

110TH CONGRESS
1ST SESSION

H. R. 3031

To promote the construction of green buildings in the United States, and
for other purposes.

IN THE HOUSE OF REPRESENTATIVES

JULY 12, 2007

Mr. INSLEE (for himself, Mr. WEINER, Ms. SCHAKOWSKY, and Mr. GRIJALVA)
introduced the following bill; which was referred to the Committee on En-
ergy and Commerce, and in addition to the Committees on Transpor-
tation and Infrastructure, Education and Labor, Oversight and Govern-
ment Reform, Financial Services, and Ways and Means, for a period to
be subsequently determined by the Speaker, in each case for consider-
ation of such provisions as fall within the jurisdiction of the committee
concerned

A BILL

To promote the construction of green buildings in the United
States, 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 “Advanced Design in
5 Energy for Living Efficiently Act of 2007”.

6 **SEC. 2. FINDINGS.**

7 The Congress finds that—

1 (1) green building design practices have a posi-
2 tive effect on the reduction of greenhouse gases, the
3 health of the environment, increases in productivity
4 of workers, and improved water supply for commu-
5 nities;

6 (2) buildings account for 38 percent of carbon
7 dioxide emissions per year;

8 (3) buildings consume approximately 40 percent
9 of the energy and 70 percent of the electricity in the
10 United States per year;

11 (4) an upfront investment of 2 percent in green
12 building design, on average, results in life cycle sav-
13 ings of 20 percent of the total operation costs of a
14 building;

15 (5) case studies show examples of a 2 to 16
16 percent increase in productivity in buildings that in-
17 corporate green building design;

18 (6) students with the most daylight in their
19 classrooms progressed 20 percent faster on mathe-
20 matics tests and 26 percent faster on reading tests
21 in one year than those with the least day lighting;

22 (7) the development of a research agenda for
23 green building design must consider whole building
24 performance, and such development should be found-
25 ed on achievable and measurable performance goals;

1 (8) the tools and knowledge are currently avail-
2 able to meet the goals of this Act; and

3 (9) green building design is a national priority,
4 and can reduce the long-term operating costs for in-
5 dividuals and enhance their ability to repay the
6 mortgage.

7 **SEC. 3. DEFINITIONS.**

8 For purposes of this Act—

9 (1) the term “Administrator” means the Ad-
10 ministrator of the Environmental Protection Agency;

11 (2) the term “green building” means a building
12 that uses sustainable design principles to reduce the
13 use of nonrenewable resources, minimize environ-
14 mental impact, and relate people with the natural
15 environment;

16 (3) the term “institution of higher education”
17 has the meaning given that term in section 101 of
18 the Higher Education Act of 1965 (20 U.S.C.
19 1001); and

20 (4) the term “State” means one of the several
21 States, the District of Columbia, the Commonwealth
22 of Puerto Rico, the United States Virgin Islands,
23 Guam, American Samoa, the Commonwealth of the
24 Northern Mariana Islands, or any other common-
25 wealth, territory, or possession of the United States.

1 **SEC. 4. COORDINATING AGENCY.**

2 (a) IN GENERAL.—The Administrator shall serve as
3 the coordinating agency for Federal information on green
4 building design and practices, including information re-
5 garding construction, use, and decommissioning of green
6 buildings, and shall obtain from all Federal agencies any
7 information relating thereto that is not protected from dis-
8 closure by law.

9 (b) AVAILABILITY OF INFORMATION.—The Adminis-
10 trator, in consultation with the National Institute of
11 Building Sciences, shall make the information obtained
12 under subsection (a) readily available to the building in-
13 dustry and consumers.

14 **SEC. 5. PUBLIC EDUCATION AND TRAINING.**

15 (a) PUBLIC EDUCATION.—The Administrator, in co-
16 ordination with the National Institute of Building Sciences
17 and in conjunction with private-sector building-related en-
18 tities, shall establish a program to create and distribute
19 informational materials to increase the knowledge of the
20 general public about green building design principles.

