued under any law in effect as
16 of the date of the sequestration.

17 “(I) MARKET PRICE.—The term ‘market
18 price’ means the average quarterly price of a
19 petroleum price index specified in the standby
20 loan agreement.

21 “(J) MINIMUM PRICE.—The term ‘min-
22 imum price’ means a market price specified in
23 the standby loan agreement below which the
24 United States is obligated to make disburse-
25 ments to the qualifying CTL project.

1 “(K) OUTPUT.—The term ‘output’ means
2 all or a portion of the liquid or gaseous trans-
3 portation fuels produced from the qualifying
4 CTL project, as specified in the standby loan
5 agreement.

6 “(L) PRIMARY TERM.—The term ‘primary
7 term’ means the initial term of a standby loan
8 agreement, as specified in the agreement under
9 paragraph (2)(A)(ii)(II), which shall not be
10 more than the lesser of—

11 “(i) 20 years; or

12 “(ii) 75 percent of the projected use-
13 ful life of the qualifying CTL project, as
14 determined by the Secretary.

15 “(M) QUALIFYING CTL PROJECT.—The
16 term ‘qualifying CTL project’ means a commer-
17 cial-scale project that converts coal to industrial
18 feedstocks or 1 or more liquid or gaseous fuels
19 for transportation or other uses or a project
20 conducted at a facility that converts petroleum
21 refinery waste products (including petroleum
22 coke) into 1 or more liquid or gaseous transpor-
23 tation fuels—

24 “(i) that demonstrates the capture,
25 sequestration, disposal, or use of the car-

1 bon dioxide produced in the conversion
2 process; and

3 “(ii) for which—

4 “(I) the annual lifecycle green-
5 house gas emissions of the project are
6 at least 20 percent lower than conven-
7 tional baseline emissions;

8 “(II) at least 75 percent of the
9 carbon dioxide that would otherwise
10 be released to the atmosphere at the
11 facility in the production of end prod-
12 ucts of the project is captured for
13 long-term storage; and

14 “(III) the eligible entity has en-
15 tered into an enforceable agreement
16 with the Secretary to implement car-
17 bon capture at the percentage that, by
18 the end of the 5-year period after
19 commencement of commercial oper-
20 ation of the eligible qualifying CTL
21 project—

22 “(aa) represents the best
23 available technology; and

1 “(bb) achieves a reduction in
2 carbon emissions that is not less
3 than 75 percent.

4 “(N) STANDBY LOAN AGREEMENT.—The
5 term ‘standby loan agreement’ means a loan
6 agreement entered into under paragraph
7 (2)(A)(i).

8 “(2) AGREEMENTS.—

9 “(A) STANDBY LOAN AGREEMENT.—

10 “(i) IN GENERAL.—The Secretary
11 may enter into standby loan agreements
12 for the conduct of not more than 10 quali-
13 fying CTL projects, at least 1 of which
14 may be a qualifying CTL project primarily
15 designed to produce pipeline-quality nat-
16 ural gas from domestic coal.

17 “(ii) REQUIREMENTS.—A standby
18 loan agreement entered into under clause
19 (i) shall—

20 “(I) provide for a direct loan
21 from the Secretary to the eligible enti-
22 ty for the qualifying CTL project;

23 “(II) specify the primary term of
24 the standby loan agreement;

1 “(III) specify the full term of the
2 standby loan agreement; and

3 “(IV) establish a cap price and a
4 minimum price for the primary term
5 of the standby loan agreement.

6 “(B) PROFIT-SHARING AGREEMENT.—

7 “(i) IN GENERAL.—Simultaneously
8 with entering into a standby loan agree-
9 ment under subparagraph (A), the Sec-
10 retary may enter into a profit-sharing
11 agreement with the eligible entity.

12 “(ii) REQUIREMENTS.—Under a prof-
13 it-sharing agreement, if the market price
14 exceeds the cap price in a calendar quar-
15 ter, a profit-sharing payment shall be
16 made for the calendar quarter, in an
17 amount equal to the difference between—

18 “(I) the amount that is equal to
19 the product obtained by multiplying—

20 “(aa) the amount that is
21 equal to the difference between—

22 “(AA) the market price;

23 and

24 “(BB) the cap price;

25 and

1 “(bb) the output of the
2 qualifying CTL project; and

3 “(II) the total amount of any
4 loan repayments made for the cal-
5 endar quarter.

