



## CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

June 20, 2017

### **S. 385**

### **Energy Savings and Industrial Competitiveness Act**

*As reported by the Senate Committee on Energy and Natural Resources on May 10, 2017*

#### **SUMMARY**

S. 385 would amend current law and authorize appropriations for a variety of activities and programs related to energy efficiency. The bill would require federal agencies that guarantee mortgages to consider whether homes with energy-efficient improvements would affect borrowers' ability to repay mortgages. The bill also would modify certain energy-related goals and requirements for federal agencies.

CBO estimates that enacting S. 385 would increase direct spending by \$17 million over the 2017-2027 period; therefore, pay-as-you-go procedures apply. Enacting the bill would not affect revenues. In addition, CBO estimates that implementing the legislation would cost \$198 million over the next five years, assuming appropriation actions consistent with the legislation.

CBO estimates that enacting S. 385 would not increase on-budget deficits or net direct spending by more than \$5 billion in any of the four consecutive 10-year periods beginning in 2028.

S. 385 would impose an intergovernmental mandate, as defined in the Unfunded Mandates Reform Act (UMRA), by requiring states and tribal governments to certify to the Department of Energy (DOE) whether or not they have updated residential and commercial building codes to meet the latest standards developed by building efficiency organizations. CBO estimates that the cost of that mandate would fall well below the annual threshold established in UMRA for intergovernmental mandates (\$78 million in 2017, adjusted annually for inflation).

S. 385 contains no private-sector mandates as defined in UMRA.

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

The estimated budgetary effects of S. 385 are shown in Table 1. The costs of this legislation primarily fall within budget functions 270 (energy), 370 (commerce and housing credit), and 700 (veterans benefits and services).

**TABLE 1. SUMMARY OF THE BUDGETARY EFFECTS OF S. 385**

	By Fiscal Year, in Millions of Dollars												
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2017-2022	2017-2027
<b>INCREASES IN DIRECT SPENDING</b>													
Estimated Budget Authority	0	0	*	1	1	2	2	2	3	3	3	4	17
Estimated Outlays	0	0	*	1	1	2	2	2	3	3	3	4	17
<b>INCREASES OR DECREASES (-) IN SPENDING SUBJECT TO APPROPRIATION</b>													
Estimated Authorization Level	0	241	4	-12	-12	-13	-15	-15	-15	-19	-19	208	125
Estimated Outlays	0	48	67	51	27	5	-7	-15	-15	-19	-19	198	123

Note: \* = between -\$500,000 and \$500,000.

## **BASIS OF ESTIMATE**

For this estimate, CBO assumes that S. 385 will be enacted near the start of fiscal year 2018, that the necessary amounts will be appropriated each year, and that spending will follow historical spending patterns for existing and similar activities.

### **Direct Spending**

S. 385 would direct federal agencies that guarantee mortgages to consider the savings from energy efficiency improvements in determining a borrower’s ability to repay a mortgage if the seller voluntarily provides a report on energy efficiency for the home. Under the bill, federal agencies would be required to implement those changes before the end of calendar year 2019.

Based on information from the Federal Housing Finance Agency, the Federal Housing Administration (FHA), and private researchers, CBO expects that enacting that requirement would lead to a small increase (less than 0.1 percent) in the total volume of mortgages insured by federal entities including Fannie Mae, Freddie Mac, the Department of Veterans Affairs (VA), and FHA. The mortgages that VA and FHA guarantee are securitized by the Government National Mortgage Association (GNMA). The increase in the volume of mortgage guarantees would occur because the eligibility criteria for mortgages on certain energy efficient homes would be more favorable for borrowers than under current law.

To be considered for the program, the seller would voluntarily pay for an energy efficiency report for the home and provide the report to all relevant parties—borrower, appraiser, and lender. If that report indicates that the borrower would incur lower energy utility costs on the home than a similar home with average energy costs, the borrower’s eligibility criteria and the maximum loan amount for the home would be adjusted under guidelines that would be developed by the Department of Housing and Urban Development.