21 (b) GREEN BUILDING TRAINING.—Not later than 6
22 months after the date of enactment of this Act, the Ad-
23 ministrator shall provide for the establishment of criteria
24 for appropriate education and training of architects, engi-
25 neers, and developers in green building design and applica-
26 tion.

1 **SEC. 6. BLUE RIBBON PANEL.**

2 (a) ESTABLISHMENT.—The National Institute of
3 Building Sciences shall establish a blue ribbon panel to
4 provide independent advice and counsel to the Adminis-
5 trator on policy issues associated with the conservation of
6 energy in residential, commercial, and Federal buildings,
7 green building design systems, the health of the indoor
8 environment, and reduction of water use and waste out-
9 put.

10 (b) APPOINTMENT.—The blue ribbon panel shall be
11 appointed by the Board of Directors of the National Insti-
12 tute of Building Sciences. Appointees shall represent all
13 sectors that are knowledgeable about or affected by green
14 buildings, including architects, professional engineers, gov-
15 ernment officials, representatives of consumer organiza-
16 tions, representatives of construction labor organizations,
17 product manufacturers, builders, housing management ex-
18 perts, and experts in building standards, codes, research,
19 testing, and fire safety.

20 (c) REPORT TO CONGRESS.—Not later than 1 year
21 after the date of enactment of this Act, the blue ribbon
22 panel shall report to Congress on the results of study to
23 determine best practices for quantifying the information
24 necessary to make informed property investment decisions,
25 including with respect to buildings that meet carbon-neu-

1 tral emission standards and use green building design
2 practices.

3 **SEC. 7. RESEARCH AND DEVELOPMENT REPORT.**

4 Not later than 6 months after the date of enactment
5 of this Act, the National Institute of Building Sciences
6 shall report to Congress on the estimated amount of fund-
7 ing necessary for research and development on green
8 building design in the United States. Such report shall in-
9 clude recommendations on further policies needed to pro-
10 mote green building design.

11 **SEC. 8. GREENHOUSE GAS EMISSION STANDARDS.**

12 (a) ESTABLISHMENT.—Not later than 1 year after
13 the date of enactment of this Act, the National Institute
14 of Building Sciences shall establish standards for the con-
15 struction of new commercial and residential buildings that
16 will reduce carbon emissions, compared to emissions from
17 similar buildings in 2003, by—

18 (1) 40 percent by 2010; and

19 (2) 70 percent by 2020.

20 (b) COMPLIANCE.—

21 (1) REQUIREMENT.—Effective 6 years after the
22 date of enactment of this Act, no State shall receive
23 funding under this Act unless it demonstrates to the
24 satisfaction of the Administrator that—

1 (A) the State (and all of the local jurisdic-
 2 tions within the State) has—

3 (i) adopted the standards established
 4 under subsection (a); and

5 (ii) fully implemented such standards;
 6 or

7 (B) technical barriers exist that prevent
 8 such adoption and implementation.

9 (2) SUPPORTING INFORMATION.—In order to
 10 make a demonstration to the Administrator under
 11 paragraph (1), a State shall receive, and submit to
 12 the Administrator, reports from all local jurisdic-
 13 tions in the State on how many building permits
 14 were issued each year and how many of these per-
 15 mits met the standards established under subsection
 16 (a).

17 **SEC. 9. STUDY OF USE OF FHA ENERGY EFFICIENT MORT-**
 18 **GAGE PROGRAM.**

19 (a) STUDY.—The Comptroller General of the United
 20 States shall conduct a study of the program of the Sec-
 21 retary of Housing and Urban Development for energy effi-
 22 cient mortgages insured under title II of the National
 23 Housing Act, established and operated pursuant to section
 24 106 of the Energy Policy Act of 1992 (42 U.S.C. 12712

1 note) and expanded in 1995 pursuant to subsection (b)
2 of such section, to determine—

3 (1) the extent to which such program is utilized
4 by mortgagors in the United States;

5 (2) any impediments to wider or more efficient
6 use of such program, including any such impedi-
7 ments relating to—

8 (A) knowledge of or about the program;
9 and

10 (B) the terms, limitations, or operation of
11 the program;

12 (3) effective actions which may be taken to in-
13 crease utilization of the program by mortgagors in
14 the United States.