6 “(3) LOAN DISBURSEMENTS.—

7 “(A) DISBURSEMENT.—A loan subject to a
8 standby loan agreement shall be disbursed dur-
9 ing the primary term of the standby loan agree-
10 ment during any period in which the market
11 price falls below the minimum price.

12 “(B) AMOUNT.—

13 “(i) IN GENERAL.—Subject to sub-
14 paragraph (B), the total amount of dis-
15 bursements in any calendar quarter under
16 subparagraph (A) shall be equal to the
17 product obtained by multiplying—

18 “(I) the difference between—

19 “(aa) the minimum price;
20 and

21 “(bb) the market price; and

22 “(II) the output of the qualifying
23 CTL project.

24 “(ii) LIMITATION.—Notwithstanding
25 clause (i), the total amount of disburse-

1 ments in any calendar quarter shall be not
2 more than the total amount of disburse-
3 ments specified in the applicable standby
4 loan agreement.

5 “(4) LOAN REPAYMENTS.—

6 “(A) IN GENERAL.—Subject to subpara-
7 graph (B), the Secretary shall establish terms
8 and conditions, including interest rates and am-
9 ortization schedules, for the repayment of a
10 loan under this subsection within the full term
11 of the standby loan agreement.

12 “(B) LIMITATIONS.—In establishing the
13 terms and conditions under subparagraph (A),
14 the Secretary shall provide that—

15 “(i) if, in any calendar quarter during
16 the primary term of the standby loan
17 agreement, the market price is less than
18 the cap price—

19 “(I) the qualifying CTL project
20 may elect to defer some or all of the
21 repayment obligations due during the
22 applicable calendar quarter; and

23 “(II) if an election is made under
24 subclause (I), any unpaid obligations

1 will continue to accrue interest during
2 the deferral period;

3 “(ii)(I) if, in any calendar quarter
4 during the primary term of the agreement,
5 the market price is greater than the cap
6 price, the qualifying CTL project shall
7 meet the scheduled repayment obligation
8 and any deferred repayment obligations,
9 but shall not be required to pay in the ap-
10 plicable calendar quarter an amount that
11 is more than the product obtained by mul-
12 tiplying—

13 “(aa) the amount that is equal to
14 the difference between—

15 “(AA) the market price; and

16 “(BB) the cap price; and

17 “(bb) the output of the qualifying
18 CTL project; and

19 “(II) the qualifying CTL project may
20 elect to defer any repayment obligation in
21 excess of the amount determined under
22 subclause (I); and

23 “(C) at the end of the primary term of the
24 standby loan agreement, the cumulative amount
25 of any deferred repayment obligations and any

1 accrued interest shall be amortized (with inter-
2 est) over the remainder of the full term of the
3 standby loan agreement.

4 “(5) COMPLIANCE WITH FEDERAL CREDIT RE-
5 FORM ACT.—

6 “(A) UPFRONT PAYMENT OF COST OF
7 LOAN.—No standby loan agreement may be en-
8 tered into under this subsection unless the eligi-
9 ble entity, on execution of the standby loan
10 agreement, makes an upfront payment to the
11 United States that the Director of the Office of
12 Management and Budget determines is equal to
13 the cost of the loan, as determined under
14 502(5)(B) of the Federal Credit Reform Act of
15 1990 (2 U.S.C. 661a(5)(B)).

16 “(B) MINIMIZATION OF RISK TO THE GOV-
17 ERNMENT.—In making the determination of the
18 cost of the loan for purposes of establishing the
19 upfront payment under subparagraph (A), the
20 Secretary and the Director of the Office of
21 Management and Budget shall take into consid-
22 eration the extent to which the minimum price
23 and the cap price reflect historical patterns of
24 volatility in actual oil prices relative to projec-
25 tions of future oil prices, based on—

1 “(i) publicly available data from the
2 Energy Information Administration; and

3 “(ii) statistical methods and analyses
4 that are appropriate for the analysis of vol-
5 atility in energy prices.

