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### UNITED STATES-ISRAEL ENERGY COOPERATION ACT OF 2007

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SEPTEMBER 17, 2007.—Ordered to be printed

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Mr. BINGAMAN, from the Committee on Energy and Natural  
Resources, submitted the following

### R E P O R T

[To accompany S. 838]

The Committee on Energy and Natural Resources, to which was referred the bill (S. 838) to authorize funding for eligible joint ventures between United States and Israeli businesses and academic persons, to establish the International Energy Advisory Board, and for other purposes, having considered the same, reports favorably thereon with an amendment and an amendment to the title and recommends that the bill, as amended, do pass.

The amendments are as follows:

1. Strike out all after the enacting clause and insert in lieu thereof the following:

**SECTION 1. SHORT TITLE.**

This Act may be cited as the “United States–Israel Energy Cooperation Act”.

**SEC. 2. FINDINGS.**

Congress finds that—

(1) it is in the highest national security interests of the United States to develop renewable energy sources;

(2) the State of Israel is a steadfast ally of the United States;

(3) the special relationship between the United States and Israel is manifested in a variety of cooperative scientific research and development programs, such as—

(A) the United States–Israel Binational Science Foundation; and

(B) the United States–Israel Binational Industrial Research and Development Foundation;

(4) those programs have made possible many scientific, technological, and commercial breakthroughs in the fields of life sciences, medicine, bioengineering, agriculture, biotechnology, communications, and others;

(5) on February 1, 1996, the Secretary of Energy and the Israeli Minister of Energy and Infrastructure signed an agreement to establish a framework for collaboration between the United States and Israel in energy research and development activities;

(6) Israeli scientists and engineers are at the forefront of research and development in the field of renewable energy sources; and

(7) enhanced cooperation between the United States and Israel for the purpose of research and development of renewable energy sources would be in the national interests of both countries.

**SEC. 3. GRANT PROGRAM.**

(a) **ESTABLISHMENT.**—In implementing the agreement entitled the “Agreement between the Department of Energy of the United States of America and the Ministry of Energy and Infrastructure of Israel Concerning Energy Cooperation”, dated February 1, 1996, the Secretary of Energy (referred to in this Act as the “Secretary”) shall establish a grant program in accordance with the requirements of sections 988 and 989 of the Energy Policy Act of 2005 (42 U.S.C. 16352, 16353) to support research, development, and commercialization of renewable energy or energy efficiency.

(b) **TYPES OF ENERGY.**—In carrying out subsection (a), the Secretary may make grants to promote—

- (1) solar energy;
- (2) biomass energy;
- (3) energy efficiency;
- (4) wind energy;
- (5) geothermal energy;
- (6) wave and tidal energy; and
- (7) advanced battery technology.

(c) **ELIGIBLE APPLICANTS.**—An applicant shall be eligible to receive a grant under this section if the project of the applicant—

- (1) addresses a requirement in the area of improved energy efficiency or renewable energy sources, as determined by the Secretary; or
- (2) is a joint venture between—

(A)(i) a for-profit business entity, academic institution, National Laboratory (as defined in section 2 of the Energy Policy Act of 2005 (42 U.S.C. 15801)), or nonprofit entity in the United States; and

(ii) a for-profit business entity, academic institution, or nonprofit entity in Israel; or

(B)(i) the Federal Government; and

(ii) the Government of Israel.

(d) **APPLICATIONS.**—To be eligible to receive a grant under this section, an applicant shall submit to the Secretary an application for the grant in accordance with procedures established by the Secretary, in consultation with the advisory board established under subsection (e).

(e) **ADVISORY BOARD.**—

(1) **ESTABLISHMENT.**—The Secretary shall establish an advisory board—

(A) to monitor the method by which grants are awarded under this section; and

(B) to provide to the Secretary periodic performance reviews of actions taken to carry out this section.

(2) **COMPOSITION.**—The advisory board established under paragraph (1) shall be composed of 3 members, to be appointed by the Secretary, of whom—

(A) 1 shall be a representative of the Federal Government;

(B) 1 shall be selected from a list of nominees provided by the United States–Israel Binational Science Foundation; and

(C) 1 shall be selected from a list of nominees provided by the United States–Israel Binational Industrial Research and Development Foundation.

(f) **CONTRIBUTED FUNDS.**—Notwithstanding section 3302 of title 31, United States Code, the Secretary may accept, retain, and use funds contributed by any person, government entity, or organization for purposes of carrying out this section—

(1) without further appropriation; and

(2) without fiscal year limitation.