CBO estimates that the increase in total mortgages guaranteed by Fannie Mae, Freddie Mac, and VA would increase direct spending by \$17 million over the 2019-2027 period. The budgetary effects of changes in the volume of mortgages guaranteed by FHA and securitized by GNMA are recorded in the budget as changes in spending that is subject to future appropriation. CBO’s estimate of the budgetary effects for FHA and GNMA is discussed below under the heading “Spending Subject to Appropriation.”

**Fannie Mae and Freddie Mac.** Under current law, CBO estimates that Fannie Mae and Freddie Mac will guarantee about \$10 trillion in new mortgages over the 2019-2027 period. Under the bill, CBO estimates that Fannie Mae and Freddie Mac would guarantee an additional \$7 billion in new mortgage volume over the next 10 years. The increase in the volume of mortgages guaranteed would increase direct spending by \$11 million over the 2019-2027 period on a fair-value basis.<sup>1</sup> (That figure is the product of CBO’s estimated subsidy rate in each year—an average of 0.15 percent over the 2019-2027 period—and the estimated increase in loan volume under the bill.)

**Department of Veterans Affairs.** CBO estimates that under current law, VA will guarantee about \$930 billion in new mortgages over the next 10 years. Under the bill, CBO estimates that VA would guarantee an additional \$550 million in new mortgage volume over the 2019-2027 period. That increase in volume would increase direct spending by about \$6 million over the 2019-2027 period. (That figure is a product of CBO’s estimated subsidy rate in each year—an average of 1.1 percent over the next 10 years—and the estimated increase in loan volume under the bill.)<sup>2</sup>

## **Spending Subject to Appropriation**

Assuming appropriation actions consistent with the bill, CBO estimates that implementing S. 385 also would, on net, cost \$198 million over the 2018-2022 period (see Table 2).

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1. For more information on CBO’s methodology for estimating the costs of Fannie Mae and Freddie Mac’s loan guarantee programs, see Congressional Budget Office, Fair-Value Accounting for Federal Credit Programs (March 2012), <https://www.cbo.gov/publication/43027>.

2. This estimate for VA mortgage guarantees was prepared using procedures specified in the Federal Credit Reform Act. Pursuant to section 3105 of the Concurrent Resolution on the Budget for Fiscal Year 2016, CBO has also calculated this cost on a fair-value basis, which is shown below in the section “Additional Information.”

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**TABLE 2. CHANGES IN SPENDING SUBJECT TO APPROPRIATION UNDER S. 385**

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	By Fiscal Year, in Millions of Dollars					2018-
	2018	2019	2020	2021	2022	2022
<b>INCREASES OR DECREASES (-) IN SPENDING SUBJECT TO APPROPRIATION</b>						
Energy-Efficiency Activities						
Estimated Authorization Level	241	11	1	1	1	255
Estimated Outlays	48	74	64	40	19	245
Repeal of Requirement to Reduce Fossil Fuel Use						
Estimated Authorization Level	0	-5	-10	-10	-10	-35
Estimated Outlays	0	-5	-10	-10	-10	-35
FHA Energy Efficiency Mortgage Guarantees						
Estimated Authorization Level	0	-2	-3	-3	-4	-12
Estimated Outlays	0	-2	-3	-3	-4	-12
Total Changes						
Estimated Authorization Level	241	4	-12	-12	-13	208
Estimated Outlays	48	67	51	27	5	198

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Note: FHA = Federal Housing Administration.

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**Energy-Efficiency Activities.** CBO estimates that fully funding a variety of provisions aimed at enhancing energy efficiency would require appropriations totaling \$255 million over the 2018-2022 period (and \$5 million in later years). That five-year total includes:

- \$220 million specifically authorized for technical and financial assistance to state, local, and tribal governments and other activities aimed at improving the energy efficiency of public and private residential and commercial buildings;
- \$30 million specifically authorized for energy-efficiency programs related to certain appliances; and
- \$5 million in estimated funding for a variety of studies, reports, and other activities.

Assuming appropriation of those amounts, CBO estimates that the resulting outlays would total \$245 million over the 2018-2022 period and \$15 million in later years.

