

Making Solar Affordable in Santa Cruz

City officials explore ways to make going solar an option for non-millionaires.

By Steve Hahn

Santa Cruz city officials will be taking a field trip up to Berkeley this week as part of their search for ways to make solar panel installation affordable to the average property owner. Finance Director Sandra Benoit and the city's new Global Warming Coordinator Ross Clark will join Planning Director Greg Larson as they meet with their Berkeley counterparts to learn about a unique idea coming out of that city. As of press time, Berkeley's plan was set to come before its City Council Nov. 6, the day before Santa Cruz officials arrive. If the idea is approved by the council it will allow the city of Berkeley to pay the full cost of installing solar panels on residences and businesses, with the understanding that benefiting property owners will pay the city back through a 20-year assessment fee on their property.

Santa Cruz officials, including Larson, like the program because it overcomes the chief burden in transitioning to solar—the high up-front costs of installation. Larson estimates the tab ranges from \$15,000 to \$30,000 per house, depending on the size of the property. Business owners often have to pay substantially more depending on their energy use.

In all likelihood, this program would end up saving the property owner money, officials say, because energy costs would be locked in over the 20-year period and therefore wouldn't be subject to the fluctuations of the energy market.

"What we're looking at is how can we help homeowners and businesses deal with the financial side in the absence of greater support from the feds and state," says Larson. "We're learning how the Berkeley program works, what the concept is."

Larson stresses that the Berkeley idea is just one among many the city is studying, and that the plan would have to be approved by the voters before it could be implemented. Where the initial money for this program would come from remains a mystery at this point, but the general public would not see more taxes. The assessment fees would only be charged to those who chose to install solar panels through the program.

Mahlon Aldridge, vice president of the energy group at Ecology Action, says there are a multitude of reasons to seriously consider Berkeley's idea. First and foremost is the fact that the city, county and UCSC just signed a Climate Action Compact pledging to lower greenhouse gas emissions. Perhaps a more pressing reason is that AB 32, California's Global Warming Solutions Act, calls for all regions in the state to reduce their emission levels to 1990 levels by 2020. This would constitute a 25 percent drop in emissions. Implementation of the state law forced the city of Santa Cruz to incorporate this carbon-reduction goal into the city's General Plan, which is now in the process of being updated.

"The barriers that exist, the reasons people don't [install solar], is because of the up-front costs, which can be significant, and not knowing whether or not you'll hold onto your property for the life and payback time of your solar system," says Aldridge, who helped organize the Berkeley trip. "That payback time is on average 10 years, and that's a long time to think forward and invest \$18,000 to \$22,000 in a solar system, especially if you already have an \$800,000 house. What [this plan] does is it allows the cost of that to be spread over time and you only pay for the portion you use when you live there."

So if a property owner decides to sell his or her house before the 20 years is up, the next owner will continue paying the city the assessment fee and continue getting cheaper electricity, says Aldridge.

The city is considering a number of other financing methods as well, such as including the cost of solar installation in mortgage loans or encouraging residents to borrow money from their retirement funds to pay for the installation. The idea is that money saved on utility bills could be funneled into mortgage payments or a retirement fund over the years, returning the balance to its original amount. The only option to be taken off the table so far is direct subsidies, says Larson, because it would be too expensive for the city. Whatever option the city picks, one thing is clear: as

federal inaction on the global warming issue drags on, local initiatives are popping up—and solar panels are becoming increasingly popular.

At the Santa Cruz Community Credit Union, borrowers can now apply for a loan that would pay the full cost of installing a solar system with an interest rate of 7.25 percent, about half the average rate charged by the credit union.

Cabrillo College has also decided to make the transition to solar with plans to install a one-megawatt system somewhere on the Aptos campus. Likewise, the Santa Cruz City School District is planning on installing a 1.7-megawatt solar system spread over nine campuses. A solar system with a one-megawatt capacity could power anywhere from 500 to 1,000 average homes, depending on factors ranging from cloud cover to energy efficiency within the home. The school district plans to use its 1.7-megawatt system to provide 90 percent of the district's energy. Ross Clark, who started as the city's Global Warming Coordinator on Nov. 5, believes there is a strong desire for solar technology in the city. If the prohibitive costs can be overcome, either through the assessment fee idea or another avenue, Clark is confident Santa Cruz residents will be able to add energy self-sufficiency to the long list of reasons why it's good to live here. "If the financing is figured out," says Clark, "everyone who's installed them that I've talked to are very happy with having them on their roof and they take a lot of pride in the fact that they generate power for the community instead of being a consumer." Clark also looks forward to working with the local business and investor communities to determine how the city can help incorporate them into the solar transition.

Back at the planning department, Larson believes Santa Cruz will continue, if not accelerate, its tradition of supporting solar projects in the recent future. More than 100 kilowatts' worth of solar systems currently grace city-owned roofs, and Larson says a one-megawatt system (which equals 1,000 kilowatts) may be added soon to offset the energy demands of the planned desalination plant. "We see solar, especially in this climate and region," says Larson, "as one of the key resources that could meet the lion's share of energy needs for our community."

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