

1           **Subtitle D—Industrial Energy**  
2                           **Efficiency**

3   **SEC. 451. INDUSTRIAL ENERGY EFFICIENCY.**

4           (a) IN GENERAL.—Title III of the Energy Policy and  
5 Conservation Act (42 U.S.C. 6291 et seq.) is amended by  
6 inserting after part D the following:

7           **“PART E—INDUSTRIAL ENERGY EFFICIENCY**

8   **“SEC. 371. DEFINITIONS.**

9           “In this part:

10           “(1) ADMINISTRATOR.—The term ‘Adminis-  
11 trator’ means the Administrator of the Environ-  
12 mental Protection Agency.

13           “(2) COMBINED HEAT AND POWER.—The term  
14 ‘combined heat and power system’ means a facility  
15 that—

16           “(A) simultaneously and efficiently pro-  
17 duces useful thermal energy and electricity; and

18           “(B) recovers not less than 60 percent of  
19 the energy value in the fuel (on a higher-heat-  
20 ing-value basis) in the form of useful thermal  
21 energy and electricity.

22           “(3) NET EXCESS POWER.—The term ‘net ex-  
23 cess power’ means, for any facility, recoverable waste  
24 energy recovered in the form of electricity in quan-  
25 tities exceeding the total consumption of electricity

1 at the specific time of generation on the site at  
2 which the facility is located.

3 “(4) PROJECT.—The term ‘project’ means a re-  
4 coverable waste energy project or a combined heat  
5 and power system project.

6 “(5) RECOVERABLE WASTE ENERGY.—The  
7 term ‘recoverable waste energy’ means waste energy  
8 from which electricity or useful thermal energy may  
9 be recovered through modification of an existing fa-  
10 cility or addition of a new facility.

11 “(6) REGISTRY.—The term ‘Registry’ means  
12 the Registry of Recoverable Waste Energy Sources  
13 established under section 372(d).

14 “(7) USEFUL THERMAL ENERGY.—The term  
15 ‘useful thermal energy’ means energy—

16 “(A) in the form of direct heat, steam, hot  
17 water, or other thermal form that is used in  
18 production and beneficial measures for heating,  
19 cooling, humidity control, process use, or other  
20 valid thermal end-use energy requirements; and

21 “(B) for which fuel or electricity would  
22 otherwise be consumed.

23 “(8) WASTE ENERGY.—The term ‘waste energy’  
24 means—

1           “(A) exhaust heat or flared gas from any  
2 industrial process;

3           “(B) waste gas or industrial tail gas that  
4 would otherwise be flared, incinerated, or vent-  
5 ed;

6           “(C) a pressure drop in any gas, excluding  
7 any pressure drop to a condenser that subse-  
8 quently vents the resulting heat; and

9           “(D) such other forms of waste energy as  
10 the Administrator may determine.

11           “(9) OTHER TERMS.—The terms ‘electric util-  
12 ity’, ‘nonregulated electric utility’, ‘State regulated  
13 electric utility’, and other terms have the meanings  
14 given those terms in title I of the Public Utility Reg-  
15 ulatory Policies Act of 1978 (16 U.S.C. 2611 et  
16 seq.).

17 **“SEC. 372. SURVEY AND REGISTRY.**

18           “(a) RECOVERABLE WASTE ENERGY INVENTORY  
19 PROGRAM.—

20           “(1) IN GENERAL.—The Administrator, in co-  
21 operation with the Secretary and State energy of-  
22 fices, shall establish a recoverable waste energy in-  
23 ventory program.

24           “(2) SURVEY.—The program shall include—

1           “(A) an ongoing survey of all major indus-  
2           trial and large commercial combustion sources  
3           in the United States (as defined by the Admin-  
4           istrator) and the sites at which the sources are  
5           located; and

6           “(B) a review of each source for the quan-  
7           tity and quality of waste energy produced at the  
8           source.

9           “(b) CRITERIA.—

10           “(1) IN GENERAL.—Not later than 270 days  
11           after the date of enactment of the Energy Independ-  
12           ence and Security Act of 2007, the Administrator  
13           shall publish a rule for establishing criteria for in-  
14           cluding sites in the Registry.

15           “(2) INCLUSIONS.—The criteria shall include—

16           “(A) a requirement that, to be included in  
17           the Registry, a project at the site shall be deter-  
18           mined to be economically feasible by virtue of  
19           offering a payback of invested costs not later  
20           than 5 years after the date of first full project  
21           operation (including incentives offered under  
22           this part);

23           “(B) standards to ensure that projects pro-  
24           posed for inclusion in the Registry are not de-  
25           veloped or used for the primary purpose of

1 making sales of excess electric power under the  
2 regulatory provisions of this part; and

3 “(C) procedures for contesting the listing  
4 of any source or site on the Registry by any  
5 State, utility, or other interested person.

6 “(c) TECHNICAL SUPPORT.—On the request of the  
7 owner or operator of a source or site included in the Reg-  
8 istry, the Secretary shall—

9 “(1) provide to owners or operators of combus-  
10 tion sources technical support; and

11 “(2) offer partial funding (in an amount equal  
12 to not more than  $\frac{1}{2}$  of total costs) for feasibility  
13 studies to confirm whether or not investment in re-  
14 covery of waste energy or combined heat and power  
15 at a source would offer a payback period of 5 years  
16 or less.

17 “(d) REGISTRY.—

18 “(1) ESTABLISHMENT.—

19 “(A) IN GENERAL.—Not later than 1 year  
20 after the date of enactment of the Energy Inde-  
21 pendence and Security Act of 2007, the Admin-  
22 istrator shall establish a Registry of Recover-  
23 able Waste Energy Sources, and sites on which  
24 the sources are located, that meet the criteria  
25 established under subsection (b).

1           “(B) UPDATES; AVAILABILITY.—The Ad-  
2 administrator shall—

3           “(i) update the Registry on a regular  
4 basis; and

5           “(ii) make the Registry available to  
6 the public on the website of the Environ-  
7 mental Protection Agency.

