

109TH CONGRESS
1ST SESSION

S. 745

To amend the Global Environmental Protection Assistance Act of 1989 to promote international clean energy development, to open and expand clean energy markets abroad, to engage developing nations in the advancement of sustainable energy use and climate change actions, and for other purposes.

IN THE SENATE OF THE UNITED STATES

APRIL 11, 2005

Mr. BYRD (for himself, Mr. JEFFORDS, Mr. KERRY, and Mr. BINGAMAN) introduced the following bill; which was read twice and referred to the Committee on Foreign Relations

A BILL

To amend the Global Environmental Protection Assistance Act of 1989 to promote international clean energy development, to open and expand clean energy markets abroad, to engage developing nations in the advancement of sustainable energy use and climate change actions, 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,*

1 **SECTION 1. SHORT TITLE.**

2 This Act may be cited as the “International Clean
3 Energy Deployment and Global Energy Markets Invest-
4 ment Act of 2005”.

5 **SEC. 2. PURPOSES.**

6 The purposes of this Act are—

7 (1) to strengthen the cooperation of the United
8 States with developing countries in addressing crit-
9 ical energy needs and global climate change;

10 (2) to promote sustainable economic develop-
11 ment, increase access to modern energy services, re-
12 duce greenhouse gas emissions, and strengthen en-
13 ergy security and independence in developing coun-
14 tries through the deployment of clean energy tech-
15 nologies;

16 (3) to facilitate the export of clean energy tech-
17 nologies to developing countries;

18 (4) to reduce the trade deficit of the United
19 States through the export of United States energy
20 technologies and technological expertise;

21 (5) to retain and create manufacturing and re-
22 lated service jobs in the United States;

23 (6) to integrate the objectives described in para-
24 graphs (1) through (5) in a manner consistent with
25 interests of the United States, into the foreign policy
26 of the United States;

1 (7) to authorize funds for clean energy develop-
 2 ment activities in developing countries; and

3 (8) to ensure that activities funded under part
 4 C of title VII of the Global Environmental Protec-
 5 tion Assistance Act of 1989 (as added by section 3)
 6 contribute to economic growth, poverty reduction,
 7 good governance, the rule of law, property rights,
 8 and environmental protection.

9 **SEC. 3. CLEAN ENERGY TECHNOLOGY DEPLOYMENT IN DE-**
 10 **VELOPING COUNTRIES.**

11 Title VII of the Global Environmental Protection As-
 12 sistance Act of 1989 (Public Law 101–240; 103 Stat.
 13 2521) is amending by adding at the end the following:

14 **“PART C—CLEAN ENERGY TECHNOLOGY**
 15 **DEPLOYMENT IN DEVELOPING COUNTRIES**

16 **“SEC. 731. DEFINITIONS.**

17 “In this part:

18 “(1) CLEAN ENERGY TECHNOLOGY.—The term
 19 ‘clean energy technology’ means an energy supply or
 20 end-use technology that, over its lifecycle and com-
 21 pared to a similar technology already in commercial
 22 use in any developing country—

23 “(A) is reliable, affordable, economically
 24 viable, socially acceptable, and compatible with
 25 the needs and norms of the host country;

1 “(B) results in—

2 “(i) reduced emissions of greenhouse
3 gases; or

4 “(ii) increased geological sequestra-
5 tion; and

6 “(C) may—

7 “(i) substantially lower emissions of
8 air pollutants; and

9 “(ii) generate substantially smaller or
10 less hazardous quantities of solid or liquid
11 waste.

12 “(2) DEPARTMENT.—The term ‘Department’
13 means the Department of State.

14 “(3) DEVELOPING COUNTRY.—

15 “(A) IN GENERAL.—The term ‘developing
16 country’ means any country not listed in Annex
17 I of the United Nations Framework Convention
18 on Climate Change, done at New York on May
19 9, 1992.

20 “(B) INCLUSION.—The term ‘developing
21 country’ may include a country with an econ-
22 omy in transition, as determined by the Sec-
23 retary.