15 (b) REPORT.—Not later than the expiration of the
16 6-month period beginning on the date of the enactment
17 of this Act, the Comptroller General shall submit to the
18 Congress a report describing the findings of the study pur-
19 suant to subsection (a) and setting forth recommendations
20 for actions under subsection (a)(3).

21 **SEC. 10. HEALTHY, HIGH-PERFORMANCE SCHOOLS.**

22 (a) GRANT PROGRAM AUTHORIZED.—The Adminis-
23 trator of the Environmental Protection Agency, acting
24 through the National Institute of Building Sciences, in
25 consultation with the Secretary of Energy and the Sec-

1 retary of Education, is authorized to award grants to
2 State educational agencies to permit such State edu-
3 cational agencies to carry out this section.

4 (b) SUBGRANTS.—

5 (1) IN GENERAL.—A State educational agency
6 receiving a grant under this section shall use funds
7 made available under the grant to award subgrants
8 to local educational agencies to permit such local
9 educational agencies to carry out the activities de-
10 scribed in subsection (e).

11 (2) LIMITATION.—A State educational agency
12 shall award subgrants under this subsection to local
13 educational agencies that are the neediest, as deter-
14 mined by the State, and that have made a commit-
15 ment to develop healthy, high-performance school
16 buildings in accordance with the plan developed and
17 approved under subsection (c)(1).

18 (c) IMPLEMENTATION.—

19 (1) PLANS.—A State educational agency shall
20 award subgrants under this section only to local edu-
21 cational agencies that, in consultation with the State
22 educational agency and State agencies with respon-
23 sibilities relating to energy and health, have devel-
24 oped plans that the State educational agency deter-
25 mines to be feasible and appropriate in order to

1 achieve the purposes for which the subgrants are
2 made.

3 (2) SUPPLEMENTING GRANT FUNDS.—The
4 State educational agency shall encourage local edu-
5 cational agencies that receive subgrants under this
6 section to supplement their subgrant funds with
7 funds from other sources in order to implement their
8 plans.

9 (d) ADMINISTRATION.—A State educational agency
10 receiving a grant under this section shall use the grant
11 funds made available under this section for one or more
12 of the following:

13 (1) To evaluate compliance by local educational
14 agencies with the requirements of this section.

15 (2) To distribute information and materials on
16 healthy, high-performance school buildings for both
17 new and existing facilities.

18 (3) To organize and conduct programs for
19 school board members, school district personnel, and
20 others to disseminate information on healthy, high-
21 performance school buildings.

22 (4) To provide technical services and assistance
23 in planning and designing healthy, high-performance
24 school buildings.

1 (5) To collect and monitor information per-
2 taining to healthy, high-performance school building
3 projects.

4 (e) LOCAL USES OF FUNDS.—

5 (1) IN GENERAL.—A local educational agency
6 that receives a subgrant under this section shall use
7 the subgrant funds to plan and prepare for healthy,
8 high-performance school building projects that—

9 (A) reduce energy use to at least 30 per-
10 cent below that of a school constructed in com-
11 pliance with standards prescribed in chapter 8
12 of the 2000 International Energy Conservation
13 Code, or a similar State code intended to
14 achieve substantially equivalent results;

15 (B) meet Federal and State health and
16 safety codes; and

17 (C) support healthful, energy efficient, and
18 environmentally sound practices.

19 (2) USE OF FUNDS.—A local educational agen-
20 cy that receives a subgrant under this section shall
21 use funds for one or more of the following:

22 (A) To develop a comprehensive energy
23 audit of the energy consumption characteristics
24 of a building and the need for additional energy
25 conservation measures necessary to allow

1 schools to meet the guidelines set out in para-
2 graph (1).