8           “(C) CONTESTING LISTING.—Any State,  
9 electric utility, or other interested person may  
10 contest the listing of any source or site by sub-  
11 mitting a petition to the Administrator.

12           “(2) CONTENTS.—

13           “(A) IN GENERAL.—The Administrator  
14 shall register and include on the Registry all  
15 sites meeting the criteria established under sub-  
16 section (b).

17           “(B) QUANTITY OF RECOVERABLE WASTE  
18 ENERGY.—The Administrator shall—

19           “(i) calculate the total quantities of  
20 potentially recoverable waste energy from  
21 sources at the sites, nationally and by  
22 State; and

23           “(ii) make public—

24           “(I) the total quantities described  
25 in clause (i); and



1                   the source pursuant to the incentives  
2                   provided under section 374.

3                   “(iii) STATE TOTALS.—Information  
4                   concerning the site shall be included in the  
5                   total quantity of recoverable waste energy  
6                   for a State unless there are fewer than 3  
7                   sites in the State.

8                   “(4) REMOVAL OF PROJECTS FROM REG-  
9                   ISTRY.—

10                   “(A) IN GENERAL.—Subject to subpara-  
11                   graph (B), as a project achieves successful re-  
12                   covery of waste energy, the Administrator  
13                   shall—

14                   “(i) remove the related sites or  
15                   sources from the Registry; and

16                   “(ii) designate the removed projects  
17                   as eligible for incentives under section 374.

18                   “(B) LIMITATION.—No project shall be re-  
19                   moved from the Registry without the consent of  
20                   the owner or operator of the project if—

21                   “(i) the owner or operator has sub-  
22                   mitted a petition under section 374; and

23                   “(ii) the petition has not been acted  
24                   on or denied.



1           “(5) INELIGIBILITY OF CERTAIN SOURCES.—

2           The Administrator shall not list any source con-  
3           structed after the date of the enactment of the En-  
4           ergy Independence and Security Act of 2007 on the  
5           Registry if the Administrator determines that the  
6           source—

7                   “(A) was developed for the primary pur-  
8                   pose of making sales of excess electric power  
9                   under the regulatory provisions of this part; or

10                   “(B) does not capture at least 60 percent  
11                   of the total energy value of the fuels used (on  
12                   a higher-heating-value basis) in the form of use-  
13                   ful thermal energy, electricity, mechanical en-  
14                   ergy, chemical output, or any combination  
15                   thereof.

16           “(e) SELF-CERTIFICATION.—

17                   “(1) IN GENERAL.—Subject to any procedures  
18                   that are established by the Administrator, an owner,  
19                   operator, or third-party developer of a recoverable  
20                   waste energy project that qualifies under standards  
21                   established by the Administrator may self-certify the  
22                   sites or sources of the owner, operator, or developer  
23                   to the Administrator for inclusion in the Registry.

24                   “(2) REVIEW AND APPROVAL.—To prevent a  
25                   fraudulent listing, a site or source shall be included

1 on the Registry only if the Administrator reviews  
2 and approves the self-certification.

3 “(f) NEW FACILITIES.—As a new energy-consuming  
4 industrial facility is developed after the date of enactment  
5 of the Energy Independence and Security Act of 2007, to  
6 the extent the facility may constitute a site with recover-  
7 able waste energy that may qualify for inclusion on the  
8 Registry, the Administrator may elect to include the facil-  
9 ity on the Registry, at the request of the owner, operator,  
10 or developer of the facility, on a conditional basis with the  
11 site to be removed from the Registry if the development  
12 ceases or the site fails to qualify for listing under this part.

13 “(g) OPTIMUM MEANS OF RECOVERY.—For each site  
14 listed in the Registry, at the request of the owner or oper-  
15 ator of the site, the Administrator shall offer, in coopera-  
16 tion with Clean Energy Application Centers operated by  
17 the Secretary of Energy, suggestions for optimum means  
18 of recovery of value from waste energy stream in the form  
19 of electricity, useful thermal energy, or other energy-re-  
20 lated products.

21 “(h) REVISION.—Each annual report of a State  
22 under section 548(a) of the National Energy Conservation  
23 Policy Act (42 U.S.C. 8258(a)) shall include the results  
24 of the survey for the State under this section.

1       “(i) AUTHORIZATION OF APPROPRIATIONS.—There  
2 are authorized to be appropriated to—

3           “(1) the Administrator to create and maintain  
4 the Registry and services authorized by this section,  
5 \$1,000,000 for each of fiscal years 2008 through  
6 2012; and

7           “(2) the Secretary—

8           “(A) to assist site or source owners and  
9 operators in determining the feasibility of  
10 projects authorized by this section, \$2,000,000  
11 for each of fiscal years 2008 through 2012; and

12           “(B) to provide funding for State energy  
13 office functions under this section, \$5,000,000.

14 **“SEC. 373. WASTE ENERGY RECOVERY INCENTIVE GRANT**  
15 **PROGRAM.**

16       “(a) ESTABLISHMENT.—The Secretary shall estab-  
17 lish in the Department of Energy a waste energy recovery  
18 incentive grant program to provide incentive grants to—

19           “(1) owners and operators of projects that suc-  
20 cessfully produce electricity or incremental useful  
21 thermal energy from waste energy recovery;

22           “(2) utilities purchasing or distributing the  
23 electricity; and

1           “(3) States that have achieved 80 percent or  
2 more of recoverable waste heat recovery opportuni-  
3 ties.

4           “(b) GRANTS TO PROJECTS AND UTILITIES.—

5           “(1) IN GENERAL.—The Secretary shall make  
6 grants under this section—

7                   “(A) to the owners or operators of waste  
8 energy recovery projects; and

9                   “(B) in the case of excess power purchased  
10 or transmitted by a electric utility, to the util-  
11 ity.

12           “(2) PROOF.—Grants may only be made under  
13 this section on receipt of proof of waste energy re-  
14 covery or excess electricity generation, or both, from  
15 the project in a form prescribed by the Secretary.