24 “(4) GEOLOGICAL SEQUESTRATION.—The term
25 ‘geological sequestration’ means the capture and

1 long-term storage in a geological formation of a
 2 greenhouse gas from an energy producing facility,
 3 which prevents the release of greenhouse gases into
 4 the atmosphere.

5 “(5) GREENHOUSE GAS.—The term ‘greenhouse
 6 gas’ means—

7 “(A) carbon dioxide;

8 “(B) methane;

9 “(C) nitrous oxide;

10 “(D) hydrofluorocarbons;

11 “(E) perfluorocarbons; and

12 “(F) sulfur hexafluoride.

13 “(6) INSTITUTION OF HIGHER EDUCATION.—
 14 The term ‘institution of higher education’ has the
 15 meaning given the term in section 101(a) of the
 16 Higher Education Act of 1965 (20 U.S.C. 1001(a)).

17 “(7) INTERAGENCY WORKING GROUP.—The
 18 term ‘Interagency Working Group’ means the Inter-
 19 agency Working Group on Clean Energy Technology
 20 Exports established under section 732(b)(1)(A).

21 “(8) NATIONAL LABORATORY.—The term ‘Na-
 22 tional Laboratory’ means any of the following lab-
 23 oratories owned by the Department of Energy:

24 “(A) Ames Laboratory.

25 “(B) Argonne National Laboratory.

1 “(C) Brookhaven National Laboratory.

2 “(D) Fermi National Accelerator Labora-
3 tory.

4 “(E) Idaho National Engineering and En-
5 vironmental Laboratory.

6 “(F) Lawrence Berkeley National Labora-
7 tory.

8 “(G) Lawrence Livermore National Lab-
9 oratory.

10 “(H) Los Alamos National Laboratory.

11 “(I) National Energy Technology Labora-
12 tory.

13 “(J) National Renewable Energy Labora-
14 tory.

15 “(K) Oak Ridge National Laboratory.

16 “(L) Pacific Northwest National Labora-
17 tory.

18 “(M) Princeton Plasma Physics Labora-
19 tory.

20 “(N) Sandia National Laboratories.

21 “(O) Stanford Linear Accelerator Center.

22 “(P) Thomas Jefferson National Accel-
23 erator Facility.

1 “(9) QUALIFYING PROJECT.—The term ‘quali-
 2 fying project’ means a project meeting the criteria
 3 established under section 735(b).

4 “(10) SECRETARY.—The term ‘Secretary’
 5 means the Secretary of State.

6 “(11) STATE.—The term ‘State’ means—

7 “(A) a State;

8 “(B) the District of Columbia;

9 “(C) the Commonwealth of Puerto Rico;

10 and

11 “(D) any other territory or possession of
 12 the United States.

13 “(12) STRATEGY.—The term ‘Strategy’ means
 14 the strategy established under section 733.

15 “(13) TASK FORCE.—The term ‘Task Force’
 16 means the Task Force on International Clean En-
 17 ergy Cooperation established under section 732(a).

18 “(14) UNITED STATES.—The term ‘United
 19 States’, when used in a geographical sense, means
 20 all of the States.

21 **“SEC. 732. ORGANIZATION.**

22 “(a) TASK FORCE.—

23 “(1) ESTABLISHMENT.—Not later than 90 days
 24 after the date of enactment of this part, the Presi-

1 dent shall establish a Task Force on International
2 Clean Energy Cooperation.

3 “(2) COMPOSITION.—The Task Force shall be
4 composed of—

5 “(A) the Secretary, who shall serve as
6 Chairperson; and

7 “(B) representatives, appointed by the
8 head of the respective Federal agency, of—

9 “(i) the Department of Commerce;

10 “(ii) the Department of the Treasury;

11 “(iii) the Department of Energy;

12 “(iv) the Environmental Protection
13 Agency;

14 “(v) the United States Agency for
15 International Development;

16 “(vi) the Export-Import Bank;

17 “(vii) the Overseas Private Investment
18 Corporation;

19 “(viii) the Trade and Development
20 Agency;

21 “(ix) the Small Business Administra-
22 tion;

23 “(x) the Office of United States Trade
24 Representative; and

1 “(xi) other Federal agencies, as deter-
2 mined by the President.