3 (B) To produce a comprehensive analysis
4 of building strategies, designs, materials, and
5 equipment that—

6 (i) are cost effective, produce greater
7 energy efficiency, and enhance indoor air
8 quality; and

9 (ii) can be used when conducting
10 school construction and renovation or pur-
11 chasing materials and equipment.

12 (C) To obtain research and provide tech-
13 nical services and assistance in planning and
14 designing healthy, high-performance school
15 buildings, including developing a timeline for
16 implementation of such plans.

17 (f) INFORMATION AND ASSISTANCE.—The Adminis-
18 trator of the Environmental Protection Agency, acting
19 through the National Institute of Building Sciences, shall
20 provide information and assistance to local educational
21 agencies on sustainable design. The information and as-
22 sistance shall include—

23 (1) information on how benefits of sustainable
24 design can benefit life cycle costs to all school dis-
25 tricts at no cost to school districts; and

1 (2) assistance on how to create curriculum for
2 environmental science classes to study local effects
3 of sustainable design.

4 (g) REPORT TO CONGRESS.—The Administrator shall
5 conduct a biennial review of State actions implementing
6 this section and carrying out the plans developed under
7 this section through State and local funding, and shall
8 submit a report to Congress on the results of such reviews.

9 (h) LIMITATIONS.—No funds received under this sec-
10 tion may be used for any of the following:

11 (1) Payment of maintenance of costs in connec-
12 tion with any projects constructed in whole or in
13 part with Federal funds provided under this section.

14 (2) Construction, renovation, or repair of school
15 facilities.

16 (3) Construction, renovation, repair, or acquisi-
17 tion of a stadium or other facility primarily used for
18 athletic contests or exhibitions, or other events for
19 which admission is charged to the general public.

20 (i) DEFINITIONS.—In this section:

21 (1) The term “healthy, high-performance school
22 building” means a school building in which the de-
23 sign, construction, operation, and maintenance—

24 (A) use energy-efficient and affordable
25 practices and materials;

- 1 (B) are cost-effective;
- 2 (C) enhance indoor air quality; and
- 3 (D) protect and conserve water.

4 (2) The terms “local educational agency” and
5 “State educational agency” have the meaning given
6 those terms in section 9101 of the Elementary and
7 Secondary Education Act of 1965 (20 U.S.C. 7801).

8 (j) CONFORMING REPEAL.—Subpart 18 (20 U.S.C.
9 7277 et seq.) of part D of title V of the Elementary and
10 Secondary Education Act of 1965 is repealed.

11 **SEC. 11. LOAN GUARANTEES FOR PUBLIC INSTITUTIONS OF**
12 **HIGHER EDUCATION.**

13 (a) PROGRAM.—The Administrator shall establish a
14 program to make loan guarantees available to public insti-
15 tutions of higher education in a State for the construction
16 or renovation of permanent buildings that meet the stand-
17 ards established under section 8(a).

18 (b) QUALIFICATIONS.—The Administrator shall es-
19 tablish the qualifications necessary for an institution to
20 be eligible for a loan guarantee under this section, includ-
21 ing qualifications to protect the financial interests of the
22 Federal Government.

23 (c) APPROVAL.—The Administrator shall approve or
24 disapprove an application for a loan guarantee under this

1 section not later than 30 days after receiving a completed
2 application.

3 (d) AUTHORIZATION OF APPROPRIATIONS.—There
4 are authorized to be appropriated to the Administrator
5 such sums as may be necessary to carry out this section.

6 **SEC. 12. ACCOUNTABILITY OF FEDERAL AGENCIES.**

7 (a) AGENCY ACTIONS.—Each Federal agency shall—

8 (1) increase the energy efficiency of its facilities
9 and operations;

10 (2) annually transmit to the President and the
11 Congress a report on the energy efficiency increases
12 and carbon emission reductions associated with its
13 facilities and operation; and

14 (3) reward agency employees who make signifi-
15 cant contributions to the reduction of agency carbon
16 emissions.