16           “(3) EXCESS ELECTRIC ENERGY.—

17                   “(A) IN GENERAL.—In the case of waste  
18 energy recovery, a grant under this section shall  
19 be made at the rate of \$10 per megawatt hour  
20 of documented electricity produced from recov-  
21 erable waste energy (or by prevention of waste  
22 energy in the case of a new facility) by the  
23 project during the first 3 calendar years of pro-  
24 duction, beginning on or after the date of en-

1 actment of the Energy Independence and Secu-  
2 rity Act of 2007.

3 “(B) UTILITIES.—If the project produces  
4 net excess power and an electric utility pur-  
5 chases or transmits the excess power, 50 per-  
6 cent of so much of the grant as is attributable  
7 to the net excess power shall be paid to the  
8 electric utility purchasing or transporting the  
9 net excess power.

10 “(4) USEFUL THERMAL ENERGY.—In the case  
11 of waste energy recovery that produces useful ther-  
12 mal energy that is used for a purpose different from  
13 that for which the project is principally designed, a  
14 grant under this section shall be made to the owner  
15 or operator of the waste energy recovery project at  
16 the rate of \$10 for each 3,412,000 Btus of the ex-  
17 cess thermal energy used for the different purpose.

18 “(c) GRANTS TO STATES.—In the case of any State  
19 that has achieved 80 percent or more of waste heat recov-  
20 ery opportunities identified by the Secretary under this  
21 part, the Administrator shall make a 1-time grant to the  
22 State in an amount of not more than \$1,000 per megawatt  
23 of waste-heat capacity recovered (or a thermal equivalent)  
24 to support State-level programs to identify and achieve ad-  
25 ditional energy efficiency.

1 “(d) ELIGIBILITY.—The Secretary shall—

2 “(1) establish rules and guidelines to establish  
3 eligibility for grants under subsection (b);

4 “(2) publicize the availability of the grant pro-  
5 gram known to owners or operators of recoverable  
6 waste energy sources and sites listed on the Reg-  
7 istry; and

8 “(3) award grants under the program on the  
9 basis of the merits of each project in recovering or  
10 preventing waste energy throughout the United  
11 States on an impartial, objective, and not unduly  
12 discriminatory basis.

13 “(e) LIMITATION.—The Secretary shall not award  
14 grants to any person for a combined heat and power  
15 project or a waste heat recovery project that qualifies for  
16 specific Federal tax incentives for combined heat and  
17 power or for waste heat recovery.

18 “(f) AUTHORIZATION OF APPROPRIATIONS.—There  
19 are authorized to be appropriated to the Secretary—

20 “(1) to make grants to projects and utilities  
21 under subsection (b)—

22 “(A) \$100,000,000 for fiscal year 2008  
23 and \$200,000,000 for each of fiscal years 2009  
24 through 2012; and

1           “(B) such additional amounts for fiscal  
2           year 2008 and each fiscal year thereafter as  
3           may be necessary for administration of the  
4           waste energy recovery incentive grant program;  
5           and

6           “(2) to make grants to States under subsection  
7           (b), \$10,000,000 for each of fiscal years 2008  
8           through 2012, to remain available until expended.

9   **“SEC. 374. ADDITIONAL INCENTIVES FOR RECOVERY, USE,**  
10                   **AND PREVENTION OF INDUSTRIAL WASTE**  
11                   **ENERGY.**

12           “(a) CONSIDERATION OF STANDARD.—

13           “(1) IN GENERAL.—Not later than 180 days  
14           after the receipt by a State regulatory authority  
15           (with respect to each electric utility for which the  
16           authority has ratemaking authority), or nonregu-  
17           lated electric utility, of a request from a project  
18           sponsor or owner or operator, the State regulatory  
19           authority or nonregulated electric utility shall—

20           “(A) provide public notice and conduct a  
21           hearing respecting the standard established by  
22           subsection (b); and

23           “(B) on the basis of the hearing, consider  
24           and make a determination whether or not it is

1           appropriate to implement the standard to carry  
2           out the purposes of this part.

3           “(2) RELATIONSHIP TO STATE LAW.—For pur-  
4           poses of any determination under paragraph (1) and  
5           any review of the determination in any court, the  
6           purposes of this section supplement otherwise appli-  
7           cable State law.

8           “(3) NONADOPTION OF STANDARD.—Nothing  
9           in this part prohibits any State regulatory authority  
10          or nonregulated electric utility from making any de-  
11          termination that it is not appropriate to adopt any  
12          standard described in paragraph (1), pursuant to  
13          authority under otherwise applicable State law.

14          “(b) STANDARD FOR SALES OF EXCESS POWER.—  
15          For purposes of this section, the standard referred to in  
16          subsection (a) shall provide that an owner or operator of  
17          a waste energy recovery project identified on the Registry  
18          that generates net excess power shall be eligible to benefit  
19          from at least 1 of the options described in subsection (c)  
20          for disposal of the net excess power in accordance with  
21          the rate conditions and limitations described in subsection  
22          (d).

23          “(c) OPTIONS.—The options referred to in subsection  
24          (b) are as follows:



1           “(1) SALE OF NET EXCESS POWER TO UTIL-  
2           ITY.—The electric utility shall purchase the net ex-  
3           cess power from the owner or operator of the eligible  
4           waste energy recovery project during the operation  
5           of the project under a contract entered into for that  
6           purpose.

7           “(2) TRANSPORT BY UTILITY FOR DIRECT SALE  
8           TO THIRD PARTY.—The electric utility shall transmit  
9           the net excess power on behalf of the project owner  
10          or operator to up to 3 separate locations on the sys-  
11          tem of the utility for direct sale by the owner or op-  
12          erator to third parties at those locations.