6 “(C) TREATMENT OF PAYMENTS.—

7 “(i) IN GENERAL.—The value to the
8 United States of an upfront payment
9 under subparagraph (A) and any profit-
10 sharing payments under paragraph (2)(B)
11 shall be taken into account for purposes of
12 section 502(5)(B)(iii) of the Federal Credit
13 Reform Act of 1990 (2 U.S.C.
14 661a(5)(B)(iii)) in determining the cost to
15 the Federal Government of a loan under
16 this subsection.

17 “(ii) NO COST.—If a loan under this
18 subsection has no cost to the Federal Gov-
19 ernment, the requirements of section
20 504(b) of the Federal Credit Reform Act
21 of 1990 (2 U.S.C. 661c(b)) shall be consid-
22 ered to be satisfied.

23 “(6) APPLICABLE LAW.—

24 “(A) NO DOUBLE BENEFIT.—A qualifying
25 CTL project receiving a loan under this sub-

1 section may not, during the primary term of the
 2 standby loan agreement, receive a Federal loan
 3 guarantee under—

4 “(i) subsection (a); or

5 “(ii) any other law.

6 “(B) SUBROGATION, FEES, AND FULL
 7 FAITH AND CREDIT.—Subsections (g)(2), (h),
 8 and (j) shall apply to standby loans under this
 9 subsection to the same extent the provisions
 10 apply to loan guarantees.”.

11 **SEC. 5. CREDIT FOR MULTI-PRODUCT PIPELINE CON-**
 12 **STRUCTION.**

13 (a) IN GENERAL.—Subpart D of part IV of sub-
 14 chapter A of chapter 1 of the Internal Revenue Code of
 15 1986 is amended by adding at the end the following new
 16 section:

17 **“SEC. 45Q. COAL-BASED TRANSPORTATION FUEL PIPELINE**
 18 **CREDIT.**

19 “(a) IN GENERAL.—For purposes of section 38, in
 20 the case of an eligible taxpayer, the coal-based transpor-
 21 tation fuel pipeline credit for any taxable year is an
 22 amount equal to the applicable amount for each gallon of
 23 qualified average daily throughput with respect to an eligi-
 24 ble pipeline during the taxable year.

1 “(b) APPLICABLE AMOUNT.—For purposes of sub-
2 section (a), the applicable amount is an amount equal to—

3 “(1) \$0.02 per gallon for the first 1,000,000
4 gallons of qualified average daily throughput, and

5 “(2) \$0.01 per gallon for the number of gallons
6 of qualified average daily throughput in excess of
7 1,000,000 gallons.

8 “(c) QUALIFIED AVERAGE DAILY THROUGHPUT.—
9 For purposes of this section—

10 “(1) IN GENERAL.—The term ‘qualified average
11 daily throughput’ means the average of the amount
12 of qualified fuel which enters the eligible pipeline on
13 each day during the taxable year.

14 “(2) TERMINATION.—

15 “(A) IN GENERAL.—No amount of quali-
16 fied fuel entering an eligible pipeline shall be
17 taken into account for any day after December
18 31, 2015.

19 “(B) SPECIAL RULE.—In the case of any
20 taxable year which includes December 31, 2015,
21 any day in such taxable year following such
22 date shall not be taken into account in deter-
23 mining the qualified average daily throughput
24 for such year.

1 “(d) OTHER DEFINITIONS.—For purposes of this
2 section—

3 “(1) ELIGIBLE TAXPAYER.—The term ‘eligible
4 taxpayer’ means any taxpayer who owns an eligible
5 pipeline.

6 “(2) ELIGIBLE PIPELINE.—The term ‘eligible
7 pipeline’ means a pipeline—

8 “(A) the original use of which commences
9 with the taxpayer,

10 “(B) which is placed in service by the tax-
11 payer after the date of the enactment of this
12 Act and before December 31, 2012,

13 “(C) no written binding contract for the
14 construction of which was in effect on or before
15 December 31, 2007, and

16 “(D) which is used for the transportation
17 of fuels derived from coal.

18 Rules similar to the rules of section 179C(c)(2) shall
19 apply for purposes of this paragraph.

20 “(3) QUALIFIED FUEL.—The term ‘qualified
21 fuel’ means any liquid fuel derived from coal, or coal
22 and biomass (as defined in section 45K(c)(3))
23 through the Fischer-Tropsch processor another proc-
24 ess converting coal into liquid fuel.”.

