



## CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

August 30, 2011

### **S. 1000** **Energy Savings and Industrial Competitiveness Act of 2011**

*As ordered reported by the Senate Committee on Energy and Natural Resources  
on July 14, 2011*

#### **SUMMARY**

S. 1000 would authorize appropriations to support a variety of activities aimed at promoting energy efficiency in certain sectors of the economy. Assuming appropriation of the authorized amounts, CBO estimates that implementing S. 1000 would have a net discretionary cost of \$1.2 billion over the 2012-2016 period. S. 1000 could affect direct spending; therefore, pay-as-you-go procedures apply. CBO estimates, however, that any such effects would be insignificant in any given year. Enacting S. 1000 would not affect revenues.

S. 1000 would impose an intergovernmental mandate, as defined in the Unfunded Mandates Reform Act (UMRA), by requiring states to certify to the Department of Energy (DOE) whether or not they have updated residential and commercial building codes to meet standards developed by building efficiency organizations. CBO estimates that the cost of that mandate would fall well below the annual threshold established in UMRA (\$71 million in 2011, adjusted annually for inflation). The bill contains no private-sector mandates as defined in UMRA.

#### **ESTIMATED COST TO THE FEDERAL GOVERNMENT**

The estimated budgetary impact of S. 1000 is shown in the following table. The costs of this legislation fall within budget function 270 (energy).

	By Fiscal Year, in Millions of Dollars					2012-2016
	2012	2013	2014	2015	2016	
<b>CHANGES IN SPENDING SUBJECT TO APPROPRIATION</b>						
New Authorizations						
Estimated Authorization Level	1,080	460	451	452	453	2,896
Estimated Outlays	313	403	473	513	488	2,190
Reduced Authorizations						
Authorization Level	-800	-175	0	0	0	-975
Estimated Outlays	-232	-251	-212	-165	-84	-944
Total Proposed Changes						
Estimated Authorization Level	280	285	451	452	453	1,921
Estimated Outlays	81	152	261	348	404	1,246

## **BASIS OF ESTIMATE**

S. 1000 would have a net discretionary cost of \$1.2 billion over the next five years, assuming appropriation action consistent with the bill. The bill also could affect direct spending, but CBO estimates that any such effects would not be significant in any of the next 10 years.

### **Spending Subject to Appropriation**

S. 1000 would authorize appropriations for a variety of programs and activities aimed at promoting energy efficiency, particularly within residential and commercial buildings and the industrial sector. The bill also would reduce several existing authorizations of appropriations for related activities. Taken as a whole, CBO estimates that implementing S. 1000 would have a net discretionary cost of \$1.2 billion over the 2012-2016 period.

**New Authorizations.** S. 1000 would specifically authorize appropriations totaling \$2.7 billion over the 2012-2016 period for DOE to carry out a variety of activities directed toward improving the energy efficiency of buildings and industrial systems. That specified amount includes:

- \$2 billion for grants to nonfederal lenders to support efforts by industrial and commercial manufacturers to improve their energy efficiency;

- \$400 million to cover the federal government's cost of providing certain types of credit support for projects to upgrade the energy efficiency of existing buildings that are privately owned;
- \$200 million to establish national construction codes related to the energy efficiency of residential and commercial buildings and to provide technical assistance related to such codes;
- \$20 million to provide rebates to purchasers of certain energy-efficient transformers and devices that reduce energy consumed by motors;
- \$20 million for grants and other incentives to improve the efficiency of processes involved in the production and distribution of products; and
- \$10 million for onsite assessments of the energy efficiency of manufacturing processes.

In addition, CBO estimates that implementing other provisions of S. 1000 that direct DOE to expand ongoing efforts by DOE and the General Services Administration (GSA) related to building technologies and industrial energy efficiency would require appropriations totaling \$256 million over the 2012-2016 period. Most of that amount would be used by GSA to update building designs and implement projects to meet certain energy-efficiency requirements.