3 “(3) DUTIES.—

4 “(A) LEAD AGENCY.—The Task Force
5 shall act as the lead agency in the development
6 and implementation of strategy under section
7 733.

8 “(B) COORDINATION AND IMPLEMENTA-
9 TION.—The Task Force shall support the co-
10 ordination and implementation of programs
11 under sections 1331, 1332, and 1608 of the
12 Energy Policy Act of 1992 (42 U.S.C. 13361,
13 13362, 13387).

14 “(4) TERMINATION.—The Task Force, includ-
15 ing any working group established by the Task
16 Force, shall terminate on January 1, 2016.

17 “(b) WORKING GROUPS.—

18 “(1) ESTABLISHMENT.—The Task Force—

19 “(A) shall establish an Interagency Work-
20 ing Group on Clean Energy Technology Ex-
21 ports; and

22 “(B) may establish other working groups
23 as necessary to carry out this part.

1 “(2) COMPOSITION OF INTERAGENCY WORKING
2 GROUP.—The Interagency Working Group shall be
3 composed of—

4 “(A) the Secretary of Energy, the Sec-
5 retary of Commerce, and the Administrator of
6 the United States Agency for International De-
7 velopment, who shall jointly serve as Chair-
8 persons; and

9 “(B) other members, as determined by the
10 Task Force.

11 “(c) INTERAGENCY CENTER.—

12 “(1) ESTABLISHMENT.—There is established an
13 Interagency Center in the Office of International
14 Energy Market Development of the Department of
15 Energy.

16 “(2) DUTIES.—The Interagency Center shall—

17 “(A) assist the Interagency Working
18 Group in carrying out this part; and

19 “(B) perform such other duties as are de-
20 termined to be appropriate by the Secretary of
21 Energy.

22 **“SEC. 733. STRATEGY.**

23 “(a) INITIAL STRATEGY.—

24 “(1) IN GENERAL.—Not later than 1 year after
25 the date of enactment of this part, the Task Force

1 shall develop and submit to the President a Strategy
2 to—

3 “(A) support the development and imple-
4 mentation of programs and policies in devel-
5 oping countries to promote the adoption of
6 clean energy technologies and energy efficiency
7 technologies and strategies, with an emphasis
8 on those developing countries that are expected
9 to experience the most significant growth in en-
10 ergy production and use over the next 20 years;

11 “(B) open and expand clean energy tech-
12 nology markets and facilitate the export of
13 clean energy technology to developing countries,
14 in a manner consistent with the subsidy codes
15 of the World Trade Organization;

16 “(C) integrate into the foreign policy objec-
17 tives of the United States the promotion of—

18 “(i) clean energy technology deploy-
19 ment and reduced greenhouse gas emis-
20 sions in developing countries; and

21 “(ii) clean energy technology exports;

22 “(D) establish a pilot program that pro-
23 vides financial assistance for qualifying
24 projects; and

“(E) develop financial mechanisms and instruments (including securities that mitigate the political and foreign exchange risks of uses that are consistent with the foreign policy of the United States by combining the private sector market and government enhancements) that—

“(i) are cost-effective; and

“(ii) facilitate private capital investment in clean energy technology projects in developing countries.

“(2) TRANSMISSION TO CONGRESS.—On receiving the Strategy from the Task Force under paragraph (1), the President shall transmit to Congress the Strategy.

“(b) UPDATES.—

“(1) IN GENERAL.—Not later than 2 years after the date of submission of the initial Strategy under subsection (a)(1), and every 2 years thereafter—

“(A) the Task Force shall—

“(i) review and update the Strategy;
and

“(ii) report the results of the review and update to the President; and

1 “(B) the President shall submit to Con-
2 gress a report on the Strategy.

3 “(2) INCLUSIONS.—The report shall include—

4 “(A) the updated Strategy;

5 “(B) a description of the assistance pro-
6 vided under this part;

7 “(C) the results of the pilot projects car-
8 ried out under this part, including a compara-
9 tive analysis of the relative merits of each pilot
10 project;

11 “(D) the activities and progress reported
12 by developing countries to the Department
13 under section 736(b)(2); and

14 “(E) the activities and progress reported
15 towards meeting the goals established under
16 section 736(b)(2).