1 (b) CONFORMING AMENDMENT.—Section 38(b) of
 2 such the Internal Revenue Code of 1986 (relating to gen-
 3 eral business credit) is amended by striking “plus” at the
 4 end of paragraph (32), by striking the period at the end
 5 of paragraph (33) and inserting “, plus”, and by adding
 6 at the end of following new paragraph:

7 “(34) the coal-based transportation fuel pipeline
 8 credit under section 45Q(a).”.

9 (c) CLERICAL AMENDMENT.—The table of sections
 10 for subpart B of part IV of subchapter A of chapter 1
 11 of such Code (relating to other credits) is amended by add-
 12 ing at the end the following new section:

“Sec. 45Q. Coal-based transportation fuel pipeline credit.”.

13 (d) EFFECTIVE DATE.—The amendments made by
 14 this subsection shall apply to property placed in service
 15 after the date of the enactment of this Act.

16 **SEC. 6. INCENTIVES TO CAPTURE COALMINE METHANE.**

17 (a) IN GENERAL.—Section 45K of the Internal Rev-
 18 enue Code of 1986 (relating to credit for producing fuel
 19 from a nonconventional source) is amended by adding at
 20 the end the following new subsection:

21 “(h) APPLICATION TO COALMINE METHANE GAS.—

22 “(1) IN GENERAL.—This section shall apply to
 23 coalmine methane gas—

24 “(A) captured or extracted by the taxpayer
 25 after the date of the enactment of this sub-

1 section and before the date that is 5 years after
2 the date of the enactment of this subsection,
3 and

4 “(B) utilized as a fuel source or sold by or
5 on behalf of the taxpayer to an unrelated per-
6 son after the date of the enactment of this sub-
7 section and before the date that is 5 years after
8 the date of the enactment of this subsection.

9 “(2) COALMINE METHANE GAS.—For purposes
10 of this paragraph, the term ‘coalmine methane gas’
11 means any methane gas which is—

12 “(A) liberated during qualified coal mining
13 operations, or

14 “(B) extracted up to 5 years in advance of
15 qualified coal mining operations as part of a
16 specific plan to mine a coal deposit.

17 “(3) SPECIAL RULE FOR ADVANCED EXTRAC-
18 TION.—In the case of coalmine methane gas which
19 is captured in advance of qualified coal mining oper-
20 ations, the credit under subsection (a) shall be al-
21 lowed only after the date the coal extraction occurs
22 in the immediate area where the coalmine methane
23 gas was removed.

24 “(4) NONCOMPLIANCE WITH POLLUTION
25 LAWS.—For purposes of subparagraphs (B) and (C),

1 coal mining operations which are not in compliance
2 with the applicable State and Federal pollution pre-
3 vention, control, and permit requirements for any
4 period of time shall not be considered to be qualified
5 coal mining operations during such period.”.

6 (b) EFFECTIVE DATE.—The amendments made by
7 this section shall take effect on the date of the enactment
8 of this Act.

9 **SEC. 7. EXPANDED CLEAN COAL TECHNOLOGY INCEN-**
10 **TIVES.**

11 (a) EXPANSION AND MODIFICATION OF ADVANCED
12 COAL PROJECT INVESTMENT CREDIT.—

13 (1) CREDIT RATE PARITY AMONG PROJECTS.—
14 Section 48A(a) of the Internal Revenue Code of
15 1986 (relating to qualifying advanced coal project
16 credit) is amended by striking “equal to” and all
17 that follows and inserting “equal to 30 percent of
18 the qualified investment for such taxable year.”.

19 (2) EXPANSION OF AGGREGATE CREDITS.—Sec-
20 tion 48A(d)(3)(A) of such Code (relating to aggre-
21 gate credits) is amended by striking
22 “\$1,300,000,000” and inserting “\$8,300,000,000”.

