

**AMENDMENT TO H.R. 2774**  
**OFFERED BY MR. BARTLETT OF MARYLAND**

At the end of the bill, insert the following new section:

1 **SEC. 6. DAYLIGHTING SYSTEMS AND DIRECT SOLAR LIGHT**  
2 **PIPE TECHNOLOGY.**

3 (a) **ESTABLISHMENT.**—The Secretary shall establish  
4 a program of research and development to provide assist-  
5 ance in the demonstration and commercial application of  
6 direct solar renewable energy sources to provide alter-  
7 natives to traditional power generation for lighting and il-  
8 lumination, including light pipe technology, and to pro-  
9 mote greater energy conservation and improved efficiency.  
10 All direct solar renewable energy devices supported under  
11 this program shall have the capability to provide measur-  
12 able data on the amount of kilowatt-hours saved over the  
13 traditionally powered light sources they have replaced.

14 (b) **REPORTING.**—The Secretary shall transmit to  
15 Congress an annual report assessing the measurable data  
16 derived from each project in the direct solar renewable en-  
17 ergy sources program and the energy savings resulting  
18 from its use.

19 (c) **DEFINITIONS.**—For purposes of this section—

1           (1) the term “direct solar renewable energy”  
2           means energy from a device that converts sunlight  
3           into useable light within a building, tunnel, or other  
4           enclosed structure, replacing artificial light gen-  
5           erated by a light fixture and doing so without the  
6           conversion of the sunlight into another form of en-  
7           ergy; and

8           (2) the term “light pipe” means a device de-  
9           signed to transport visible solar radiation from its  
10          collection point to the interior of a building while ex-  
11          cluding interior heat gain in the nonheating season.

12          (d) AUTHORIZATION OF APPROPRIATIONS.—There  
13          are authorized to be appropriated to the Secretary for car-  
14          rying out this section \$3,500,000 for each of the fiscal  
15          years 2008 through 2012.

**AMENDMENT TO H.R. 2774**  
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At the end of the bill, insert the following new section:

1 **SEC. 6. SOLAR AIR CONDITIONING RESEARCH AND DEVELOPMENT PROGRAM.**  
2

3 (a) **ESTABLISHMENT.**—The Secretary shall establish  
4 a research, development, and demonstration program to  
5 promote less costly and more reliable decentralized distributed  
6 solar-powered air conditioning for individuals and  
7 businesses.

8 (b) **AUTHORIZED ACTIVITIES.**—Grants made available  
9 under this section may be used to support the following  
10 activities:

11 (1) Advancing solar thermal collectors, including  
12 concentrating solar thermal and electric systems,  
13 flat plate and evacuated tube collector performance.

14 (2) Achieving technical and economic integration  
15 of solar-powered distributed air-conditioning  
16 systems with existing hot water and storage systems  
17 for residential applications.

18 (3) Designing and demonstrating mass manufacturing  
19 capability to reduce costs of modular

1 standardized solar-powered distributed air condi-  
2 tioning systems and components.

3 (4) Improving the efficiency of solar-powered  
4 distributed air-conditioning to increase the effective-  
5 ness of solar-powered absorption chillers, solar-driv-  
6 en compressors and condensers, and cost-effective  
7 precooling approaches.

8 (5) Researching and comparing performance of  
9 solar-powered distributed air conditioning systems in  
10 different regions of the country, including potential  
11 integration with other onsite systems, such as solar,  
12 biogas, geothermal heat pumps, and propane assist  
13 or combined propane fuel cells, with a goal to de-  
14 velop site-specific energy production and manage-  
15 ment systems that ease fuel and peak utility loading.

16 (c) COST SHARING.—The non-Federal share of re-  
17 search and development projects supported under this sec-  
18 tion shall be not less than 20 percent, and for demonstra-  
19 tion projects shall be not less than 50 percent.

20 (d) AUTHORIZATION OF APPROPRIATIONS.—There  
21 are authorized to be appropriated to the Secretary for car-  
22 rying out this section \$2,500,000 for each of the fiscal  
23 years 2008 through 2012.

**AMENDMENT TO H.R. 2774**  
**OFFERED BY MS. EDDIE BERNICE JOHNSON OF**  
**TEXAS**

Page 4, line 16, redesignate subsection (d) as subsection (e).

Page 4, after line 15, insert the following new subsection:

1       (d) REPORT.—The Secretary shall make public, via  
2 the website of the Department or upon request, informa-  
3 tion on the name and institution for all grants awarded  
4 under this section, including a brief description of the  
5 project as well as the grant award amount.

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**TEXAS**

Page 2, line 13, strike “approaches for management and” and insert “cost-effective approaches for management and large-scale”.

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**TEXAS**

Page 4, line 15, insert “Due consideration shall be given to women, underrepresented minorities, and persons with disabilities.” after “path to certification.”.



**AMENDMENT TO H.R. 2774**  
**OFFERED BY MR. SMITH OF TEXAS**

At the end of the bill, add the following new section:

1 **SEC. 6. PHOTOVOLTAIC DEMONSTRATION PROGRAM.**

2 (a) **IN GENERAL.**—The Secretary shall establish a  
3 program of grants to States to demonstrate advanced pho-  
4 tovoltaic technology.