13          “(3) TRANSPORT OVER PRIVATE TRANSMISSION  
14          LINES.—The State and the electric utility shall per-  
15          mit, and shall waive or modify such laws as would  
16          otherwise prohibit, the construction and operation of  
17          private electric wires constructed, owned, and oper-  
18          ated by the project owner or operator, to transport  
19          the power to up to 3 purchasers within a 3-mile ra-  
20          dius of the project, allowing the wires to use or cross  
21          public rights-of-way, without subjecting the project  
22          to regulation as a public utility, and according the  
23          wires the same treatment for safety, zoning, land  
24          use, and other legal privileges as apply or would  
25          apply to the wires of the utility, except that—

1           “(A) there shall be no grant of any power  
2 of eminent domain to take or cross private  
3 property for the wires; and

4           “(B) the wires shall be physically seg-  
5 regated and not interconnected with any portion  
6 of the system of the utility, except on the cus-  
7 tomer side of the revenue meter of the utility  
8 and in a manner that precludes any possible ex-  
9 port of the electricity onto the utility system, or  
10 disruption of the system.

11           “(4) AGREED ON ALTERNATIVES.—The utility  
12 and the owner or operator of the project may reach  
13 agreement on any alternate arrangement and pay-  
14 ments or rates associated with the arrangement that  
15 is mutually satisfactory and in accord with State  
16 law.

17           “(d) RATE CONDITIONS AND CRITERIA.—

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

19           “(A) PER UNIT DISTRIBUTION COSTS.—  
20 The term ‘per unit distribution costs’ means (in  
21 kilowatt hours) the quotient obtained by divid-  
22 ing—

23           “(i) the depreciated book-value dis-  
24 tribution system costs of a utility; by

1                   “(ii) the volume of utility electricity  
2                   sales or transmission during the previous  
3                   year at the distribution level.

4                   “(B) PER UNIT DISTRIBUTION MARGIN.—  
5                   The term ‘per unit distribution margin’  
6                   means—

7                   “(i) in the case of a State-regulated  
8                   electric utility, a per-unit gross pretax  
9                   profit equal to the product obtained by  
10                  multiplying—

11                  “(I) the State-approved percent-  
12                  age rate of return for the utility for  
13                  distribution system assets; by

14                  “(II) the per unit distribution  
15                  costs; and

16                  “(ii) in the case of a nonregulated  
17                  utility, a per unit contribution to net reve-  
18                  nues determined multiplying—

19                  “(I) the percentage (but not less  
20                  than 10 percent) obtained by divid-  
21                  ing—

22                  “(aa) the amount of any net  
23                  revenue payment or contribution  
24                  to the owners or subscribers of

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1 the nonregulated utility during  
2 the prior year; by

3 “(bb) the gross revenues of  
4 the utility during the prior year  
5 to obtain a percentage; by

6 “(II) the per unit distribution  
7 costs.

8 “(C) PER UNIT TRANSMISSION COSTS.—  
9 The term ‘per unit transmission costs’ means  
10 the total cost of those transmission services  
11 purchased or provided by a utility on a per-kilo-  
12 watt-hour basis as included in the retail rate of  
13 the utility.

14 “(2) OPTIONS.—The options described in para-  
15 graphs (1) and (2) in subsection (c) shall be offered  
16 under purchase and transport rate conditions that  
17 reflect the rate components defined under paragraph  
18 (1) as applicable under the circumstances described  
19 in paragraph (3).

20 “(3) APPLICABLE RATES.—

21 “(A) RATES APPLICABLE TO SALE OF NET  
22 EXCESS POWER.—

23 “(i) IN GENERAL.—Sales made by a  
24 project owner or operator of a facility  
25 under the option described in subsection

1 (c)(1) shall be paid for on a per kilowatt  
2 hour basis that shall equal the full  
3 undiscounted retail rate paid to the utility  
4 for power purchased by the facility minus  
5 per unit distribution costs, that applies to  
6 the type of utility purchasing the power.

7 “(ii) VOLTAGES EXCEEDING 25 KILO-  
8 VOLTS.—If the net excess power is made  
9 available for purchase at voltages that  
10 must be transformed to or from voltages  
11 exceeding 25 kilovolts to be available for  
12 resale by the utility, the purchase price  
13 shall further be reduced by per unit trans-  
14 mission costs.

15 “(B) RATES APPLICABLE TO TRANSPORT  
16 BY UTILITY FOR DIRECT SALE TO THIRD PAR-  
17 TIES.—

18 “(i) IN GENERAL.—Transportation by  
19 utilities of power on behalf of the owner or  
20 operator of a project under the option de-  
21 scribed in subsection (c)(2) shall incur a  
22 transportation rate that shall equal the per  
23 unit distribution costs and per unit dis-  
24 tribution margin, that applies to the type  
25 of utility transporting the power.

1                   “(ii) VOLTAGES EXCEEDING 25 KILO-  
2                   VOLTS.—If the net excess power is made  
3                   available for transportation at voltages  
4                   that must be transformed to or from  
5                   voltages exceeding 25 kilovolts to be trans-  
6                   ported to the designated third-party pur-  
7                   chasers, the transport rate shall further be  
8                   increased by per unit transmission costs.

9                   “(iii) STATES WITH COMPETITIVE RE-  
10                  TAIL MARKETS FOR ELECTRICITY.—In a  
11                  State with a competitive retail market for  
12                  electricity, the applicable transportation  
13                  rate for similar transportation shall be ap-  
14                  plied in lieu of any rate calculated under  
15                  this paragraph.

16               “(4) LIMITATIONS.—

17               “(A) IN GENERAL.—Any rate established  
18               for sale or transportation under this section  
19               shall—

20                   “(i) be modified over time with  
21                   changes in the underlying costs or rates of  
22                   the electric utility; and

23                   “(ii) reflect the same time-sensitivity  
24                   and billing periods as are established in

1           the retail sales or transportation rates of-  
2           ferred by the utility.

3           “(B) LIMITATION.—No utility shall be re-  
4           quired to purchase or transport a quantity of  
5           net excess power under this section that exceeds  
6           the available capacity of the wires, meter, or  
7           other equipment of the electric utility serving  
8           the site unless the owner or operator of the  
9           project agrees to pay necessary and reasonable  
10          upgrade costs.

11          “(e) PROCEDURAL REQUIREMENTS FOR CONSIDER-  
12          ATION AND DETERMINATION.—

13           “(1) PUBLIC NOTICE AND HEARING.—

14           “(A) IN GENERAL.—The consideration re-  
15           ferred to in subsection (a) shall be made after  
16           public notice and hearing.