In total, assuming appropriation of amounts specified and estimated to be necessary, CBO estimates that implementing S. 1000 would have a gross cost of almost \$2.2 billion over the 2012-2016 period, with additional outlays occurring in later years. That estimate is based on historical spending patterns for activities similar to those authorized under S. 1000.

**Reduced Authorizations.** To offset a portion of increased discretionary spending, S. 1000 would reduce some existing authorizations of appropriations for DOE programs to support a variety of grants, incentives, and initiatives related to industrial energy efficiency and building technologies. In total, S. 1000 would reduce amounts authorized to be appropriated by \$975 million over the 2012-2013 period. Assuming future appropriations are reduced accordingly, CBO estimates that implementing S. 1000 would result in \$944 million less in discretionary spending for those programs over the 2012-2016 period.

### **Direct Spending**

S. 1000 would amend title 17 of the Energy Policy Act of 2005 (title 17), which authorizes DOE to guarantee loans for certain types of energy projects. Specifically, the bill would authorize DOE to provide various forms of credit enhancements to support projects to

install certain types of energy-efficient or renewable energy technologies in private and public buildings—including federal buildings. (Credit enhancements are actions that improve the credit worthiness of a project.) The bill does not define the types of credit enhancements that DOE could provide. Any transactions related to issuing or guaranteeing debt would be subject to provisions of the Federal Credit Reform Act (FCRA) that would prohibit DOE from making any obligations without an up-front appropriation to cover the subsidy cost of such arrangements. For purposes of this estimate, CBO assumes that any spending for other forms of credit enhancements—for example, grants or payments to project sponsors—would also be subject to appropriation.

CBO also estimates, however, that implementing the proposed program could affect direct spending in two ways. First, S. 1000 would authorize DOE to proceed with loan guarantees in cases where borrowers pay upfront fees to cover anticipated subsidy costs. Normally, DOE's authority to guarantee such loans would be subject to limits specified in annual appropriation acts; however, previously enacted appropriation laws have already authorized DOE to guarantee loans under title 17. CBO does not expect all of that authority to be used by existing programs over the 10-year period covered by this estimate; therefore, a portion of it could be used to guarantee loans under S. 1000. Any resulting net change in the timing of outlays stemming from existing authority would be considered direct spending. However, based on information from DOE about the relatively small amount of loan volume remaining—\$400 million—CBO estimates that any change in direct spending resulting from the subsidy cost of using that authority would be insignificant.

Finally, CBO expects that authorizing DOE to provide credit enhancements could result in a marginal increase in federal agencies' use of certain types of contracts and agreements that support energy-efficiency projects. Under current law, federal agencies have a variety of long-term contracting tools—including energy savings performance contracts, power purchase agreements, and enhanced-use leases—that support projects undertaken by nonfederal parties. In some cases, the added benefit of federal credit enhancements provided under S. 1000 could improve the economic viability of marginal projects, increasing the probability that they proceed. In those cases, CBO expects that credit enhancements provided under S.1000 could result in an increased use of agencies' underlying contracting authorities, which are considered a form of direct spending. CBO estimates, however, that any additional direct spending stemming from such marginal changes in agencies' behavior would be insignificant in any year.

## **PAY-AS-YOU-GO CONSIDERATIONS**

Enacting S. 1000 could increase direct spending; therefore, pay-as-you-go procedures apply. CBO estimates, however, that any such effects would be insignificant in each year and over the next 10 years.

## **ESTIMATED IMPACT ON STATE, LOCAL, AND TRIBAL GOVERNMENTS**

S. 1000 would impose an intergovernmental mandate, as defined in UMRA, by requiring states to certify to DOE whether or not they have updated residential and commercial building codes to meet standards developed by building efficiency organizations. Because the mandate cost would just be the cost to provide that certification (regardless of whether building codes are updated), CBO estimates that the cost of that mandate would fall well below the annual threshold established in UMRA (\$71 million in 2011, adjusted annually for inflation).

## **ESTIMATED IMPACT ON THE PRIVATE SECTOR**

This bill contains no private-sector mandates as defined in UMRA

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