(g) **REPORT.**—Not later than 180 days after the date of completion of a project for which a grant is provided under this section, the grant recipient shall submit to the Secretary a report that contains—

(1) a description of the method by which the recipient used the grant funds;

and

(2) an evaluation of the level of success of each project funded by the grant.

(h) **CLASSIFICATION.**—Grants shall be awarded under this section only for projects that are considered to be unclassified by both the United States and Israel.

**SEC. 4. TERMINATION.**

The grant program and the advisory committee established under this Act terminate on the date that is 7 years after the date of enactment of this Act.

**SEC. 5. AUTHORIZATION OF APPROPRIATIONS.**

The Secretary shall use amounts authorized to be appropriated under section 931 of the Energy Policy Act of 2005 (42 U.S.C. 16231) to carry out this Act.

2. Amend the title so as to read: "To authorize funding for eligible joint ventures between United States and Israeli businesses and academic persons."

**PURPOSE OF THE MEASURE**

The purpose of the measure is to promote joint ventures between United States and Israeli business and academic persons in research, development, demonstration and commercialization in the areas of renewable energy and energy efficiency.

**BACKGROUND AND NEED**

The United States and Israel have a long-standing relationship in joint energy research and development. The two countries entered into an Energy Research and Development Agreement in 1984, which expired in 1991, and into a subsequent Energy Cooperation Agreement in 1996. The later agreement establishes cooperation and exchange of scientific and technical information in a wide range of areas including renewable energy, fossil energy, and electric transmission. In addition, research cooperation entities exist covering a wide array of topics, notably through the United States-Israel Binational Science Foundation and the United States-Israel Binational Industrial Research and Development Foundation. S. 838 furthers the cooperation of the two countries by focusing specific grant programs for joint ventures between United States and Israeli business and academic persons in the areas of research, development, demonstration, and commercialization of renewable energy and energy efficiency, both of which are important to the two countries.

**LEGISLATIVE HISTORY**

S. 838 was introduced by Senator Smith for himself and Senators Bingaman and Landrieu on March 12, 2007 and referred to the Committee on Energy and Natural Resources. Senators Cantwell, Casey, Conrad, Menendez, and Spector were later added as cosponsors. The Subcommittee on Energy held a hearing on S. 838 on May 22, 2007. At a business meeting on July 25, 2007, the Committee on Energy and Natural Resources ordered S. 838 favorably reported with an amendment in the nature of a substitute.

**COMMITTEE RECOMMENDATION**

The Committee on Energy and Natural Resources, in open business session on July 25, 2007, by a unanimous voice vote of a quorum present, recommended that the Senate pass S. 838, if amended as described herein.

**COMMITTEE AMENDMENT**

During consideration of S. 838, the Committee adopted an amendment in the nature of a substitute. The amendment simplifies the nature of the grant program by requiring the Secretary to fund grants in consultation with the Advisory Board without specifying the office responsible within the Department; simplifies

the nature of the advisory board; and eliminates a position nominated by the Israeli government, since this program is principally conducted through the United States funding. The amendment further eliminates a repayment requirement for grant recipients whose research results in commercial profits; makes technical corrections to the acceptance and use by the Secretary of non-federal funds as part of the grant program; and requires that projects carried out under the program are considered unclassified by both countries to promote the widest possible utility. A technical correction was made to the title of S. 838 to better reflect the nature of the substitute amendment.

#### SECTION-BY-SECTION ANALYSIS

Section 1 provides for a short title of the Act.

Section 2 contains findings.

Section 3 directs the Secretary of Energy to establish a grant program to support joint ventures between the United States and Israeli business and academic persons to support research, development, and commercialization of renewable energy or energy efficiency.

Subsection (a) directs the Secretary to establish the grant program in implementing the agreement between the Department of Energy of the United States of America and the Ministry of Energy and Infrastructure of Israel concerning Energy Cooperation dated February 1, 1996. The subsection specifies that research supported under this program shall meet the cost-sharing and merit-based requirements of sections 988 and 989 of the Energy Policy Act of 2005 (42 U.S.C. 16352 and 42 U.S.C. 16353).

Subsection (b) specifies that grants under this program shall be made to promote solar energy, biomass energy, energy efficiency, wind energy, geothermal energy, wave and tidal energy, and advanced battery technology.