17           “(B) ADMINISTRATION.—The determina-  
18           tion referred to in subsection (a) shall be—

19           “(i) in writing;

20           “(ii) based on findings included in the  
21           determination and on the evidence pre-  
22           sented at the hearing; and

23           “(iii) available to the public.

1           “(2) INTERVENTION BY ADMINISTRATOR.—The  
2 Administrator may intervene as a matter of right in  
3 a proceeding conducted under this section—

4           “(A) to calculate—

5               “(i) the energy and emissions likely to  
6 be saved by electing to adopt 1 or more of  
7 the options; and

8               “(ii) the costs and benefits to rate-  
9 payers and the utility; and

10           “(B) to advocate for the waste-energy re-  
11 covery opportunity.

12           “(3) PROCEDURES.—

13               “(A) IN GENERAL.—Except as otherwise  
14 provided in paragraphs (1) and (2), the proce-  
15 dures for the consideration and determination  
16 referred to in subsection (a) shall be the proce-  
17 dures established by the State regulatory au-  
18 thority or the nonregulated electric utility.

19               “(B) MULTIPLE PROJECTS.—If there is  
20 more than 1 project seeking consideration si-  
21 multaneously in connection with the same util-  
22 ity, the proceeding may encompass all such  
23 projects, if full attention is paid to individual  
24 circumstances and merits and an individual



1 judgment is reached with respect to each  
2 project.

3 “(f) IMPLEMENTATION.—

4 “(1) IN GENERAL.—The State regulatory au-  
5 thority (with respect to each electric utility for which  
6 the authority has ratemaking authority) or nonregu-  
7 lated electric utility may, to the extent consistent  
8 with otherwise applicable State law—

9 “(A) implement the standard determined  
10 under this section; or

11 “(B) decline to implement any such stand-  
12 ard.

13 “(2) NONIMPLEMENTATION OF STANDARD.—

14 “(A) IN GENERAL.—If a State regulatory  
15 authority (with respect to each electric utility  
16 for which the authority has ratemaking author-  
17 ity) or nonregulated electric utility declines to  
18 implement any standard established by this sec-  
19 tion, the authority or nonregulated electric util-  
20 ity shall state in writing the reasons for declin-  
21 ing to implement the standard.

22 “(B) AVAILABILITY TO PUBLIC.—The  
23 statement of reasons shall be available to the  
24 public.

1           “(C) ANNUAL REPORT.—The Adminis-  
2           trator shall include in an annual report sub-  
3           mitted to Congress a description of the lost op-  
4           portunities for waste-heat recovery from the  
5           project described in subparagraph (A), specifi-  
6           cally identifying the utility and stating the  
7           quantity of lost energy and emissions savings  
8           calculated.

9           “(D) NEW PETITION.—If a State regu-  
10          latory authority (with respect to each electric  
11          utility for which the authority has ratemaking  
12          authority) or nonregulated electric utility de-  
13          clines to implement the standard established by  
14          this section, the project sponsor may submit a  
15          new petition under this section with respect to  
16          the project at any time after the date that is 2  
17          years after the date on which the State regu-  
18          latory authority or nonregulated utility declined  
19          to implement the standard.

20 **“SEC. 375. CLEAN ENERGY APPLICATION CENTERS.**

21          “(a) RENAMING.—

22                 “(1) IN GENERAL.—The Combined Heat and  
23          Power Application Centers of the Department of En-  
24          ergy are redesignated as Clean Energy Application  
25          Centers.

1           “(2) REFERENCES.—Any reference in any law,  
2 rule, regulation, or publication to a Combined Heat  
3 and Power Application Center shall be treated as a  
4 reference to a Clean Energy Application Center.

5           “(b) RELOCATION.—

6           “(1) IN GENERAL.—In order to better coordi-  
7 nate efforts with the separate Industrial Assessment  
8 Centers and to ensure that the energy efficiency  
9 and, when applicable, the renewable nature of de-  
10 ploying mature clean energy technology is fully ac-  
11 counted for, the Secretary shall relocate the adminis-  
12 tration of the Clean Energy Application Centers to  
13 the Office of Energy Efficiency and Renewable En-  
14 ergy within the Department of Energy.

15           “(2) OFFICE OF ELECTRICITY DELIVERY AND  
16 ENERGY RELIABILITY.—The Office of Electricity  
17 Delivery and Energy Reliability shall—

18           “(A) continue to perform work on the role  
19 of technology described in paragraph (1) in  
20 support of the grid and the reliability and secu-  
21 rity of the technology; and

22           “(B) shall assist the Clean Energy Appli-  
23 cation Centers in the work of the Centers with  
24 regard to the grid and with electric utilities.

25           “(c) GRANTS.—

1           “(1) IN GENERAL.—The Secretary shall make  
2 grants to universities, research centers, and other  
3 appropriate institutions to ensure the continued op-  
4 erations and effectiveness of 8 Regional Clean En-  
5 ergy Application Centers in each of the following re-  
6 gions (as designated for such purposes as of the date  
7 of the enactment of the Energy Independence and  
8 Security Act of 2007):

9                   “(A) Gulf Coast.

10                   “(B) Intermountain.

11                   “(C) Mid-Atlantic.

12                   “(D) Midwest.

13                   “(E) Northeast.

14                   “(F) Northwest.

15                   “(G) Pacific.

16                   “(H) Southeast.

17           “(2) ESTABLISHMENT OF GOALS AND COMPLI-  
18 ANCE.—In making grants under this subsection, the  
19 Secretary shall ensure that sufficient goals are es-  
20 tablished and met by each Center throughout the  
21 program duration concerning outreach and tech-  
22 nology deployment.

23           “(d) ACTIVITIES.—

24                   “(1) IN GENERAL.—Each Clean Energy Appli-  
25 cation Center shall—

1           “(A) operate a program to encourage de-  
2           ployment of clean energy technologies through  
3           education and outreach to building and indus-  
4           trial professionals; and other individuals and or-  
5           ganizations with an interest in efficient energy  
6           use; and

7           “(B) provide project specific support to  
8           building and industrial professionals through  
9           assessments and advisory activities.

