

Solar and wind incentives for homeowners in the 2008 Energy Act

Congress has just given a generous boost to homeowners who want to convert their homes to solar energy or cut their electricity bills with a wind turbine. The "Energy Improvement and Extension Act of 2008" (the 2008 Energy Act), which was enacted on Oct. 3, 2008, contains tax breaks for homeowners who invest in a home solar-power system or small wind turbine. These tax breaks, when combined with incentives that already exist in many states, mean that homeowners may be able to get back a sizeable portion of their investment in such projects from the government. Here are the details.

Solar tax credit extended and enhanced.

Under pre-2008 Energy Act law, homeowners were eligible for tax credits for qualified solar water heating and photovoltaic systems. Solar water heating systems produce hot water; photovoltaic systems produce electricity. The credits, which were available for systems placed in service between Jan. 1, 2006 and Dec. 31, 2008, were for 30% of the cost of the system. For individuals the maximum credit was \$2,000 for photovoltaic systems and \$2,000 for solar water heating systems in any tax year.

The new law makes several improvements on the previous rules. First, it extends the credit for an additional eight years (through 2016). Second, it scraps the \$2,000 cap, which didn't go far with most solar installations. The \$2,000 cap meant that a homeowner who installed a \$40,000, 5-kilowatt rooftop system could get only \$2,000 back through the tax break. Under the new law, that same homeowner receives a \$12,000 (30% × \$40,000) tax cut. With similar or even more generous incentives available in many states, that means that a homeowner will often be able to get more than half the investment in a home solar-power system back from the government. A third improvement under the new law is that the tax credit is made applicable against the alternative minimum tax (AMT). Under pre-2008 Energy Act law, an individual could not use the credit to reduce his income tax below the level at which the AMT kicked in. The new law allows the credit to be used to offset the AMT.

I should also mention that the new law contains another important provision for solar enthusiasts, which is that it allows utilities to take advantage of a production tax credit for solar projects, making it more likely that they will invest directly in them.

Tax credit for small wind turbines.

It has long been argued by wind energy proponents that high up-front costs were preventing homeowners and businesses from installing small wind systems on their property to generate electricity, and that a federal tax credit for small wind turbines similar to the solar tax credit should be provided to encourage more taxpayers to undertake such projects. The new law responds to these arguments by creating a 30% credit on the installed cost of small wind turbines (defined as those with rated capacities of 100 kilowatts or less) for residential or commercial applications. The credit, which is capped at \$4,000, applies to wind turbines placed in service through 2016. To give an idea of the value of such a credit, industry sources report that a typical 10-kilowatt residential wind turbine costs about \$32,000 and takes about 15 years to pay for itself in terms of lowered electricity costs. The new credit, by shaving \$4,000 off the up-front cost of the turbine, should reduce the payback period of the project. In addition, the new law allows the credit to be used to offset the AMT.