23 (3) AUTHORIZATION OF ADDITIONAL
24 PROJECTS.—

1 (A) IN GENERAL.—Subparagraph (B) of
2 section 48A(d)(3) of such Code (relating to ag-
3 gregate credits) is amended to read as follows:

4 “(B) PARTICULAR PROJECTS.—Of the dol-
5 lar amount in subparagraph (A), the Secretary
6 is authorized to certify—

7 “(i) \$800,000,000 for integrated gas-
8 ification combined cycle projects the appli-
9 cation for which is submitted during the
10 period described in paragraph (2)(A)(i),

11 “(ii) \$500,000,000 for projects which
12 use other advanced coal-based generation
13 technologies the application for which is
14 submitted during the period described in
15 paragraph (2)(A)(i),

16 “(iii) \$4,200,000,000 for integrated
17 gasification combined cycle projects the ap-
18 plication for which is submitted during the
19 period described in paragraph (2)(A)(ii),
20 and

21 “(iv) \$2,800,000,000 for other ad-
22 vanced coal-based generation technology
23 projects the application for which is sub-
24 mitted during the period described in para-
25 graph (2)(A)(ii).”.

1 (B) APPLICATION PERIOD FOR ADDI-
2 TIONAL PROJECTS.—Subparagraph (A) of sec-
3 tion 48A(d)(2) of such Code (relating to certifi-
4 cation) is amended to read as follows:

5 “(A) APPLICATION PERIOD.—Each appli-
6 cant for certification under this paragraph shall
7 submit an application meeting the requirements
8 of subparagraph (B). An applicant may only
9 submit an application—

10 “(i) for an allocation from the dollar
11 amount specified in clause (i) or (ii) of
12 paragraph (3)(A) during the 3-year period
13 beginning on the date the Secretary estab-
14 lishes the program under paragraph (1),
15 and

16 “(ii) for an allocation from the dollar
17 amount specified in clause (iii) or (iv) of
18 paragraph (3)(A) during the 3-year period
19 beginning at the earlier of the termination
20 of the period described in clause (i) or the
21 date prescribed by the Secretary.”.

22 (C) CAPTURE AND SEQUESTRATION OF
23 CARBON DIOXIDE EMISSIONS REQUIREMENT.—
24 Section 48A(e)(1) of such Code (relating to re-
25 quirements) is amended by striking “and” at

1 the end of subparagraph (E), by striking the
2 period at the end of subparagraph (F) and in-
3 serting “, and”, and by adding at the end the
4 following new subparagraph:

5 “(G) in the case of any project the applica-
6 tion for which is submitted during the period
7 described in paragraph (2)(A)(ii), the project
8 includes equipment to separate and sequester
9 65 percent of such project’s total carbon dioxide
10 emissions.”.

11 (4) NAMEPLATE CAPACITY.—Paragraph (1) of
12 section 48A(e) of such Code is amended by adding
13 at the end the following new flush sentence:

14 “For purposes of subparagraph (C), in determining
15 total nameplate generating capacity, the Secretary
16 shall use the electric output that is guaranteed by
17 the provider or supplier of the advanced coal-based
18 generation technology based upon a certified heat
19 and material heat balance.”.

20 (5) EFFECTIVE DATE.—The amendments made
21 by this subsection shall take effect on the date of the
22 enactment of this Act.

23 (b) CLEAN COAL ENERGY BONDS.—

24 (1) IN GENERAL.—Subpart I of part IV of sub-
25 chapter A of chapter 1 of the Internal Revenue Code

1 of 1986 is amended by adding at the end the fol-
2 lowing new section:

3 **“SEC. 54C. CLEAN COAL ENERGY BONDS.**

4 “(a) CLEAN COAL ENERGY BOND.—For purposes of
5 this subchapter, the term ‘clean coal energy bond’ means
6 any bond issued as part of an issue if—

7 “(1) the bond is issued by a qualified issuer
8 pursuant to an allocation by the Secretary to such
9 issuer of a portion of the national clean coal energy
10 bond limitation under subsection (c)(2),

11 “(2) 100 percent or more of the available
12 project proceeds from the sale of such issue are to
13 be used for capital expenditures incurred by quali-
14 fied borrowers for 1 or more qualified projects, and

15 “(3) the qualified issuer designates such bond
16 for purposes of this section and the bond is in reg-
17 istered form.

18 “(b) QUALIFIED PROJECT; SPECIAL USE RULES.—

19 “(1) IN GENERAL.—The term ‘qualified project’
20 means a qualifying advanced coal project (as defined
21 in section 48A(c)(1)) placed in service by a qualified
22 borrower.

