

September 8, 2009

HOME SOLAR PRICES FALLING AS REBATES SHRINK (from Mercurynews.com, written by Brandon Bailey)

Even as a state rebate is shrinking, the price of residential solar power is dropping, thanks to lower installation costs and a glut in the supply of key components.

That's putting it in reach of more people and prompting solar advocates to say the day is coming when rebates and tax credits won't be needed to spur the growth of the renewable energy industry.

The cost of a typical 4,000-watt home solar system has dropped as much as 10 percent in the last year — falling below \$20,000 in the Bay Area, after factoring in the California rebate and a federal tax credit that increased this year. Installers say a homeowner can recover the upfront costs of a solar system through lower utility bills in less than 10 years.

"The net economics of all this is getting better," said Barry Cinnamon, CEO of Los Gatos-based Akeena Solar, which sells residential and commercial systems. "We foresee a time, a few years from now, where we won't even need the state incentives."

One major subsidy is already starting to decline. The flood of applications for installation rebates under the California Solar Initiative is triggering a reduction this month in the size of rebates available from Pacific Gas & Electric, which administers the program in most of the Bay Area.

The \$2.2 billion program, funded by utility ratepayers, was designed to provide bigger financial incentives at first, to jump-start consumer interest. As more people install solar systems, the dollar amount of rebates decreases in incremental steps. For PG&E customers, the rebate for a 4,000-watt system will drop from around \$6,200 to about \$4,400.

On the other hand, the federal stimulus bill enacted in February removed a \$2,000 cap on a 30 percent federal tax credit for home solar panels, allowing many homeowners to recoup several thousand dollars of their costs.

Even without those subsidies, experts say, changes in the global market are driving costs down.

"There's been a rather dramatic decline in the last six months," said Adam Browning, who runs a nonprofit advocacy group called the Vote Solar Initiative. He said he expects the trend to continue.

After several years of lagging behind demand, silicon refiners have ramped up production and solar-panel makers have increased their manufacturing capacity, particularly in China. Those factories came on-line last year, just as a worldwide recession knocked down corporate spending for commercial solar installations.

As a result, the wholesale price of high-end solar panels has fallen by 50 percent, to around \$2.40 per watt, according to analyst Nathaniel Bullard at the research firm New Energy Finance. Since Chinese manufacturers can make panels for close to \$2 per watt, he said, prices are likely to fall further.

Panel prices are only about a third of the cost for installing a system. Labor costs are as much or more of a factor, said Curtis Seymour, a regulatory analyst at the California Public Utilities Commission.

The commission, which oversees the state subsidy program, has worked with solar contractors to devise more efficient installation procedures. Manufacturers and contractors have also come up with new hardware designs that take less time — and therefore cost less — to install.

One study found labor costs for installing solar panels have dropped 25 percent in the last two years, said Browning.

On average, a home solar power system cost about \$8 per watt last year in California, according to researchers at the Lawrence Berkeley National Laboratory. That figure has dropped about 50 cents per watt in the last year, according to Vote Solar's analysis of state statistics. Cinnamon said he believes it will fall to \$7.25 per watt this year.

"When we looked at it three years ago, the cost didn't make any sense for us. But compared to then, it's come down about 30 percent," said homeowner Susan Hollingshead, who recently signed a contract with Sungevity, a Berkeley company, to install a solar panel system for her four-bedroom house in Walnut Creek.

All told, PG&E has approved rebates for more than 11,400 residential solar installations since the program began in January 2007. Municipal utilities in Palo Alto and Santa Clara have separate programs for their customers.

Citing previous experience, Seymour at the utilities commission said the lower rebates may put a temporary crimp in applications, but consumer interest should rebound again.

Some people see the rebate step-down as bad news, he added, "but to us it's a sign the program is working."