

## Taking Credit for Energy Efficiency

By [MARTIN VAUGHAN](#)

Thinking about energy upgrades for your home in 2009? The good news is that the array of federal and state incentives to make your home more energy efficient has never been greater. The bad news, of course, is that strapped consumers in a weak economy may not have a lot of cash or home equity to use to leverage the credits.

The past year's volatility in energy prices turned a lot of attention to alternative sources of home heating and electricity. To help spur interest in alternative energy, Congress extended and expanded federal tax benefits in October, with several new provisions set to take effect Jan. 1.

With a recession under way, many companies marketing alternative-energy systems or home-efficiency improvements aren't seeing a rise in demand for their offerings. "A lot of consumers are sitting on their wallets and waiting to see how things pan out. Whether it's Christmas presents or energy retrofits, there's not a lot of money being spent," says Steven Nadel, executive director of the nonprofit American Council for an Energy-Efficient Economy.

But the extra tax savings make it worthwhile for energy-conscious homeowners to take a closer look, especially given continued uncertainty in natural-gas and heating-oil prices. Some states have sweetened the pot with rebates for energy-efficient heating and cooling systems. And with planning, taxpayers may be able to carry over some of the credits.

### Solar Power

The most generous of the new provisions is a tax credit for installing home solar-power systems. Until now, the federal tax credit for residential solar systems was capped at \$2,000. Starting Jan. 1, homeowners can claim a full 30% of their installation costs for new residential solar-power systems, with no cost cap.



According to Barry Cinnamon, CEO of solar-system installer Akeena Solar Inc., a 2.5-kilowatt rooftop system in California would cost in the neighborhood of \$25,000. State rebates would total \$5,000, plus a 30% tax credit on the remaining \$20,000 would get the upfront cost down to \$14,000, he says.

"Now you're into a 6½-year payback period [for energy savings to pay off the system's cost], even if electricity costs don't go up," says Mr. Cinnamon. "The economics have never been better." But, he adds, "Commercial and residential customers don't have the money to borrow right now."

(In Hawai'i, a \$25,000 residential solar electric system would allow the homeowner to accrue \$7,500 worth of federal tax credits (30 percent of \$25K) and a \$5,000 state tax credit, for a combined \$12,500 or 50 percent of the cost of the system.)

### Savings in the Wind

Brand new in 2009 is a tax credit for small wind turbines for residential or business use. The small-wind credit is available this year for the first time since 1985, when it was phased out as part of a broader simplification of the tax code.

That credit isn't expected to have as large an impact on the market as the retooled residential solar credit -- it is limited to \$1,000 per kilowatt, with a maximum credit of \$4,000. The popular 10-kilowatt systems can cost from \$50,000 to \$60,000.

"It's not enough to move the market," says Mike Bergey, president of Bergey Windpower Co. in Norman, Okla. "So far it has made the phones ring more, but it hasn't made the systems fly off the shelves."

Due to local permit issues -- the towers for the small turbines are usually 60 feet or taller -- small wind power is still practical only for homes that sit on an acre or more of property, Mr. Bergey says. The American Wind Energy Association doesn't recommend installation where wind speeds average less than 10 miles per hour.

Nonetheless, the new federal credit could sweeten the deal for homeowners in states with rebate programs for small wind turbines. New York and California offer up to \$20,000 in rebates for a 10-kilowatt system.

### Offsetting the AMT

Both the solar and wind residential tax credits can be claimed against the alternative minimum tax, also a new feature in 2009. That will help taxpayers with a lot of itemized deductions and tax credits get the full value of the energy tax credits.

Some planning may be called for to ensure that you have enough tax liability to make full use of the residential tax credit for solar or small wind systems, or a similar credit for geothermal heat pumps. Credit amounts that aren't used in the year the system is installed may be carried forward to the following tax year.

The tax credit for geothermal heat pumps, which use heat stored in the ground to warm or cool a home, is capped at \$2,000.

Improvements to help your home better trap heat or cool air in 2009 could qualify you for an energy efficiency tax credit of up to \$500. The tax credit is good for 10% of the cost of such activities as adding insulation, or replacing windows and external doors.

Newly installed high-efficiency furnaces, boilers, heat pumps and water heaters also are eligible for the 10% tax credit. But these credits, combined with any window and insulation credits, may not total more than \$500 for the same home.

You're out of luck, however, if you made such improvements in the 2008 tax year. When Congress renewed the tax credit, it did so only from Jan. 1, 2009 to Dec. 31, 2009.

#### Pending Guidelines

More tax incentives could be on the way as renewable energy sources are expected to benefit from coming economic-stimulus legislation, and President-elect Barack Obama's energy policies in general. But Mr. Nadel of the American Council for an Energy-Efficient Economy says where the economics make sense, homeowners would be well-served to move ahead with energy improvements now. "I'd do it, I wouldn't wait to see if I can get a little more from Uncle Sam," he says.