10          “(2) TYPES OF ACTIVITIES.—Funds made  
11          available under this section may be used—

12               “(A) to develop and distribute informa-  
13               tional materials on clean energy technologies,  
14               including continuation of the 8 websites in ex-  
15               istence on the date of enactment of the Energy  
16               Independence and Security Act of 2007;

17               “(B) to develop and conduct target market  
18               workshops, seminars, internet programs, and  
19               other activities to educate end users, regulators,  
20               and stakeholders in a manner that leads to the  
21               deployment of clean energy technologies;

22               “(C) to provide or coordinate onsite assess-  
23               ments for sites and enterprises that may con-  
24               sider deployment of clean energy technology;

1           “(D) to perform market research to iden-  
2           tify high profile candidates for clean energy de-  
3           ployment;

4           “(E) to provide consulting support to sites  
5           considering deployment of clean energy tech-  
6           nologies;

7           “(F) to assist organizations developing  
8           clean energy technologies to overcome barriers  
9           to deployment; and

10           “(G) to assist companies and organizations  
11           with performance evaluations of any clean en-  
12           ergy technology implemented.

13           “(e) DURATION.—

14           “(1) IN GENERAL.—A grant awarded under  
15           this section shall be for a period of 5 years

16           “(2) ANNUAL EVALUATIONS.—Each grant shall  
17           be evaluated annually for the continuation of the  
18           grant based on the activities and results of the  
19           grant.

20           “(f) AUTHORIZATION.—There is authorized to be ap-  
21           propriated to carry out this section \$10,000,000 for each  
22           of fiscal years 2008 through 2012.”.

23           “(b) TABLE OF CONTENTS.—The table of contents of  
24           the Energy Policy and Conservation Act (42 U.S.C. prec.

- 1 6201) is amended by inserting after the items relating to  
2 part D of title III the following:

“PART E—INDUSTRIAL ENERGY EFFICIENCY

“Sec. 371. Definitions.

“Sec. 372. Survey and Registry.

“Sec. 373. Waste energy recovery incentive grant program.

“Sec. 374. Additional incentives for recovery, utilization and prevention of industrial waste energy.

“Sec. 375. Clean Energy Application Centers.”.

3 **SEC. 452. ENERGY-INTENSIVE INDUSTRIES PROGRAM.**

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

5 (1) **ELIGIBLE ENTITY.**—The term “eligible entity” means—

6 (A) an energy-intensive industry;

7 (B) a national trade association representing an energy-intensive industry; or

8 (C) a person acting on behalf of 1 or more  
9 energy-intensive industries or sectors, as determined by the Secretary.

10 (2) **ENERGY-INTENSIVE INDUSTRY.**—The term  
11 “energy-intensive industry” means an industry that  
12 uses significant quantities of energy as part of its  
13 primary economic activities, including—

14 (A) information technology, including data  
15 centers containing electrical equipment used in  
16 processing, storing, and transmitting digital information;

17 (B) consumer product manufacturing;

18 (C) food processing;

1 (D) materials manufacturers, including—

2 (i) aluminum;

3 (ii) chemicals;

4 (iii) forest and paper products;

5 (iv) metal casting;

6 (v) glass;

7 (vi) petroleum refining;

8 (vii) mining; and

9 (viii) steel;

10 (E) other energy-intensive industries, as  
11 determined by the Secretary.

12 (3) FEEDSTOCK.—The term “feedstock” means  
13 the raw material supplied for use in manufacturing,  
14 chemical, and biological processes.

15 (4) PARTNERSHIP.—The term “partnership”  
16 means an energy efficiency partnership established  
17 under subsection (c)(1)(A).

18 (5) PROGRAM.—The term “program” means  
19 the energy-intensive industries program established  
20 under subsection (b).

21 (b) ESTABLISHMENT OF PROGRAM.—The Secretary  
22 shall establish a program under which the Secretary, in  
23 cooperation with energy-intensive industries and national  
24 industry trade associations representing the energy-inten-  
25 sive industries, shall support, research, develop, and pro-



1 mote the use of new materials processes, technologies, and  
2 techniques to optimize energy efficiency and the economic  
3 competitiveness of the United States' industrial and com-  
4 mercial sectors.

5 (c) PARTNERSHIPS.—

6 (1) IN GENERAL.—As part of the program, the  
7 Secretary shall establish energy efficiency partner-  
8 ships between the Secretary and eligible entities to  
9 conduct research on, develop, and demonstrate new  
10 processes, technologies, and operating practices and  
11 techniques to significantly improve the energy effi-  
12 ciency of equipment and processes used by energy-  
13 intensive industries, including the conduct of activi-  
14 ties to—

15 (A) increase the energy efficiency of indus-  
16 trial processes and facilities;

17 (B) research, develop, and demonstrate ad-  
18 vanced technologies capable of energy intensity  
19 reductions and increased environmental per-  
20 formance; and

21 (C) promote the use of the processes, tech-  
22 nologies, and techniques described in subpara-  
23 graphs (A) and (B).

1           (2) ELIGIBLE ACTIVITIES.—Partnership activi-  
2 ties eligible for funding under this subsection in-  
3 clude—

4           (A) feedstock and recycling research, devel-  
5 opment, and demonstration activities to identify  
6 and promote—

7           (i) opportunities for meeting industry  
8 feedstock requirements with more energy  
9 efficient and flexible sources of feedstock  
10 or energy supply;

11           (ii) strategies to develop and deploy  
12 technologies that improve the quality and  
13 quantity of feedstocks recovered from proc-  
14 ess and waste streams; and

15           (iii) other methods using recycling,  
16 reuse, and improved industrial materials;

17           (B) research to develop and demonstrate  
18 technologies and processes that utilize alter-  
19 native energy sources to supply heat, power,  
20 and new feedstocks for energy-intensive indus-  
21 tries;

22           (C) research to achieve energy efficiency in  
23 steam, power, control system, and process heat  
24 technologies, and in other manufacturing proc-  
25 esses; and

1 (D) industrial and commercial energy effi-  
2 ciency and sustainability assessments to—

3 (i) assist individual industrial and  
4 commercial sectors in developing tools,  
5 techniques, and methodologies to assess—

6 (I) the unique processes and fa-  
7 cilities of the sectors;

8 (II) the energy utilization re-  
9 quirements of the sectors; and

10 (III) the application of new, more  
11 energy efficient technologies; and

12 (ii) conduct energy savings assess-  
13 ments;

14 (E) the incorporation of technologies and  
15 innovations that would significantly improve the  
16 energy efficiency and utilization of energy-inten-  
17 sive commercial applications; and

18 (F) any other activities that the Secretary  
19 determines to be appropriate.

