

The SAVE Act: Driving Job Creation and Consumer Energy Savings

Summary

The Sensible Accounting to Value Energy (SAVE) Act of 2011 is proposed federal legislation which calls for inclusion of energy costs in underwriting for federally financed single family mortgages. The proposal would provide lower rate mortgage financing for cost effective energy improvements; allow homebuilders and homeowners to recover the cost of efficiency investments; and enable better federal mortgage underwriting while lowering utility bills for American households.

Over time, the SAVE Act would drive growth in energy-efficient home construction and energy efficiency upgrades in existing homes, generating 83,000 jobs and \$1.1 billion in consumer energy bill savings in 2020 and helping revitalize the hardest hit sectors of the economy. These improvements in home energy efficiency, and the mix of goods and services purchased with the consumer energy savings, tend to be more labor intensive than spending on power plant construction and traditional fuels, resulting in this net increase in jobs and wages.

Results

Using ACEEE's input-output DEEPER Lite model, we estimate that the SAVE Act has the potential to create 83,000 jobs and annual energy bill savings of \$1.1 billion in 2020.

Year	Annual Jobs	Annual Energy Bill Savings*
2015	16,000	\$95 million
2017	50,000	\$380 million
2020	83,000	\$1.1 billion

* in 2010 dollars

The DEEPER model evaluates the macroeconomic impacts of the proposal, including an estimation of the number of jobs created directly in response to the anticipated increase in private-sector construction spending. Also captured are inter-industry linkages, the jobs created indirectly throughout the economy for manufacturers and service providers that supply the building industry. In addition, the model accounts for induced job creation resulting from workers in these direct and indirect industries spending their earnings, generating increased demand. Finally, we include the employment impacts stemming from the billions of dollars of consumer energy savings, which are re-injected back into the economy to induce additional economic activity. Estimates conservatively exclude effects in the multifamily housing industry, as well as ancillary benefits of consumer awareness of energy bills and increased participation in utility or other energy efficiency programs.

Methodology and Assumptions

Consumption and characteristics data are based on EIA's Annual Energy Outlook 2011 and the 2005 Residential Energy Consumption Survey (RECS). For simplifying purposes, we restrict our analysis to single-family homes.

Efficiency improvements on existing homes:

The SAVE Act will help drive upgrades to existing homes through financing a purchase or re-financing an existing mortgage. We estimate the increase in market penetration of home energy improvements as a result of the SAVE Act beginning at 0.01% of existing homes in 2013 (approximately 8,600 homes

annually) ramping up to a steady state level of 0.7% by 2020 (approximately 650,000 homes annually). Market penetration levels assume the integration of the SAVE Act underwriting criteria with complementary lending mechanisms, such as Fannie Mae's energy improvement feature.

We assume 15% energy savings per housing unit and an incremental cost of \$5,000 per renovation project. To calculate the increased mortgage payment per home, we use a 5% interest rate over a 30-year mortgage. The 15% savings estimate represents savings relative to the average existing home's energy consumption (approximately \$2,200 annually) and does not necessarily reflect percent savings per retrofit project. We expect the least efficient homes with the highest energy costs to self-select to undertake retrofit projects, bringing the actual percent savings per project down. For example, 15% of \$2,200 represents just 11% in actual energy savings for a home with \$3,000 in annual utility bills.

New construction:

The SAVE Act will also drive significant growth in new energy-efficient home construction. We estimate the increase in market penetration of new energy efficient homes as a result of the SAVE Act at 2% in 2013 (approximately 15,000 homes annually) rising to a steady state level of 25% by 2020 (approximately 250,000 homes annually). We assume a 20% savings level per home and an incremental cost of \$5,000 per home. To calculate the increased mortgage payment per home, we use a 5% interest rate over a 30-year mortgage.

The American Council for an Energy-Efficient Economy acts as a catalyst to advance energy efficiency policies, programs, technologies, investments, and behaviors. For information about ACEEE and its programs, publications, and conferences, visit aceee.org.

The Institute for Market Transformation (IMT) is a Washington, DC-based nonprofit organization promoting energy efficiency, green building and environmental protection in the United States and abroad. IMT's work addresses market failures that inhibit investment in energy efficiency and sustainability in the building sector. www.imt.org.

For more information, please see www.imt.org/SAVE-Act or contact:
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