



## **Solar leasing measure in Congress aims to eliminate up-front roof installation costs**

*By Kathleen Hart*

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What if homeowners across the country could lease a rooftop solar energy system as easily as a satellite TV dish or a new car?

A bill working through Congress would reduce the risk for companies that lease rooftop solar systems, thereby making solar energy an affordable, mainstream energy option for homeowners. Rep. Ed Perlmutter, D-Colo., sponsor of the Green Resources for Energy Efficient Neighborhoods Act, or the GREEN Act of 2009, said the bill would eliminate high upfront installation costs for homeowners wishing to install solar systems.

"It's about giving the homeowner a whole different perspective, similar to the way the satellite TV vendors market their wares," Perlmutter said in an interview. He noted that whereas previously, homeowners had to buy their satellite dish, now they can just pay for the satellite dish in their monthly payments, which has caused a giant explosion in satellite dishes.

Perlmutter believes that without the leasing provision in his legislation, H.R. 2336, solar energy will continue to grow in the United States, but that it will be a slow, steady climb. "I think a lot of these systems do have the upfront costs that are hurdles that families have to overcome. A lot of them are doing it because they see the long-term benefits. But if we can make it simpler and cheaper at the outset, I think we can diversify our energy portfolio and stop relying on the Middle East and stop putting [greenhouse gas emissions] in the air," he said.

Currently, if a homeowner wants to go solar, he or she can buy a solar system outright and take advantage of all of the available tax credits. With the tax credits, the homeowner may be able to get the upfront costs down, for example, from \$30,000 to about \$15,000, Perlmutter said. "But it's still a sizeable upfront cost. The other way to approach it — and what we're trying to provide for in the bill — is leasing of the solar equipment," he explained.

Under the leasing option, either a solar company or a solar company in combination with a finance company would lease the solar unit to the homeowner at a given lease schedule. The lease schedule would be something less than the amount of power anticipated to be saved by the solar system, "so net to the homeowner, there's money in his pocket," Perlmutter said. These would be long leases, with a five-year or 10-year initial term and the ability to renew them. The leasing company would be responsible for keeping the solar system operational during the term of the lease.

If the homeowner were to decide not to renew the lease, the leasing company could keep maintaining the solar system and sell the electricity generated on the homeowner's roof back into the grid. Under a provision of the bill, the leasing company could turn the system over to the federal government, which would then be able to sell the power back to the grid.

Passage of the bill is important because solar leasing companies are trying to minimize their risk, Perlmutter said. They need to know that there is a "residual value" to the lease, meaning that the power can be sold back to the grid. "Just like with a car lease, there is a residual value to the car. From a federal policy perspective, [this would mean that] we've now diversified the energy resources of the country," he explained.

One difficult issue in this scenario is how to determine the residual value of a given solar system. "Based on today's technology, we can figure out the residual value," Perlmutter said. However, the tricky part of the calculation derives from the fact that photovoltaic systems are becoming cheaper and more powerful with each passing year, he added.

On June 11, the House Financial Services Committee Subcommittee on Housing and Community Opportunity held a hearing on the GREEN Act. Perlmutter said the bill enjoys the support of many architects, engineers, land planners, private builders, the National Association of Realtors, the U.S. Green Building Council, private builders and the Department of Housing and Urban Development. At the hearing, an official with Lennar Urban, a part of Lennar Corp., one of the nation's largest homebuilders, testified in support of the renewable energy provision in the bill.

"Banks will lend in reliance upon that loan insurance program," Lennar Ventures President David Kaiserman said in an interview. The program would work much the way mortgages work, he explained. "In the case of renewable energy, the federal government's insurance is secured by the energy produced by the system."

Perlmutter expects the bill to be marked up by the committee, with amendments, by late September or early October. Sen. Sheldon Whitehouse, D-R.I., has sponsored a companion bill, S. 1379, in the Senate.

### **SolarCity has more than 1,600 lease customers**

Solar leasing is not an entirely new concept in the United States. Jonathan Bass, director of communications for SolarCity, said the California-based company provides consumers with a lease option that allows them to put no money down and start saving money on their electric bills immediately.

"We offer a lease program. There's a zero-down option. It's designed to allow the customers to begin saving money immediately," Bass said. The lease payment and the new electricity added together are typically 10% to 15% less than the customer's former electricity bill.

The lease payment includes the design and installation of the solar system and a Web monitoring system that gives customers an Internet page that updates every 15 minutes and shows them how much solar energy their systems are generating and how much money they are saving, Bass said. "We guarantee the production. We predict how much the system is going to produce and we guarantee that amount. At the end of the year, we'll analyze that, and if it didn't produce what we said it would, then we will compensate them for the difference."

So far, the company's systems are producing 7% to 10% more than predicted, Bass said, noting that "all that upside goes to the customer." The lease payment also includes operation and maintenance, so if something goes wrong with the system, SolarCity fixes it.

Generally, the lease payments start at \$40 to \$50 per month in some areas and go up to several hundreds of dollars a month, depending on the size of the system and the available rebates, which are used to reduce the cost of the system, Bass said. SolarCity has more than 1,600 customers on solar leases in Arizona and California and plans to expand to five other states soon. The company began installing solar systems for lease customers in July 2008. SolarCity, which has more than 4,000 customers, also sells systems.

Noting that there is a waiting list for the lease, Bass said the company has been hiring new installers to meet the demand.

"The lease was created because we kept running into issues where people really wanted to go solar but the upfront cost was prohibitive to them," Bass said. "Especially in a recession, the lease provides another option for customers who want to do something for the environment and want to start saving money right away."