20 (3) PROPOSALS.—

21 (A) IN GENERAL.—To be eligible for fund-  
22 ing under this subsection, a partnership shall  
23 submit to the Secretary a proposal that de-  
24 scribes the proposed research, development, or

1 demonstration activity to be conducted by the  
2 partnership.

3 (B) REVIEW.—After reviewing the sci-  
4 entific, technical, and commercial merit of a  
5 proposals submitted under subparagraph (A),  
6 the Secretary shall approve or disapprove the  
7 proposal.

8 (C) COMPETITIVE AWARDS.—The provision  
9 of funding under this subsection shall be on a  
10 competitive basis.

11 (4) COST-SHARING REQUIREMENT.—In carrying  
12 out this section, the Secretary shall require cost  
13 sharing in accordance with section 988 of the En-  
14 ergy Policy Act of 2005 (42 U.S.C. 16352).

15 (d) GRANTS.—The Secretary may award competitive  
16 grants for innovative technology research, development  
17 and demonstrations to universities, individual inventors,  
18 and small companies, based on energy savings potential,  
19 commercial viability, and technical merit.

20 (e) INSTITUTION OF HIGHER EDUCATION-BASED IN-  
21 DUSTRIAL RESEARCH AND ASSESSMENT CENTERS.—The  
22 Secretary shall provide funding to institution of higher  
23 education-based industrial research and assessment cen-  
24 ters, whose purpose shall be—

1           (1) to identify opportunities for optimizing en-  
2           ergy efficiency and environmental performance;

3           (2) to promote applications of emerging con-  
4           cepts and technologies in small and medium-sized  
5           manufacturers;

6           (3) to promote research and development for  
7           the use of alternative energy sources to supply heat,  
8           power, and new feedstocks for energy-intensive in-  
9           dustries;

10          (4) to coordinate with appropriate Federal and  
11          State research offices, and provide a clearinghouse  
12          for industrial process and energy efficiency technical  
13          assistance resources; and

14          (5) to coordinate with State-accredited technical  
15          training centers and community colleges, while en-  
16          suring appropriate services to all regions of the  
17          United States.

18          (f) AUTHORIZATION OF APPROPRIATIONS.—

19           (1) IN GENERAL.—There are authorized to be  
20           appropriated to the Secretary to carry out this sec-  
21           tion—

22                   (A) \$184,000,000 for fiscal year 2008;

23                   (B) \$190,000,000 for fiscal year 2009;

24                   (C) \$196,000,000 for fiscal year 2010;

25                   (D) \$202,000,000 for fiscal year 2011;

1 (E) \$208,000,000 for fiscal year 2012; and  
2 (F) such sums as are necessary for fiscal  
3 year 2013 and each fiscal year thereafter.

4 (2) PARTNERSHIP ACTIVITIES.—Of the  
5 amounts made available under paragraph (1), not  
6 less than 50 percent shall be used to pay the Fed-  
7 eral share of partnership activities under subsection  
8 (c).

9 (3) COORDINATION AND NONDUPLICATION.—  
10 The Secretary shall coordinate efforts under this  
11 section with other programs of the Department and  
12 other Federal agencies to avoid duplication of effort.

13 **SEC. 453. ENERGY EFFICIENCY FOR DATA CENTER BUILD-**  
14 **INGS.**

15 (a) DEFINITIONS.—In this section:

16 (1) DATA CENTER.—The term “data center”  
17 means any facility that primarily contains electronic  
18 equipment used to process, store, and transmit dig-  
19 ital information, which may be—

20 (A) a free-standing structure; or

21 (B) a facility within a larger structure,  
22 that uses environmental control equipment to  
23 maintain the proper conditions for the oper-  
24 ation of electronic equipment.

1           (2) DATA CENTER OPERATOR.—The term “data  
2 center operator” means any person or government  
3 entity that builds or operates a data center or pur-  
4 chases data center services, equipment, and facili-  
5 ties.

6           (b) VOLUNTARY NATIONAL INFORMATION PRO-  
7 GRAM.—

8           (1) IN GENERAL.—Not later than 90 days after  
9 the date of enactment of this Act, the Secretary and  
10 the Administrator of the Environmental Protection  
11 Agency shall, after consulting with information tech-  
12 nology industry and other interested parties, initiate  
13 a voluntary national information program for those  
14 types of data centers and data center equipment and  
15 facilities that are widely used and for which there is  
16 a potential for significant data center energy savings  
17 as a result of the program.