17 (b) ENERGY MANAGER TRAINING.—The energy man-
18 ager, designated under section 304 of Executive Order No.
19 13123, of each Federal agency shall be required to receive
20 training approved by the Administrator on green building
21 design, construction, use, and decommissioning, and to re-
22 ceive an annual refresher course approved by the Adminis-
23 trator on those subjects.

24 (c) ENERGY EFFICIENCY BUDGET REPORT.—Not
25 later than 6 months after the date of enactment of this

1 Act, the Comptroller General shall transmit to the Con-
2 gress a report comparing the energy efficiency budget re-
3 quest by the President for each Federal agency for fiscal
4 years 2006 and 2007 with the requests from the agency
5 to the President for energy efficiency budget amounts for
6 those fiscal years.

7 **SEC. 13. STATE AND LOCAL GOVERNMENT BLOCK GRANTS.**

8 (a) IN GENERAL.—The Administrator shall make
9 block grants to State and local governments. Such grants
10 may be used for—

11 (1) the renovation of existing buildings to
12 achieve the standards established by the National
13 Institute of Building Sciences under section 8(a);

14 (2) redesigning existing plans for new buildings
15 to enable those plans to meet such standards;

16 (3) research and development of technologies to
17 enable and support green building design and the
18 achievement of such standards; and

19 (4) public education and training, including
20 training for homeowners, business owners, first time
21 home buyers, and contractors, on green buildings
22 and their construction, use, and decommissioning.

23 (b) MANDATORY USE.—All block grants received
24 under this section shall be used, at least in part, for the
25 purpose described in subsection (a)(4).

1 (c) ELIGIBILITY.—No State or local government may
 2 receive a block grant under this section unless it dem-
 3 onstrates to the satisfaction of the Administrator that—

4 (1) the State or local government (and in the
 5 case of a State, all the local jurisdictions within the
 6 State) has—

7 (A) adopted the standards established
 8 under section 8(a); and

9 (B) fully implemented such standards; or

10 (2) technical barriers exist that prevent such
 11 adoption and implementation.

12 (d) RESEARCH AND DEVELOPMENT COORDINA-
 13 TION.—The Administrator shall monitor activities de-
 14 scribed in subsection (a)(3) to prevent unnecessary dupli-
 15 cation of research and development efforts.

16 (e) AUTHORIZATION OF APPROPRIATIONS.—There
 17 are authorized to be appropriated to the Administrator for
 18 making grants under this section \$1,000,000,000 for the
 19 period encompassing fiscal years 2009 through 2018.

20 **SEC. 14. AUTHORIZATION OF APPROPRIATIONS.**

21 There are authorized to be appropriated to the Ad-
 22 ministrator for carrying out this Act, other than sections
 23 11 and 13 \$50,000,000 for each of the fiscal years 2009
 24 through 2013.

1 **SEC. 15. INCREASE AND EXTENSION OF ENERGY EFFICIENT**
2 **COMMERCIAL BUILDINGS DEDUCTION.**

3 (a) INCREASE.—Section 179D of the Internal Rev-
4 enue Code of 1986 (relating to energy efficient commercial
5 buildings deduction) is amended—

6 (1) in subsection (b)(1)(A) by striking “\$1.80”
7 and inserting “\$2.25”, and

8 (2) in subsection (d)(1)(A) by striking “by sub-
9 stituting” and all that follows through the period at
10 the end and inserting “by substituting ‘\$.75’ for
11 ‘\$2.25’.”.

12 (b) EXTENSION.—Subsection (h) of section 179D of
13 such Code (relating to termination) is amended by striking
14 “December 31, 2008” and inserting “December 31,
15 2013”.

16 (c) EFFECTIVE DATE.—The amendments made by
17 this section shall apply to property placed in service after
18 the date of the enactment of this Act, in taxable years
19 ending after such date.

○