

Greening up the house: Rebates and tax credits are motivating people to make their homes more energy efficient.

BY GEORGIA TASKER
GTASKER@MIAMIHERALD.COM

What's new about saving energy this Earth Month? Saving money.

Solar power is powering along so well in the Florida Keys that Thomas and Mary Ellen Operchal received a check from the Florida Keys Electric Co-op for \$122 this month. That's because they produced more electricity than they could use from the rooftop photovoltaic system on their Marathon house so they sold the excess for use on the Co-op's distribution system.

Solar power is powering along so well in the Florida Keys that Thomas and Mary Ellen Operchal received a check from the Florida Keys Electric Co-op for \$122 this month. That's because they produced more electricity than they could use from the rooftop photovoltaic system on their Marathon house so they sold the excess for use on the Co-op's distribution system.

Energy Star products now include not only washers, dryers and refrigerators, but also computers and even battery chargers. The program, which is a cooperative effort between the Department of Energy and the Environmental Protection Agency, says energy-saving products saved U.S. consumers \$19 billion on energy costs last year.

But the big news now, says Sarah Williams with the Florida Governor's Office of Energy and Climate Change is 'there are a lot of incentives to encourage homeowners to `green' their home -- not only from the federal government, but also from local utilities or municipalities.'

Federal tax credits are available again for solar products under the federal stimulus plan, the American Recovery and Reinvestment Act. Consumers can claim up to \$1,500 in credits for home products placed in service in 2009 and 2010.

2010.

Not subject to the cap are geothermal heat pumps, solar water heaters, solar panels, fuel cells and small wind energy systems. Tax credits are available for these through 2016.

The state of Florida also provides rebates for the purchase of solar water heaters, photovoltaics, and even solar pool heating.

The Florida program, now in its third year, has given out \$6 million in rebates, Williams said. This year's rebate fund already has been exhausted, and 2,400 people have applied and been approved for future funds.

Florida Power & Light offers rebates of \$125 to \$2,100 for homeowners who replace less efficient air-conditioning units with more efficient ones. Rebates of up to \$300 also are available from FPL for upgrading ceiling insulation.

Ken Fields, who installed roof-hugging solar panels on his Miami Beach home last year, now works with Electron Solar Energy, the Miami distributor for a number of solar manufacturers. Fields tells his customers that

30 percent of the total cost of any renewable energy system can be deducted from income taxes the first year. That means a \$50,000 solar system would cost only \$35,000 after \$15,000 in tax credits.

SOLAR POWER

Tax credits were one reason the Operchals were able to purchase their 5,000-watt solar system in February 2007. They had looked at a generator for hurricane season, but decided to go with solar and back-up batteries because they could use it daily. The cost, after rebates, was \$20,000 to \$25,000, they said. Their system produces electricity that is sent to the Keys Electric Co-op for use on its grid. If everything is running at once, it's enough to power everything in the house except the stove and dryer.

While they pay a small monthly fee to be hooked up to the grid, they were the first customers to produce so much extra electricity last year that the power company paid them. It helps that they also insulated windows, bought energy efficient appliances, use compact fluorescent lights and have a programmable thermostat that runs the air conditioning. All are improvements they made over two years to "leave a smaller carbon footprint," said Mary Ellen.

Additionally, Florida allows homeowners to deduct the cost of the system from the taxable value of their home over a 10-year period. FPL also has a homeowner solar program called Net Metering, which allows solar customers to interconnect with its power grid. One month's savings is credited to the next, and at the end of the year, the customer is paid for excess energy. So far, however, only about 300 have signed up, making them eligible to sell any excess to FPL.