23 “(2) REFINANCING RULES.—For purposes of
24 subsection (a)(2), a qualified project may be reffi-
25 nanced with proceeds of a clean coal energy bond

1 only if the indebtedness being refinanced (including
2 any obligation directly or indirectly refinanced by
3 such indebtedness) was originally incurred by a
4 qualified borrower after the date of the enactment of
5 this section.

6 “(3) REIMBURSEMENT.—For purposes of sub-
7 section (a)(2), a clean coal energy bond may be
8 issued to reimburse a qualified borrower for amounts
9 paid after the date of the enactment of this section
10 with respect to a qualified project, but only if—

11 “(A) prior to the payment of the original
12 expenditure, the qualified borrower declared its
13 intent to reimburse such expenditure with the
14 proceeds of a clean coal energy bond,

15 “(B) not later than 60 days after payment
16 of the original expenditure, the qualified issuer
17 adopts an official intent to reimburse the origi-
18 nal expenditure with such proceeds, and

19 “(C) the reimbursement is made not later
20 than 18 months after the date the original ex-
21 penditure is paid.

22 “(4) TREATMENT OF CHANGES IN USE.—For
23 purposes of subsection (a)(2), the proceeds of an
24 issue shall not be treated as used for a qualified
25 project to the extent that a qualified borrower takes

1 any action within its control which causes such pro-
2 ceeds not to be used for a qualified project. The Sec-
3 retary shall prescribe regulations specifying remedial
4 actions that may be taken (including conditions to
5 taking such remedial actions) to prevent an action
6 described in the preceding sentence from causing a
7 bond to fail to be a clean coal energy bond.

8 “(c) LIMITATION ON AMOUNT OF BONDS DES-
9 IGNATED.—

10 “(1) NATIONAL LIMITATION.—There is a na-
11 tional clean coal energy bond limitation of
12 \$2,000,000,000.

13 “(2) ALLOCATION BY SECRETARY.—The Sec-
14 retary shall allocate the amount described in para-
15 graph (1) among qualified projects in such manner
16 as the Secretary determines appropriate, except that
17 the Secretary may not allocate more than
18 \$1,250,000,000 of the national clean coal energy
19 bond limitation to finance qualified projects of quali-
20 fied borrowers which are governmental bodies.

21 “(d) QUALIFIED ISSUER; QUALIFIED BORROWER.—
22 For purposes of this section—

23 “(1) QUALIFIED ISSUER.—The term ‘qualified
24 issuer’ means—

25 “(A) a clean coal energy bond lender,

1 “(B) a cooperative electric company, or

2 “(C) a governmental body.

3 “(2) QUALIFIED BORROWER.—The term ‘quali-
4 fied borrower’ means—

5 “(A) a mutual or cooperative electric com-
6 pany described in section 501(c)(12) or
7 1381(a)(2)(C), or

8 “(B) a governmental body.

9 “(3) COOPERATIVE ELECTRIC COMPANY.—The
10 term ‘cooperative electric company’ means a mutual
11 or cooperative electric company described in section
12 501(c)(12) or section 1381(a)(2)(C), or a not-for-
13 profit electric utility which has received a loan or
14 loan guarantee under the Rural Electrification Act.

15 “(4) CLEAN COAL ENERGY BOND LENDER.—
16 The term ‘clean coal energy bond lender’ means a
17 lender which is a cooperative which is owned by, or
18 has outstanding loans to, 100 or more cooperative
19 electric companies and is in existence on February
20 1, 2002, and shall include any affiliated entity which
21 is controlled by such lender.

22 “(5) GOVERNMENTAL BODY.—The term ‘gov-
23 ernmental body’ means any State, territory, posses-
24 sion of the United States, the District of Columbia,

1 Indian tribal government, and any political subdivi-
2 sion thereof.

3 “(e) SPECIAL RULES RELATING TO POOL BONDS.—

4 No portion of a clean coal energy bond which is a pooled
5 financing bond may be allocable to any loan unless the
6 borrower has entered into a written loan commitment for
7 such portion prior to the issue date of such issue.