17 “(c) CONTENT.—In developing, updating, and sub-
18 mitting a report on the Strategy, the Task Force shall—

19 “(1) assess—

20 “(A) energy trends, energy needs, and po-
21 tential energy resource bases in developing
22 countries; and

23 “(B) the implications of the trends and
24 needs for domestic and global economic and se-
25 curity interests;

1 “(2) analyze technology, policy, and market op-
2 portunities for international development, dem-
3 onstration, and deployment of clean energy tech-
4 nologies and strategies;

5 “(3) examine relevant trade, tax, finance, inter-
6 national, and other policy issues to assess what poli-
7 cies, in the United States and in developing coun-
8 tries, would help open markets and improve clean
9 energy technology exports of the United States in
10 support of—

11 “(A) enhancing energy innovation and co-
12 operation, including energy sector and market
13 reform, capacity building, and financing meas-
14 ures;

15 “(B) improving energy end-use efficiency
16 technologies (including buildings and facilities)
17 and vehicle, industrial, and co-generation tech-
18 nology initiatives; and

19 “(C) promoting energy supply technologies,
20 including fossil, nuclear, and renewable tech-
21 nology initiatives;

22 “(4) investigate issues associated with building
23 capacity to deploy clean energy technology in devel-
24 oping countries, including—

25 “(A) energy-sector reform;

1 “(B) creation of open, transparent, and
2 competitive markets for clean energy tech-
3 nologies;

4 “(C) the availability of trained personnel to
5 deploy and maintain clean energy technology;
6 and

7 “(D) demonstration and cost-buydown
8 mechanisms to promote first adoption of clean
9 energy technology;

10 “(5) establish priorities for promoting the diffu-
11 sion and adoption of clean energy technologies and
12 strategies in developing countries, taking into ac-
13 count economic and security interests of the United
14 States and opportunities for the export of technology
15 of the United States;

16 “(6) identify the means of integrating the prior-
17 ities established under paragraph (5) into bilateral,
18 multilateral, and assistance activities and commit-
19 ments of the United States;

20 “(7) establish methodologies for the measure-
21 ment, monitoring, verification, and reporting under
22 section 736(b)(2) of the greenhouse gas emission im-
23 pacts of clean energy projects and policies in devel-
24 oping countries;

1 “(8) establish a registry that is accessible to the
2 public through electronic means (including through
3 the Internet) in which information reported under
4 section 736(b)(2) shall be collected;

5 “(9) make recommendations to the heads of ap-
6 propriate Federal agencies on ways to streamline
7 Federal programs and policies to improve the role of
8 the agencies in the international development, dem-
9 onstration, and deployment of clean energy tech-
10 nology;

11 “(10) make assessments and recommendations
12 regarding the distinct technological, market, re-
13 gional, and stakeholder challenges necessary to de-
14 ploy clean energy technology;

15 “(11) recommend conditions and criteria that
16 will help ensure that funds provided by the United
17 States promote sound energy policies in developing
18 countries while simultaneously opening their markets
19 and exporting clean energy technology of the United
20 States;

21 “(12) establish an advisory committee, com-
22 posed of representatives of the private sector and
23 other interested groups, on the export and deploy-
24 ment of clean energy technology;

1 “(13) establish a coordinated mechanism for
 2 disseminating information to the private sector and
 3 the public on clean energy technologies and clean en-
 4 ergy technology transfer opportunities; and

5 “(14) monitor the progress of each Federal
 6 agency in promoting the purposes of this part, in ac-
 7 cordance with—

8 “(A) the 5-year strategic plan submitted to
 9 Congress in October 2002; and

10 “(B) other applicable law.

11 **“SEC. 734. CLEAN ENERGY ASSISTANCE TO DEVELOPING**
 12 **COUNTRIES.**

13 “(a) IN GENERAL.—Subject to section 736, the Sec-
 14 retary may provide assistance to developing countries for
 15 activities that are consistent with the priorities established
 16 in the Strategy.