5 (b) **REQUIREMENTS.**—

6 (1) **ABILITY TO MEET REQUIREMENTS.**—To re-  
7 ceive funding under the program under this section,  
8 a State must submit a proposal that demonstrates,  
9 to the satisfaction of the Secretary, that the State  
10 will meet the requirements of subsection (f).

11 (2) **COMPLIANCE WITH REQUIREMENTS.**—If a  
12 State has received funding under this section for the  
13 preceding year, the State must demonstrate, to the  
14 satisfaction of the Secretary, that it complied with  
15 the requirements of subsection (f) in carrying out  
16 the program during that preceding year, and that it  
17 will do so in the future, before it can receive further  
18 funding under this section.

19 (3) **FUNDING ALLOCATION.**—Each State sub-  
20 mitting a qualifying proposal shall receive funding



1 under the program based on the proportion of  
2 United States population in the State according to  
3 the 2000 census. In each fiscal year, the portion of  
4 funds attributable under this paragraph to States  
5 that have not submitted qualifying proposals in the  
6 time and manner specified by the Secretary shall be  
7 distributed pro rata to the States that have sub-  
8 mitted qualifying proposals in the specified time and  
9 manner.

10 (c) COMPETITION.—If more than \$25,000,000 is  
11 available for the program under this section for any fiscal  
12 year, the Secretary shall allocate 75 percent of the total  
13 amount of funds available according to subsection (b)(3),  
14 and shall award the remaining 25 percent on a competitive  
15 basis to the States with the proposals the Secretary con-  
16 siders most likely to encourage the widespread adoption  
17 of photovoltaic technologies.

18 (d) PROPOSALS.—Not later than 6 months after the  
19 date of enactment of this Act, and in each subsequent fis-  
20 cal year for the life of the program, the Secretary shall  
21 solicit proposals from the States to participate in the pro-  
22 gram under this section.

23 (e) COMPETITIVE CRITERIA.—In awarding funds in  
24 a competitive allocation under subsection (c), the Sec-  
25 retary shall consider—

1 (1) the likelihood of a proposal to encourage the  
2 demonstration of, or lower the costs of, advanced  
3 photovoltaic technologies; and

4 (2) the extent to which a proposal is likely to—

5 (A) maximize the amount of photovoltaics  
6 demonstrated;

7 (B) maximize the proportion of non-Fed-  
8 eral cost share; and

9 (C) limit State administrative costs.

10 (f) STATE PROGRAM.—A program operated by a  
11 State with funding under this section shall provide com-  
12 petitive awards for the demonstration of advanced photo-  
13 voltaic technologies. Each State program shall—

14 (1) require a contribution of at least 60 percent  
15 per award from non-Federal sources, which may in-  
16 clude any combination of State, local, and private  
17 funds, except that at least 10 percent of the funding  
18 must be supplied by the State;

19 (2) endeavor to fund recipients in the commer-  
20 cial, industrial, institutional, governmental, and resi-  
21 dential sectors;

22 (3) limit State administrative costs to no more  
23 than 10 percent of the grant;

24 (4) report annually to the Secretary on—

25 (A) the amount of funds disbursed;

1 (B) the amount of photovoltaics purchased;

2 and

3 (C) the results of the monitoring under  
4 paragraph (5);

5 (5) provide for measurement and verification of  
6 the output of a representative sample of the  
7 photovoltaics systems demonstrated throughout the  
8 average working life of the systems, or at least 20  
9 years; and

10 (6) require that applicant buildings must have  
11 received an independent energy efficiency audit dur-  
12 ing the 6-month period preceding the filing of the  
13 application.

14 (g) UNEXPENDED FUNDS.—If a State fails to expend  
15 any funds received under subsection (b) or (c) within 3  
16 years of receipt, such remaining funds shall be returned  
17 to the Treasury.

18 (h) REPORTS.—The Secretary shall report to Con-  
19 gress 5 years after funds are first distributed to the States  
20 under this section—

21 (1) the amount of photovoltaics demonstrated;

22 (2) the number of projects undertaken;

23 (3) the administrative costs of the program;

1           (4) the amount of funds that each State has  
2 not received because of a failure to submit a quali-  
3 fying proposal, as described in subsection (b)(3);

4           (5) the results of the monitoring under sub-  
5 section (f)(5); and

6           (6) the total amount of funds distributed, in-  
7 cluding a breakdown by State.

8           (i) AUTHORIZATION OF APPROPRIATIONS.—There  
9 are authorized to be appropriated to the Secretary for the  
10 purposes of carrying out this section—

11           (1) \$15,000,000 for fiscal year 2008;

12           (2) \$30,000,000 for fiscal year 2009;

13           (3) \$45,000,000 for fiscal year 2010;

14           (4) \$60,000,000 for fiscal year 2011; and

15           (5) \$70,000,000 for fiscal year 2012.

**AMENDMENT TO H.R. 2774**  
**OFFERED BY MR. WU OF OREGON**

Page 3, line 15, insert “, including curriculum for  
community colleges” after “environmental conditions”.