**Repeal of Requirement to Reduce Fossil Fuel Use.** S. 385 would repeal section 433 of the Energy Independence and Security Act of 2007 (EISA), which requires federal agencies to gradually phase out, and eliminate by 2030, the use of energy generated from fossil fuel in newly constructed federal buildings and buildings undergoing major renovations. That provision is one of several energy-related requirements with which federal agencies must comply under current law; other statutory provisions and executive orders direct agencies to reduce overall consumption of energy and water, reduce greenhouse gas emissions, increase use of energy generated from renewable sources, and meet certain sustainability-related standards.

According to DOE, agencies are expected to make significant ongoing investments in energy-related technologies, many of which will help agencies simultaneously achieve multiple requirements. For that reason, CBO estimates that repealing any single energy-related requirement would not necessarily change the overall amount of federal investment in energy-related technologies. In particular, during the period covered by this estimate, agencies must also ensure that newly constructed buildings and major renovations are designed to achieve certain energy-efficiency standards; according to DOE, many investments that agencies pursue to comply with such standards are likely to simultaneously fulfill the requirement under section 433 of EISA.

Nevertheless, CBO expects that repealing section 433 of EISA would, on the margin, reduce the near-term costs federal agencies face to comply with the reduction targets specified by that provision. Under current administrative policy, in lieu of reducing fossil fuel use at affected buildings by the required amounts, agencies can achieve compliance by purchasing renewable energy certificates from firms that generate electricity from renewable resources. (Under current law, federal agencies purchase such certificates to comply with certain other energy-related requirements.) Based on an analysis of information from DOE, CBO estimates that under current law, agencies will use discretionary appropriations to purchase renewable energy certificates worth \$35 million over the next five years (and an additional \$66 million over the 2023-2027 period) in order to comply with section 433 of EISA. Thus, CBO estimates that repealing that provision would generate discretionary savings of that amount, assuming future appropriations for compliance costs are reduced accordingly.

**FHA Energy Efficiency Mortgage Guarantees.** As discussed above under the heading “Direct Spending,” S. 385 would direct federal agencies to consider savings from energy efficiency improvements in determining a borrowers’ ability to repay a mortgage. CBO estimates that, over the 2019-2022 period, implementing the bill would increase offsetting collections for FHA’s single-family program and GNMA by \$12 million. Those additional collections would stem from an increase in the volume of FHA loan guarantees and the subsequent securitization by GNMA of those loans as well as VA loans. The increase in the volume of mortgage guarantees by FHA would occur because the eligibility criteria for

mortgages on certain energy-efficient homes would be more favorable for borrowers than under current law.

CBO estimates that under current law FHA will guarantee about \$900 billion in new mortgages over the 2019-2022 period. We estimate that, over the same period, enacting this bill would increase mortgage guarantees from FHA's single-family program by between \$350 million and \$400 million—an increase of less than 0.1 percent. The combination of guarantee fees charged by FHA and estimated defaults and mortgage prepayments over that period yields an average subsidy rate for FHA's guarantees of -2.9 percent.<sup>3</sup> Multiplying that subsidy rate by the additional volume of mortgage guarantees expected to be offered by FHA under the bill results in additional estimated offsetting collections of \$10 million over the 2019-2022 period.<sup>4</sup>

CBO expects that the increased volume of FHA and VA loans guaranteed under the bill would increase the volume of loans securitized by GNMA. CBO estimates that under current law GNMA will securitize mortgages with a value of about \$1.3 trillion over the 2019-2022 period. We also estimate that under the bill, over that same period, the amount of loans securitized by the agency would increase by about \$600 million—an increase of less than 0.1 percent. The subsidy rate for loans securitized by GNMA is estimated to average -0.29 percent over that period. Multiplying those figures results in additional estimated offsetting collections totaling about \$2 million over the 2019-2022 period.