17 “(b) ASSISTANCE.—The assistance may be provided
 18 through—

19 “(1) the Millennium Challenge Corporation es-
 20 tablished under section 604(a) of the Millennium
 21 Challenge Act of 2003 (22 U.S.C. 7703(a));

22 “(2) the Global Village Energy Partnership;
 23 and

24 “(3) other international assistance programs or
 25 activities of—

1 “(A) the Department;

2 “(B) the United States Agency for Inter-
3 national Development; and

4 “(C) other Federal agencies.

5 “(c) ELIGIBLE ACTIVITIES.—The activities sup-
6 ported under this section include—

7 “(1) development of national action plans and
8 policies to—

9 “(A) facilitate the provision of clean energy
10 services and the adoption of energy efficiency
11 measures;

12 “(B) identify linkages between the use of
13 clean energy technologies and the provision of
14 agricultural, transportation, water, health, edu-
15 cational, and other development-related services;
16 and

17 “(C) integrate the use of clean energy
18 technologies into national strategies for eco-
19 nomic growth, poverty reduction, and sustain-
20 able development;

21 “(2) strengthening of public and private sector
22 capacity to—

23 “(A) assess clean energy needs and op-
24 tions;

1 “(B) identify opportunities to reduce,
2 avoid, or sequester greenhouse gas emissions;

3 “(C) establish enabling policy frameworks;

4 “(D) develop and access financing mecha-
5 nisms; and

6 “(E) monitor progress in implementing
7 clean energy and greenhouse gas reduction
8 strategies;

9 “(3) enactment and implementation of market-
10 favoring measures to promote commercial-based en-
11 ergy service provision and to improve the govern-
12 ance, efficiency, and financial performance of the en-
13 ergy sector; and

14 “(4) development and use of innovative public
15 and private mechanisms to catalyze and leverage fi-
16 nancing for clean energy technologies, including use
17 of the development credit authority of the United
18 States Agency for International Development and
19 credit enhancements through the Export-Import
20 Bank and the Overseas Private Investment Corpora-
21 tion.

22 **“SEC. 735. PILOT PROGRAM FOR DEMONSTRATION**
23 **PROJECTS.**

24 “(a) IN GENERAL.—Not later than 2 years after the
25 date of enactment of this part, the Secretary, in consulta-

1 tion with the Secretary of Energy and the Administrator
 2 of the United States Agency for International Develop-
 3 ment, shall, by regulation, establish a pilot program that
 4 provides financial assistance for qualifying projects con-
 5 sistent with the Strategy and the performance criteria es-
 6 tablished under section 736.

7 “(b) QUALIFYING PROJECTS.—To be qualified to re-
 8 ceive assistance under this section, a project shall—

9 “(1) be a project—

10 “(A) to construct an energy production fa-
 11 cility in a developing country for the production
 12 of energy to be consumed in the developing
 13 country; or

14 “(B) to improve the efficiency of energy
 15 use in a developing country;

16 “(2) be a project that—

17 “(A) is submitted by a firm of the United
 18 States to the Secretary in accordance with pro-
 19 cedures established by the Secretary by regula-
 20 tion;

21 “(B) meets the requirements of section
 22 1608(k) of the Energy Policy Act of 1992 (42
 23 U.S.C. 13387(k));

1 “(C) uses technology that has been suc-
2 cessfully developed or deployed in the United
3 States; and

4 “(D) is selected by the Secretary without
5 regard to the developing country in which the
6 project is located, with notice of the selection
7 published in the Federal Register; and

8 “(3) when deployed, result in a greenhouse gas
9 emission reduction (when compared to the tech-
10 nology that would otherwise be deployed) of at
11 least—

12 “(A) in the case of a unit or energy-effi-
13 ciency measure placed in service during the pe-
14 riod beginning on the date of enactment of this
15 part and ending on December 31, 2009, 20 per-
16 centage points;

17 “(B) in the case of a unit or energy-effi-
18 ciency measure placed in service during the pe-
19 riod beginning on January 1, 2010, and ending
20 on December 31, 2019, 40 percentage points;
21 and

22 “(C) in the case of a unit or energy-effi-
23 ciency measure placed in service after December
24 31, 2019, 60 percentage points.