Subsection (c) further limits eligibility for grants under this program to joint ventures between for-profit business entities, academic institutions, or National Laboratories (as defined in section 2 of the Energy Policy Act of 2005 (42 U.S.C. 15801)) in the United States, and for-profit business entities, academic institutions, or nonprofit entities in Israel; or to joint ventures between the United States Government and the Government of Israel.

Subsection (d) specifies that the grant applicants shall submit applications to the Secretary in consultation with the Advisory Board.

Subsection (e) establishes the Advisory Board, which shall monitor the process by which grants are awarded and provide periodic performance reviews to the Secretary of the program as a whole. The Advisory Board shall be composed of three members, one from the Federal Government, one from a list of nominees provided from the United States-Israel Binational Foundation and one from a list of nominees provided by the United States-Israel Binational Industrial Research and Development Foundation.

Subsection (f) provides that the Secretary may accept non-federal funds for the purposes of carrying out the program without fiscal year limitation and further appropriation.

Subsection (g) requires that grantees submit a report to the Secretary within 180 days after project completion describing how the

grant funds were used and the level of success of the projects funded under the grant.

Subsection (h) requires that projects shall be considered unclassified by both the United States and Israel to be eligible for funding under this program.

Section 4 terminates the program 7 years after the date of enactment.

Section 5 authorizes appropriations under existing funds authorized under section 931 of the Energy Policy Act of 2005 (42 U.S.C. 16231).

#### COST AND BUDGET CONSIDERATIONS

The following estimate of costs of this measure has been provided by the Congressional Budget Office.

SEPTEMBER 11, 2007.

Hon. JEFF BINGAMAN,  
*Chairman, Committee on Energy and Natural Resources,*  
*U.S. Senate, Washington, DC.*

DEAR MR. CHAIRMAN: The Congressional Budget Office has prepared the enclosed cost estimate for S. 838, the United States-Israel Energy Cooperation Act.

If you wish further details on this estimate, we will be pleased to provide them. The CBO staff contact is Megan Carroll.

Sincerely,

PETER R. ORSZAG.

Enclosure.

#### *S. 838—United States-Israel Energy Cooperation Act*

Summary: S. 838 would direct the Secretary of Energy to establish a grant program to support joint ventures between U.S. and Israeli entities to promote certain energy-related technologies. CBO estimates that implementing the bill would cost \$4 million in 2008 and \$35 million over the 2008–2012 period, assuming appropriation of the necessary amounts. CBO estimates that enacting S. 838 would increase both direct spending and revenues by less than \$500,000 annually.

S. 838 contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act (UMRA).

Estimated cost to the federal government: The estimated budgetary impact of S. 838 is shown in the following table. The costs of this legislation fall within budget function 270 (energy).

	By fiscal year, in millions of dollars—				
	2008	2009	2010	2011	2012
CHANGES IN SPENDING SUBJECT TO APPROPRIATION					
Estimated Authorization Level .....	8	8	8	8	9
Estimated Outlays .....	4	7	8	8	8

Basis of estimate: CBO estimates that implementing S. 838 would cost \$4 million in 2008 and \$35 million over the 2008–2012 period. We also estimate that enacting the bill would increase both direct spending and revenues, but by less than \$500,000 a year. For this estimate, CBO assumes that S. 838 will be enacted near the start of fiscal year 2008.

*Spending subject to appropriation*

S. 838 would direct the Secretary of Energy to establish a grant program to provide financial assistance for joint ventures between U.S. and Israeli government units, businesses, academic institutions, or nonprofit entities to promote technologies related to energy efficiency or renewable energy. The bill would require the Secretary to establish an advisory board to monitor the process for awarding those grants.

Based on information provided by the Department of Energy (DOE) about funding levels for similar international programs, CBO estimates that fully funding S. 838 would require appropriations totaling \$8 million in 2008 and \$36 million over the 2008–2012 period. Assuming appropriation of the necessary amounts, we estimate that spending would total \$4 million in 2008 and \$35 million over the 2008–2012 period. That estimate assumes that DOE would spend \$30 million over the next five years for grants and about \$1 million annually for the proposed advisory board.

*Direct spending and revenues*

S. 838 would authorize the Secretary of Energy to accept donations and spend those amounts, without further appropriation, for activities authorized by the bill. Any amounts received would be classified as governmental receipts (revenues), and subsequent outlays would be recorded as direct spending. Based on information provided by DOE, CBO estimates that any increases in revenues and direct spending under S. 838 would not exceed \$500,000 in any year.

