Lease option increases rooftop solar's appeal, study says

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(PhysOrg.com) -- Rooftop solar panels are attracting a new demographic of customers who are choosing to lease rather than buy, and enjoying the low upfront costs and immediate savings.

The new third-party-lease business model lets homeowners save money the very first month, rather than breaking even a decade later after an initial investment of $10,000 or $20,000.

Analysts with the U.S. Department of Energy’s National Renewable Energy Laboratory (NREL) found that the solar lease models are surging in southern California. And they’re being adopted in less affluent neighborhoods that had few customer-owned systems.

The NREL study, “The Transformation of Southern California’s Residential Photovoltaics Market through Third-Party Ownership,” is in the current edition of the journal *Energy Policy*.

The study indicated an attraction for third-party leasing in neighborhoods with less affluence than those most likely to go for the customer-owned option.

It found a positive correlation between customers outright buying solar energy systems and customers living in neighborhoods where the average household income was $150,000 or more.

But with third-party-leased photovoltaic (PV) panels, that positive correlation appeared in neighborhoods where the average household income was just $100,000 or more.

If what's true in southern California proves true for the nation, it means that rooftop solar power could prove tempting for an additional 13 million Americans who live in households that earn between $100,000 and $150,000 per year.

"What is so interesting about the southern California data is that the strong decrease in PV prices – from lower retail costs and stronger federal incentives – didn't pick up a new demographic. But the new business model – leasing – did pick up a new customer demographic," NREL's Easan Drury, the lead author of the report, said.

Repackaging the value of photovoltaics as a simple savings on the monthly bill is an attractive alternative to the pitch that it will pay for itself in a decade, he said. "If someone comes up to you and says you can make money next month and forever, that totally changes how people see the value of solar."

Among Drury's other findings:

• Third-party leasing usually eliminates the need for home-equity-style financing and, thus, the need for significant equity in the home. Without the hurdle of financing, more people can adopt solar, Drury said.
• Along with the lower income threshold, Drury found a surge in solar leasing in neighborhoods with younger families.
• In the Los Angeles and Orange county markets, customer-owned PV was five times more prevalent than third-party owned in 2009. In 2010, the ratio had dropped to 2 to 1. And for the first quarter of 2011, the ratio was almost even.

Homeowners can put as little as $3,000 down and see an immediate drop in their electricity costs, albeit that first year the drop may be just a couple dollars a month.

The real benefits come over the next two decades, when the $40 or $50 per month they're paying to lease the solar panels stays constant, while, presumably, the cost of electricity goes up. Third-party companies are touting potential customer savings of $10,000 to $15,000 over two decades.

Provided by National Renewable Energy Laboratory