18           (2) REQUIREMENTS.—The program described  
19 in paragraph (1) shall—

20           (A) address data center efficiency holis-  
21 tically, reflecting the total energy consumption  
22 of data centers as whole systems, including both  
23 equipment and facilities;

24           (B) consider prior work and studies under-  
25 taken in this area, including by the Environ-

1           mental Protection Agency and the Department  
2           of Energy;

3           (C) consistent with the objectives described  
4           in paragraph (1), determine the type of data  
5           center and data center equipment and facilities  
6           to be covered under the program;

7           (D) produce specifications, measurements,  
8           best practices, and benchmarks that will enable  
9           data center operators to make more informed  
10          decisions about the energy efficiency and costs  
11          of data centers, and that take into account—

12           (i) the performance and use of serv-  
13           ers, data storage devices, and other infor-  
14           mation technology equipment;

15           (ii) the efficiency of heating, ventila-  
16           tion, and air conditioning, cooling, and  
17           power conditioning systems, provided that  
18           no modification shall be required of a  
19           standard then in effect under the Energy  
20           Policy and Conservation Act (42 U.S.C.  
21           6201 et seq.) for any covered heating, ven-  
22           tilation, air-conditioning, cooling or power-  
23           conditioning product;



1 (iii) energy savings from the adoption  
2 of software and data management tech-  
3 niques; and

4 (iv) other factors determined by the  
5 organization described in subsection (c);

6 (E) allow for creation of separate specifica-  
7 tions, measurements, and benchmarks based on  
8 data center size and function, as well as other  
9 appropriate characteristics;

10 (F) advance the design and implementa-  
11 tion of efficiency technologies to the maximum  
12 extent economically practical;

13 (G) provide to data center operators in the  
14 private sector and the Federal Government in-  
15 formation about best practices and purchasing  
16 decisions that reduce the energy consumption of  
17 data centers; and

18 (H) publish the information described in  
19 subparagraph (G), which may be disseminated  
20 through catalogs, trade publications, the Inter-  
21 net, or other mechanisms, that will allow data  
22 center operators to assess the energy consump-  
23 tion and potential cost savings of alternative  
24 data centers and data center equipment and fa-  
25 cilities.

1           (3) PROCEDURES.—The program described in  
2 paragraph (1) shall be developed in consultation  
3 with and coordinated by the organization described  
4 in subsection (c) according to commonly accepted  
5 procedures for the development of specifications,  
6 measurements, and benchmarks.

7           (c) DATA CENTER EFFICIENCY ORGANIZATION.—

8           (1) IN GENERAL.—After the establishment of  
9 the program described in subsection (b), the Sec-  
10 retary and the Administrator shall jointly designate  
11 an information technology industry organization to  
12 consult with and to coordinate the program.

13           (2) REQUIREMENTS.—The organization des-  
14 igned under paragraph (1), whether preexisting or  
15 formed specifically for the purposes of subsection  
16 (b), shall—

17           (A) consist of interested parties that have  
18 expertise in energy efficiency and in the devel-  
19 opment, operation, and functionality of com-  
20 puter data centers, information technology  
21 equipment, and software, as well as representa-  
22 tives of hardware manufacturers, data center  
23 operators, and facility managers;

24           (B) obtain and address input from Depart-  
25 ment of Energy National Laboratories or any

1 college, university, research institution, industry  
2 association, company, or public interest group  
3 with applicable expertise in any of the areas  
4 listed in paragraph (1);

5 (C) follow commonly accepted procedures  
6 for the development of specifications and ac-  
7 credited standards development processes;

8 (D) have a mission to develop and promote  
9 energy efficiency for data centers and informa-  
10 tion technology; and

11 (E) have the primary responsibility to con-  
12 sult in the development and publishing of the  
13 information, measurements, and benchmarks  
14 described in subsection (b) and transmission of  
15 the information to the Secretary and the Ad-  
16 ministrator for consideration under subsection  
17 (d).

18 (d) MEASUREMENTS AND SPECIFICATIONS.—

19 (1) IN GENERAL.—The Secretary and the Ad-  
20 ministrator shall consider the specifications, meas-  
21 urements, and benchmarks described in subsection  
22 (b) for use by the Federal Energy Management Pro-  
23 gram, the Energy Star Program, and other effi-  
24 ciency programs of the Department of Energy and  
25 Environmental Protection Agency, respectively.

1           (2) REJECTIONS.—If the Secretary or the Ad-  
2           ministrators rejects 1 or more specifications, meas-  
3           urements, or benchmarks described in subsection  
4           (b), the rejection shall be made consistent with sec-  
5           tion 12(d) of the National Technology Transfer and  
6           Advancement Act of 1995 (15 U.S.C. 272 note;  
7           Public Law 104–113).

8           (3) DETERMINATION OF IMPRACTICABILITY.—A  
9           determination that a specification, measurement, or  
10          benchmark described in subsection (b) is impractical  
11          may include consideration of the maximum efficiency  
12          that is technologically feasible and economically jus-  
13          tified.

14          (e) MONITORING.—The Secretary and the Adminis-  
15          trator shall—

16                (1) monitor and evaluate the efforts to develop  
17                the program described in subsection (b); and

18                (2) not later than 3 years after the date of en-  
19                actment of this Act, make a determination as to  
20                whether the program is consistent with the objec-  
21                tives of subsection (b).

22          (f) ALTERNATIVE SYSTEM.—If the Secretary and the  
23          Administrator make a determination under subsection (e)  
24          that a voluntary national information program for data  
25          centers consistent with the objectives of subsection (b) has

1 not been developed, the Secretary and the Administrator  
2 shall, after consultation with the National Institute of  
3 Standards and Technology and not later than 2 years  
4 after the determination, develop and implement the pro-  
5 gram under subsection (b).

6 (g) PROTECTION OF PROPRIETARY INFORMATION.—  
7 The Secretary, the Administrator, or the data center effi-  
8 ciency organization shall not disclose any proprietary in-  
9 formation or trade secrets provided by any individual or  
10 company for the purposes of carrying out this section or  
11 the program established under this section.

12 **Subtitle E—Healthy High-**  
13 **Performance Schools**

14 **SEC. 461. HEALTHY HIGH-PERFORMANCE SCHOOLS.**

15 (a) AMENDMENT.—The Toxic Substances Control  
16 Act (15 U.S.C. 2601 et seq.) is amended by adding at  
17 the end the following new title:

18 **“TITLE V—HEALTHY HIGH-**  
19 **PERFORMANCE SCHOOLS**

20 **“SEC. 501. GRANTS FOR HEALTHY SCHOOL ENVIRONMENTS.**

21 “(a) IN GENERAL.—The Administrator, in consulta-  
22 tion with the Secretary of Education, may provide grants  
23 to States for use in—

24 “(1) providing technical assistance for pro-  
25 grams of the Environmental Protection Agency (in-