Intergovernmental and private-sector impact: S. 838 contains no intergovernmental or private-sector mandates as defined in UMRA. The bill would authorize grants for joint ventures with Israel to support energy efficiency. This program would benefit participating public institutions of higher education. Any costs they might incur, including matching funds, would be incurred voluntarily.

Estimate prepared by: Federal Costs: Megan Carroll; Impact on State, Local, and Tribal Governments: Neil Hood; Impact on the Private Sector: Amy Petz.

Estimate approved by: Peter H. Fontaine, Assistant Director for Budget Analysis.

## REGULATORY IMPACT

In compliance with paragraph 11(b) of rule XXVI of the Standing Rules of the Senate, the Committee makes the following evaluation of the regulatory impact which would be incurred in carrying out S. 838. The bill is not a regulatory measure in the sense of imposing Government-established standards or significant economic responsibilities on private individuals and businesses.

The Secretary may need to collect some personal information from grant applicants. The Committee expects the Secretary to limit the collection of personal information to the minimum amount needed to adequately administer the programs, and therefore anticipates little impact on personal privacy.

Enactment of S. 838 will result in the production of various applications, reports, and performance assessments necessary to the administration of the various programs authorized by the bill.

Again, the Committee expects the Secretary to limit paperwork requirements to the minimum amount needed to adequately administer the program.

EXECUTIVE COMMUNICATION

At a legislative hearing before the Committee on Energy and Natural Resources on May 22, 2007, the Department of Energy Provided the following testimony with respect to S. 838.

STATEMENT OF DAVID R. HILL, GENERAL COUNSEL,  
DEPARTMENT OF ENERGY

Chairman Dorgan, Senator Murkowski, and members of the Committee, my name is David Hill and I am the General Counsel of the U.S. Department of Energy. I want to thank-you for the opportunity to appear today and offer preliminary comments on five energy-related bills that the Congress is considering. The bills before the Committee today make each valuable contributions to our national discussion on energy security, but in some cases could benefit from further review, discussion and modification. The Department looks forward to working with the Committee to resolve these issues. I would like to discuss the elements of each bill, as well as present some of the DOE activities that are already underway in areas addressed by the bills.

S. 838

S. 838 addresses U.S.-Israeli cooperation on research, development, and commercialization of alternate energy, improved energy efficiency and renewable sources. The Department has serious concerns with this legislation as drafted. While cooperation with Israel to encourage cooperation on alternative and renewable energy sources could be beneficial, we believe that the bill should stress the need for true bilateral cooperation and interactive research, rather than research funded solely by the U.S. Government. In that regard, the Department already collaborates on a number of issues, and DOE has an umbrella agreement with the Israeli Ministry of National Infrastructures. We believe that existing bilateral arrangements serve both countries well, and we oppose the creation of additional burdensome organization requirements, such as S. 838 section 4 International Advisory Board provisions.

An Israeli initiative centered on energy security, environmental stewardship, and global climate change, similar to the President Advanced Energy Initiative, would benefit Israel by helping ensure adequate and reliable supplies of energy for that country. The Department could assist Israel in developing that plan and in fact, DOE Office of Energy Efficiency and Renewable Energy (EERE) already has engaged in initial discussions with our Israel counterparts on the issue.

Finally, S. 838 could have a significant financial impact on EERE budget. This bill would authorize \$20 million annually for seven years for the projects authorized by this

bill. We do not support taking this amount of funding from other important EERE programs. In comparison, EERE budget for the Asia Pacific Partnership, which encompasses six countries, including India and China, the two fastest growing economies and largest emitters of carbon, has a total budget of \$7.5 million. Allocating \$20 million out of currently authorized funding for a single country would shift scarce resources away from the Department efforts to develop and commercialize advanced technologies that lessen our dependence on oil and provide for energy security. The goals of S. 838, as well as the efforts to assist Israel in developing its own national energy action plan, can be achieved with substantially less funding.

I do note that the bill authorizes the DOE to accept contributions from private sources to carry out this Act. This could mitigate the need for appropriations to carry out this Act although some modifications would be necessary to make the bill workable.

Again, I stress the Department values its current collaboration with Israel, and seeks to build upon this already productive relationship. We believe, however, that the time for action is now, for both the United States and Israel. Putting action plans into place that are focused on alternative sources of energy is a goal that our nations can and must share, and we would urge the Congress to adopt legislation that supports that goal.

#### CHANGES IN EXISTING LAW

In compliance with paragraph 12 of rule XXVI of the Standing Rules of the Senate, there are no changes in existing law made by the bill S. 838, as ordered reported.

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