If solar is too costly for you, there are lots of smaller green ways to save greenbacks. Erin Carlson, guru for green.yahoo.com, offers these money-saving tips:

- Replace incandescent light bulbs with compact fluorescents. The bulbs use 75 percent less energy and save about \$30 in electricity costs over their life.
- "If you adjust your TV to the home setting for brightness -- a lot are set to store display -- you can save 30 percent of energy the television uses," she says. "And a plasma TV can use twice as much as energy as an LCD. A larger television uses more than a smaller one, so we're encouraging people to buy an LCD that's just the right size."
- Devices that steal energy include things that run all day, especially appliances with clocks, such as the microwave, coffee makers, old VCRs. They steal more energy than cellphone chargers left plugged in 24/7.
- Use a slow cooker rather than the oven. How can it save energy if it is on all day? "It only uses enough energy to cook the exact amount of food in that small space as opposed to the oven, which has to heat the entire space around the food," she says.
- Use a rack dryer or clothesline instead of an electric clothes dryer.
- Put weather stripping around windows to cut down on air leaks.
- Place door sweeps at the base of doors to block hot air from coming in and cooled air from seeping out.
- Plant trees on the south side of your home to prevent heat build-up throughout the day, reducing the need for energy consumption after work and in the evening.
- "If you have a refrigerator made before 1993, replace it," she says. "It's not efficient."

BETTER APPLIANCES

Appliances have grown increasingly energy efficient. The Energy Star program determines efficiency standards and, since it began in 1992, is largely responsible for improved efficiency. Products are tested by the Department of Energy, and ratings are on a yellow label that explains how much energy an appliance uses, how it compares to other products and lists the approximate annual operating cost.

Energy Star-rated products will save 10 percent to 30 percent, says Ernesta Jones, an EPA spokeswoman, because of advanced technologies that result in greater efficiency. For example, Energy Star-rated light bulbs use 70 percent less energy than standard bulbs, she says. Even computers can earn an Energy Star rating with power management features.

Energy savings are growing every year, according to Jones. In 1993, the first year the program was fully effective, utility bill savings were \$257 million. By 2007, that figure had skyrocketed to \$16.3 billion.

More than 60 categories of products now bear the Energy Star label, including ceiling fans, light bulbs, central air-conditioning systems and even battery chargers and digital-to-analog television converters that use only eight watts of electricity when on, and one watt when in sleep mode.

RESOURCES

To check out appliances, rebates, tax credits and much more, here are online resources:

- www.fpl.com (search for Net Metering)
- www.dep.state.fl.us/energy, for state rebates and energy information • www.energystar.gov
- <http://dsireusa.org/>. The site built by North Carolina State University allows you to click on individual states for rebate and tax credit information.
- www6.homedepot.com/taxcredit/index.html for tax rebate information from Home Depot.

BY GEORGIA TASKER
GTASKER@MIAMIHERALD.COM

hat's new about saving energy this Earth Month? Saving money.

Solar power is powering along so well in the Florida Keys that Thomas and Mary Ellen Operchal received a check from the Florida Keys Electric Co-op for \$122 this month. That's because they produced more electricity than they could use from the rooftop photovoltaic system on their Marathon house so they sold the excess for use on the Co-op's distribution system.

Energy Star products now include not only washers, dryers and refrigerators, but also computers and even battery chargers. The program, which is a cooperative effort between the Department of Energy and the Environmental Protection Agency, says energy-saving products saved U.S. consumers \$19 billion on energy costs last year.

But the big news now, says Sarah Williams with the Florida Governor's Office of Energy and Climate Change is 'there are a lot of incentives to encourage homeowners to `green' their home -- not only from the federal government, but also from local utilities or municipalities.'

Federal tax credits are available again for solar products under the federal stimulus plan, the American Recovery and Reinvestment Act. Consumers can claim up to \$1,500 in credits for home products placed in service in 2009 and 2010.

Not subject to the cap are geothermal heat pumps, solar water heaters, solar panels, fuel cells and small wind energy systems. Tax credits are available for these through 2016.

The state of Florida also provides rebates for the purchase of solar water heaters, photovoltaics, and even solar pool heating.

The Florida program, now in its third year, has given out \$6 million in rebates, Williams said. This year's rebate fund already has been exhausted, and 2,400 people have applied and been approved for future funds.

Florida Power & Light offers rebates of \$125 to \$2,100 for homeowners who replace less efficient air-conditioning units with more efficient ones. Rebates of up to \$300 also are available from FPL for upgrading ceiling insulation.

Ken Fields, who installed roof-hugging solar panels on his Miami Beach home last year, now works with Electron Solar Energy, the Miami distributor for a number of solar manufacturers. Fields tells his customers that 30 percent of the total cost of any renewable energy system can be deducted from income taxes the first year. That means a \$50,000 solar system would cost only \$35,000 after \$15,000 in tax credits.