## **ADDITIONAL INFORMATION**

Pursuant to section 3105 of the Concurrent Resolution on the Budget for Fiscal Year 2016, CBO is providing additional information on the estimated budgetary effects of certain provisions of S. 385 that would affect the mortgage guarantees of VA, FHA, and GNMA. Table 3 compares the estimated costs of increasing the volume of mortgage guarantees issued by VA, FHA, and GNMA using two different accounting techniques. As shown in Table 3, the estimated costs calculated using the procedure specified in the Federal Credit Reform Act are generally less than costs estimated using fair-value methods.

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3. A negative subsidy cost for a federal credit program can occur if the net present value of upfront and annual fees charged for a loan guarantee are greater than the estimated cost of a default on that loan.
  4. This estimate for FHA mortgage guarantees was prepared using procedures specified in the Federal Credit Reform Act. Pursuant to section 3105 of the Concurrent Resolution on the Budget for Fiscal Year 2016, CBO has also calculated this cost on a fair-value basis, which is shown below in the section "Additional Information."

**TABLE 3. COMPARISON OF ESTIMATED COSTS FOR VA, FHA AND GNMA PROGRAMS UNDER S. 385 USING FCRA AND FAIR-VALUE ESTIMATES**

	In Billions of Dollars	
	Estimated Cost Using FCRA Methodology	Estimated Cost Using Fair-Value Methodology
<b>INCREASES IN DIRECT SPENDING<sup>a</sup>, 2017-2027</b>		
Department of Veterans Affairs		
Estimated Budget Authority	6	8
Estimated Outlays	6	8
<b>INCREASES OR DECREASES (-) IN SPENDING SUBJECT TO APPROPRIATION, 2017-2022</b>		
Discretionary Spending for FHA and GNMA Under Current Law		
Estimated Authorization Level	-12	12
Estimated Outlays	-12	12

Note: FCRA = Federal Credit Reform Act; FHA = Federal Housing Administration; GNMA = Government National Mortgage Association.

a. CBO uses the fair-value methodology to estimate costs for Fannie Mae and Freddie Mac’s guarantee programs. Therefore, the table does not include a comparison of both methodologies for those entities.

## PAY-AS-YOU-GO CONSIDERATIONS

The Statutory Pay-As-You-Go Act of 2010 establishes budget-reporting and enforcement procedures for legislation affecting direct spending or revenues. The net changes in outlays that are subject to those pay-as-you-go procedures are shown in Table 4.

**TABLE 4. CBO ESTIMATE OF PAY-AS-YOU-GO EFFECTS FOR S. 385 AS REPORTED BY THE SENATE COMMITTEE ON ENERGY AND NATURAL RESOURCES ON MAY 10, 2017**

	By Fiscal Year, in Millions of Dollars												
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2017-2022	2017-2027
<b>NET INCREASE IN THE DEFICIT</b>													
Statutory Pay-As-You-Go Impact	0	0	0	1	1	2	2	2	3	3	3	4	17

## **INCREASE IN LONG-TERM DEFICIT AND NET DIRECT SPENDING**

CBO estimates that enacting the legislation would not increase on-budget deficits or net direct spending by more than \$5 billion in any of the four consecutive 10-year periods beginning in 2028.

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

S. 385 would impose an intergovernmental mandate, as defined in UMRA, by requiring states and tribal governments to certify to DOE whether or not they have updated residential and commercial building codes to meet the latest standards developed by building efficiency organizations. Based on information from DOE, CBO estimates that the cost of that mandate would fall well below the annual threshold established in UMRA for intergovernmental mandates (\$78 million in 2017, adjusted annually for inflation).

S. 385 also would authorize funding and technical assistance to state, local, and tribal governments to implement the certification requirement. Such funding also could be used for implementing and enforcing new building codes and training officials. In addition, state, local, and tribal governments may benefit from federal grants to establish or expand programs to promote retrofit projects for reducing energy costs, and public institutions of higher education may benefit from federal funding for outreach activities in industrial research and assessment centers. Any costs to public entities associated with receiving such assistance would be incurred voluntarily as conditions of receiving federal assistance.

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

S. 385 contains no private-sector mandates as defined in UMRA.



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