8 “(f) OTHER DEFINITIONS AND SPECIAL RULES.—

9 For purposes of this section—

10 “(1) POOLED FINANCING BOND.—The term
11 ‘pooled financing bond’ shall have the meaning given
12 such term by section 149(f)(4)(A).

13 “(2) RATABLE PRINCIPAL AMORTIZATION RE-
14 QUIRED.—A bond shall not be treated as a clean
15 coal energy bond unless it is part of an issue which
16 provides for an equal amount principal to be paid by
17 the qualified issuer during each 12-month period
18 that the issue is outstanding (other than the first
19 12-month period).

20 “(g) TERMINATION.—A bond shall not be treated as
21 a clean coal energy bond if such bond is issued after De-
22 cember 31, 2012.”.

23 (2) CONFORMING AMENDMENTS.—

24 (A) Paragraph (1) of section 54A(d) is
25 amended to read as follows:

1 “(1) QUALIFIED TAX CREDIT BOND.—The term
2 ‘qualified tax credit bond’ means—

3 “(A) a qualified forestry conservation
4 bond, or

5 “(B) a clean coal energy bond,
6 which is part of an issue that meets requirements of
7 paragraphs (2), (3), (4), (5), and (6).”.

8 (B) Subparagraph (C) of section
9 54A(d)(2), as added by section 106, is amended
10 to read as follows:

11 “(C) QUALIFIED PURPOSE.—For purposes
12 of this paragraph, the term ‘qualified purpose’
13 means—

14 “(i) in the case of a qualified forestry
15 conservation bond, a purpose specified in
16 section 54B(e), and

17 “(ii) in the case of a clean coal energy
18 bond, a qualified project specified in sec-
19 tion 54C(b).”.

20 (C) The table of sections for subpart I of
21 part IV of subchapter A of chapter 1 is amend-
22 ed by adding at the end the following new item:

“Sec. 54C. Clean coal energy bonds.”.

23 (3) ISSUANCE OF REGULATIONS.—The Sec-
24 retary of the Treasury shall issues regulations re-
25 quired under section 54C of the Internal Revenue

1 Code of 1986 (as added by this section) not later
 2 than 120 days after the date of the enactment of
 3 this Act.

4 (4) EFFECTIVE DATE.—The amendments made
 5 by this subsection shall apply to bonds issued after
 6 December 31, 2007.

7 (c) TAX CREDIT FOR CARBON DIOXIDE SEQUESTRA-
 8 TION.—

9 (1) IN GENERAL.—Subpart D of part IV of
 10 subchapter A of chapter 1 of the Internal Revenue
 11 Code of 1986 (relating to business credits), as
 12 amended by this Act, is amended by adding at the
 13 end the following new section:

14 **“SEC. 45R. CREDIT FOR CARBON DIOXIDE SEQUESTRATION.**

15 “(a) GENERAL RULE.—For purposes of section 38,
 16 the carbon dioxide sequestration credit for any taxable
 17 year is an amount equal to the sum of—

18 “(1) \$20 per metric ton of qualified carbon di-
 19 oxide which is—

20 “(A) captured by the taxpayer at a quali-
 21 fied facility, and

22 “(B) disposed of by the taxpayer in secure
 23 geological storage, and

24 “(2) \$10 per metric ton of qualified carbon di-
 25 oxide which is—

1 “(A) captured by the taxpayer at a quali-
2 fied facility, and

3 “(B) used by the taxpayer as a tertiary
4 injectant in a qualified enhanced oil or natural
5 gas recovery project.

6 “(b) QUALIFIED CARBON DIOXIDE.—For purposes of
7 this section—

8 “(1) IN GENERAL.—The term ‘qualified carbon
9 dioxide’ means carbon dioxide captured from an in-
10 dustrial source which—

11 “(A) would otherwise be released into the
12 atmosphere as industrial emission of green-
13 house gas, and

14 “(B) is measured at the source of capture
15 and verified at the point of disposal or injec-
16 tion.

17 “(2) RECYCLED CARBON DIOXIDE.—The term
18 ‘qualified carbon dioxide’ includes the initial deposit
19 of captured carbon dioxide used as a tertiary
20 injectant. Such term does not include carbon dioxide
21 that is re-captured, recycled, and re-injected as part
22 of the enhanced oil and natural gas recovery process.