25 “(c) FINANCIAL ASSISTANCE.—

1 “(1) IN GENERAL.—For each qualifying project
 2 selected by the Secretary to participate in the pilot
 3 program, the Secretary shall make a loan or loan
 4 guarantee available for not more than 50 percent of
 5 the total cost of the project.

6 “(2) INTEREST RATE.—The interest rate on a
 7 loan made under this subsection shall be equal to
 8 the current average yield on outstanding obligations
 9 of the United States with remaining periods of ma-
 10 turity comparable to the maturity of the loan.

11 “(3) HOST COUNTRY CONTRIBUTION.—To be
 12 eligible for a loan or loan guarantee for a project in
 13 a host country under this subsection, the host coun-
 14 try shall—

15 “(A) make at least a 10 percent contribu-
 16 tion toward the total cost of the project; and

17 “(B) verify to the Secretary (using the
 18 methodology established under section
 19 733(c)(7)) the quantity of annual greenhouse
 20 gas emissions reduced, avoided, or sequestered
 21 as a result of the deployment of the project.

22 “(4) CAPACITY BUILDING RESEARCH.—

23 “(A) IN GENERAL.—A proposal made for a
 24 qualifying project may include a research com-

ponent intended to build technological capacity within the host country.

“(B) RESEARCH.—To be eligible for a loan or loan guarantee under this paragraph, the research shall—

“(i) be related to the technology being deployed; and

“(ii) involve—

“(I) an institution in the host country; and

“(II) a participant from the United States that is an industrial entity, an institution of higher education, or a National Laboratory.

“(C) HOST COUNTRY CONTRIBUTION.—To be eligible for a loan or loan guarantee for research in a host country under this paragraph, the host country shall make at least a 50 percent contribution toward the total cost of the research.

“(5) GRANTS.—

“(A) IN GENERAL.—The Secretary, in consultation with the Secretary of Energy and the Administrator of the United States Agency for International Development, may, at the request

1 of the United States ambassador to a host
2 country, make grants to help address and over-
3 come specific, urgent, and unforeseen obstacles
4 in the implementation of a qualifying project.

5 “(B) MAXIMUM AMOUNT.—The total
6 amount of a grant made for a qualifying project
7 under this paragraph may not exceed
8 \$1,000,000.

9 **“SEC. 736. PERFORMANCE CRITERIA FOR MAJOR ENERGY**
10 **CONSUMERS.**

11 “(a) IDENTIFICATION OF MAJOR ENERGY CON-
12 SUMERS.—Not later than 1 year after the date of enact-
13 ment of this part, the Task Force shall identify those de-
14 veloping countries that, by virtue of present and projected
15 energy consumption, represent the predominant share of
16 energy use among developing countries.

17 “(b) PERFORMANCE CRITERIA.—As a condition of
18 accepting assistance provided under sections 734 and 735,
19 any developing country identified under subsection (a)
20 shall—

21 “(1) meet the eligibility criteria established
22 under section 607 of the Millennium Challenge Act
23 of 2003 (22 U.S.C. 7706), notwithstanding the eligi-
24 bility of the developing country as a candidate coun-

1 try under section 606 of that Act (22 U.S.C. 7705);
2 and

3 “(2) agree to establish and report on progress
4 in meeting specific goals for reduced energy-related
5 greenhouse gas emissions and specific goals for—

6 “(A) increased access to clean energy serv-
7 ices among unserved and underserved popu-
8 lations;

9 “(B) increased use of renewable energy re-
10 sources;

11 “(C) increased use of lower greenhouse
12 gas-emitting fossil fuel-burning technologies;

13 “(D) more efficient production and use of
14 energy;

15 “(E) greater reliance on advanced energy
16 technologies;

17 “(F) the sustainable use of traditional en-
18 ergy resources; or

19 “(G) other goals for improving energy-re-
20 lated environmental performance, including the
21 reduction or avoidance of local air and water
22 quality and solid waste contaminants.

1 **“SEC. 737. AUTHORIZATION OF APPROPRIATIONS.**

2 “There are authorized to be appropriated such sums
3 as are necessary to carry out this part for each of fiscal
4 years 2006 through 2015.”.

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