SOLAR POWER

Tax credits were one reason the Operchals were able to purchase their 5,000-watt solar system in February 2007. They had looked at a generator for hurricane season, but decided to go with solar and back-up batteries because they could use it daily. The cost, after rebates, was \$20,000 to \$25,000, they said. Their system

produces electricity that is sent to the Keys Electric Co-op for use on its grid. If everything is running at once, it's enough to power everything in the house except the stove and dryer.

While they pay a small monthly fee to be hooked up to the grid, they were the first customers to produce so much extra electricity last year that the power company paid them. It helps that they also insulated windows, bought energy efficient appliances, use compact fluorescent lights and have a programmable thermostat that runs the air conditioning. All are improvements they made over two years to "leave a smaller carbon footprint," said Mary Ellen.

- Photos

RESOURCES

To check out appliances, rebates, tax credits and much more, here are online resources:

- www.fpl.com (search for Net Metering)
- www.dep.state.fl.us/energy, for state rebates and energy information
- www.energystar.gov
- <http://dsireusa.org/>. The site built by North Carolina State University allows you to click on individual states for rebate and tax credit information.
- www6.homedepot.com/taxcredit/index.html for tax rebate information from Home Depot.

BY GEORGIA TASKER
GTASKER@MIAMIHERALD.COM

hat's new about saving energy this Earth Month? Saving money.

Solar power is powering along so well in the Florida Keys that Thomas and Mary Ellen Operchal received a check from the Florida Keys Electric Co-op for \$122 this month. That's because they produced more electricity than they could use from the rooftop photovoltaic system on their Marathon house so they sold the excess for use on the Co-op's distribution system.

Energy Star products now include not only washers, dryers and refrigerators, but also computers and even battery chargers. The program, which is a cooperative effort between the Department of Energy and the Environmental Protection Agency, says energy-saving products saved U.S. consumers \$19 billion on energy costs last year.

But the big news now, says Sarah Williams with the Florida Governor's Office of Energy and Climate Change is 'there are a lot of incentives to encourage homeowners to `green' their home -- not only from the federal government, but also from local utilities or municipalities.'

Federal tax credits are available again for solar products under the federal stimulus plan, the American Recovery and Reinvestment Act. Consumers can claim up to \$1,500 in credits for home products placed in service in 2009 and 2010.

Not subject to the cap are geothermal heat pumps, solar water heaters, solar panels, fuel cells and small wind energy systems. Tax credits are available for these through 2016.

The state of Florida also provides rebates for the purchase of solar water heaters, photovoltaics, and even solar pool heating.

The Florida program, now in its third year, has given out \$6 million in rebates, Williams said. This year's rebate fund already has been exhausted, and 2,400 people have applied and been approved for future funds.

Florida Power & Light offers rebates of \$125 to \$2,100 for homeowners who replace less efficient air-conditioning units with more efficient ones. Rebates of up to \$300 also are available from FPL for upgrading ceiling insulation.

Ken Fields, who installed roof-hugging solar panels on his Miami Beach home last year, now works with Electron Solar Energy, the Miami distributor for a number of solar manufacturers. Fields tells his customers that 30 percent of the total cost of any renewable energy system can be deducted from income taxes the first year. That means a \$50,000 solar system would cost only \$35,000 after \$15,000 in tax credits.

SOLAR POWER

Tax credits were one reason the Operchals were able to purchase their 5,000-watt solar system in February 2007. They had looked at a generator for hurricane season, but decided to go with solar and back-up batteries because they could use it daily. The cost, after rebates, was \$20,000 to \$25,000, they said. Their system produces electricity that is sent to the Keys Electric Co-op for use on its grid. If everything is running at once, it's enough to power everything in the house except the stove and dryer.

While they pay a small monthly fee to be hooked up to the grid, they were the first customers to produce so much extra electricity last year that the power company paid them. It helps that they also insulated windows, bought energy efficient appliances, use compact fluorescent lights and have a programmable thermostat that runs the air conditioning. All are improvements they made over two years to "leave a smaller carbon footprint," said Mary Ellen.