23 “(c) QUALIFIED FACILITY.—For purposes of this
24 section, the term ‘qualified facility’ means any industrial
25 facility—

1 “(1) which is owned by the taxpayer,

2 “(2) at which carbon capture equipment is
3 placed in service, and

4 “(3) which captures not less than 500,000 met-
5 ric tons of carbon dioxide during the taxable year.

6 “(d) SPECIAL RULES AND OTHER DEFINITIONS.—

7 For purposes of this section—

8 “(1) ONLY CARBON DIOXIDE CAPTURED WITH-
9 IN THE UNITED STATES TAKEN INTO ACCOUNT.—

10 The credit under this section shall apply only with
11 respect to qualified carbon dioxide the capture of
12 which is within—

13 “(A) the United States (within the mean-
14 ing of section 638(1)), or

15 “(B) a possession of the United States
16 (within the meaning of section 638(2)).

17 “(2) SECURE GEOLOGICAL STORAGE.—The Sec-
18 retary, in consultation with the Administrator of the
19 Environmental Protection Agency, shall establish
20 regulations for determining adequate security meas-
21 ures for the geological storage of carbon dioxide
22 under subsection (a)(1)(B) such that the carbon di-
23 oxide does not escape into the atmosphere. Such
24 term shall include storage at deep saline formations

1 and unminable coal seems under such conditions as
2 the Secretary may determine under such regulations.

3 “(3) TERTIARY INJECTANT.—The term ‘ter-
4 tiary injectant’ has the same meaning as when used
5 within section 193(b)(1).

6 “(4) QUALIFIED ENHANCED OIL OR NATURAL
7 GAS RECOVERY PROJECT.—The term ‘qualified en-
8 hanced oil or natural gas recovery project’ has the
9 meaning given the term ‘qualified enhanced oil re-
10 covery project’ by section 43(c)(2), by substituting
11 ‘crude oil or natural gas’ for ‘crude oil’ in subpara-
12 graph (A)(i) thereof.

13 “(5) CREDIT ATTRIBUTABLE TO TAXPAYER.—
14 Any credit under this section shall be attributable to
15 the person that captures and physically or contrac-
16 tually ensures the disposal of or the use as a tertiary
17 injectant of the qualified carbon dioxide, except to
18 the extent provided in regulations prescribed by the
19 Secretary.

20 “(6) RECAPTURE.—The Secretary shall, by reg-
21 ulations, provide for recapturing the benefit of any
22 credit allowable under subsection (a) with respect to
23 any qualified carbon dioxide which ceases to be cap-
24 tured, disposed of, or used as a tertiary injectant in

1 a manner consistent with the requirements of this
2 section.

3 “(7) INFLATION ADJUSTMENT.—In the case of
4 any taxable year beginning in a calendar year after
5 2008, there shall be substituted for each dollar
6 amount contained in subsection (a) an amount equal
7 to the product of—

8 “(A) such dollar amount, multiplied by

9 “(B) the inflation adjustment factor for
10 such calendar year determined under section
11 43(b)(3)(B) for such calendar year, determined
12 by substituting ‘2007’ for ‘1990’.

13 “(e) TERMINATION.—This section shall not apply to
14 qualified carbon dioxide after the date that is 5 years after
15 the date of the enactment of this Act.”.

16 (2) CONFORMING AMENDMENT.—Section 38(b)
17 of such Code (relating to general business credit), as
18 amended by this Act, is amended by striking “plus”
19 at the end of paragraph (33), by striking the period
20 at the end of paragraph (34) and inserting “, plus”,
21 and by adding at the end of following new para-
22 graph:

23 “(35) the carbon dioxide sequestration credit
24 determined under section 45R(a).”.

1 (3) CLERICAL AMENDMENT.—The table of sec-
2 tions for subpart B of part IV of subchapter A of
3 chapter 1 of such Code (relating to other credits), as
4 amended by this Act, is amended by adding at the
5 end the following new section:

“Sec. 45R. Credit for carbon dioxide sequestration.”.

6 (4) EFFECTIVE DATE.—The amendments made
7 by this subsection shall apply carbon dioxide cap-
8 tured after the date of the enactment of this Act.

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