# *Summaries: Energy Efficiency Tax Bills*

***The Expanding Building Efficiency Incentives Act of 2009*** **(S. 1637)** features the following:

**Energy Efficient Homes (Section 45L Credit).** Currently, energy efficient homes that are 50 percent better than code with respect to heating and cooling costs receive a $2,000 credit. The credit has been lauded as a major success by both homebuilders and energy efficiency groups with increasing market share and moving the industry to a point where in 2008, 4.6 percent of all homes sold in the U.S. qualified for the tax credit. Under the bill, this credit would be extended through 2012. In addition, the bill would create a higher standard for energy efficient new homes that are 50 percent better than code with respect to heating, cooling, water heating, lighting and appliance energy use. These homes would receive a tax credit of $4,000 and the credit would be in place through 2013.

**Energy Efficient Manufactured Homes (45L Credit).** Energy Star manufactured homes are also eligible for a $1,000 tax credit. Low-income families spend a disproportionate amount of household income on energy, and this credit will spur energy efficient manufactured housing for these families. Under the bill, the existing tax credit would increase to $1,500, and a new $2,500 tier would be created for the new Energy Star standard that will take effect in 2010 and be significantly more stringent.

**Energy Efficient Low-Income Housing.** The Low-Income Housing Tax Credit Program is an economic incentive to produce affordable housing, where federal housing tax credits are awarded to developers of qualified projects, who either use or sell the credits to investors to raise capital for housing development projects. Over 2 million units for low-income families and seniors have been constructed and preserved since 1987. However, there currently is not an incentive to make these buildings energy efficient. This legislation would provide an additional 50 percent tax credit of the current new homes tax credit if the building qualifies for the Low-Income Housing Tax Credit.

**Energy Efficient Commercial Building Tax Credit (Section 179D).** Currently, an incentive is provided through a $1.80 per square foot tax credit for a building that is 50 percent better than code with respect to building envelope, lighting,

and the HVAC system. In addition, there is a partial deduction for any one of the three components above of 60 cents per square foot. This legislation would build on the existing credits and increase the deduction to $3 per square foot and a partial deduction to $1 per square foot.

**Energy Rating.** The bill also includes a tax credit for an individual to undergo an energy rating, or energy audit, to determine what energy efficiency investments are necessary. The tax credit is equal to $200.

**Energy Rating Training.** The bill includes a $500 tax credit for training expenses of an individual to become an energy rater. As mentioned above, it is critical that the individuals who perform these energy audits are well trained and provide recommendations that are cost-effective.

## ***The Expanding Industrial Energy Efficiency Incentives Act of 2009*** **(S. 1639)** features the following:

**First,** the Act adds a new investment tax credit for reuse, recycling and/or efficiency measures related to process, sanitary and cooling water, as well as for blow-down from cooling towers and steam systems used by utility-scale thermo-electric generators. The U.S. currently re-uses only 6 percent of its water, and there is significant potential for gains in this area. The industrial sector, which is responsible for 45 percent of domestic freshwater withdrawals, is an ideal place to introduce transformative water reuse and water saving technologies. In other words, using water wisely is a cost-effective way to achieve significant energy savings.

**Second,** the bill establishes a $120-per-horsepower tax credit for efficient motor systems with adjustable speed capability. On average, motors account for 65 percent of an industrial energy user's electricity use, a percentage that is even higher in certain industries, such as water supply, mining and oil and gas extraction. New advances in power electronics and controls over the past five years have advanced the potential for new smart motor technologies to provide a significant energy savings potential if these new motors are placed widely into service. By reducing the initial design and added component costs, this new credit will accelerate the adoption of advanced motor technologies into higher volume production, helping to make the technology available economy-wide.

**Third,** the bill adds a new incentive for replacing CFC chillers. Large water-cooled chillers are the engines of air-conditioning systems for almost all large buildings. The bill establishes a credit of $150 per ton, plus an additional incentive of $100 for each ton downsized during replacement. The incentive extends only to pre-1993, post-1980 water-cooled chillers that use the refrigerants CFC-11 and CFC-

12. While chillers that use CFC-11 and CFC-12 refrigerants have been banned for new installations, some 30,000 chillers that still use these refrigerants remain in both public and private facilities across the country. While CFC chiller replacement is cost-effective over the long-term, the high up-front costs mean that many building owners do not make these investments. This moderate tax incentive improves the economics and reduces the up-front cost, substantially increasing the number of systems replaced.

• **Finally,** the bill improves the combined heat and power incentive, which was enacted last October as part of the tax extenders package. The package added a 10 percent investment tax credit for combined heat and power systems. The expansion of the combined heat and power tax credit would increase the credit's applicability from the first 15 megawatts to the first 25 megawatts of system capacity and remove the overall system size cap of 50 megawatts, allowing a greater number of combined heat and power projects to be financially viable and move forward. A recent Department of Energy study estimates that ramping up total U.S. combined heat and power to account for 20 percent of electricity capacity would eliminate over 60 percent of the expected increase in carbon dioxide emissions from today to 2030 — the equivalent of taking more than half of current passenger vehicles in the U.S. off the road.

## ***The Cleaner, Secure, Affordable Thermal Energy Act*** **(S. 1643) features the following:**

Creates, for residential consumers, a 30 percent tax credit for costs associated with converting from a fuel oil to natural gas or biomass heating system. The credit is capped at $3,500 ($4,000 in the case of biomass stoves). To qualify, the replacement equipment must be energy efficient; a natural gas boiler must have an AFUE rating of at least 85 percent; a replacement natural gas furnace must have an AFUE rating of at least 92 percent; and a replacement biomass appliance must have a thermal efficiency rating of more than 75 percent.

For business taxpayers, the Act authorizes bonus depreciation for property installed before 2012. This would enable business taxpayers to expense – that is, immediately write-off – half of the cost of qualifying property, and depreciate the remaining balance over the typical cost-recovery period.

Many of the nation's heating oil systems are used by public entities, particularly school systems. To help public entities finance their conversions to natural gas and biomass heating, the Act adds conversion programs as an activity eligible for Qualified Energy Conservation Bonds.

Finally, to encourage expansion of natural gas service capabilities, the Act includes a two-year extension of the 15-year depreciation schedule created for distribution facilities under the Energy Policy Act of 2005.

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