

Multidiscipline Team Installs Largest Private PV Array in Calif.

Developer gives abandoned site new life

by Heather Livingston
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Summary: California's largest private photovoltaic project has just been completed in Rohnert Park, a suburb of San Francisco, on the former Hewlett-Packard/Agilent Technologies campus. Dedicated on October 24, the 90,000-square-foot solar panel installation will generate 1.14 Megawatts and power the majority of the business center, which includes four large office buildings that are being renovated for reuse. The energy from the PV flat-mounted rooftop array is enough to completely power 750 homes during peak periods or 400 homes year-round.

About two years ago, Agilent decided to outsource its operations to Malaysia, putting the massive campus on the auction block. Codding Enterprises, one of the state's first commercial shopping center developers, purchased the 200-acre parcel to create a New Urbanist community. "We started out in the very beginning to design a New Urban mixed-use project, which is a very good foundation for sustainability," says Codding CEO Brad Baker of the company's decision to make the campus sustainable. "Because of the way that we're designing the streets and how the block size follows a New Urban platform, people don't have to get into their cars. They can walk to their work, the grocery store, and to recreation."

Sustainable campus

In addition to the PV array, Codding is working to make the entire campus



sustainable. Part of their strategy is to reuse and recycle as much of the existing buildings as possible, while still creating a fresh, urban live-work environment. Key services and public transit stops at Sonoma Mountain Village are planned within a half a mile of residences, and a proposed Sonoma Marin Train (SMART) station in nearby Cotati will make other regional transit systems easily accessible, reducing residents' vehicle dependence considerably. In addition, Codding is excited about the opportunity to "recycle" approximately 3,000 jobs that were lost when Agilent pulled out of the site.

According to Geof Syphers, Codding's chief sustainability officer, the entire project has applied to be in the pilot program for LEED® for neighborhood development. LEED-ND was developed by the U.S. Green Building Council in coordination with the Congress for New Urbanism and the Natural Resources Defense Council. The USGBC notes that unlike other LEED programs, LEED-ND "will emphasize smart growth aspects and neighborhood design of development while still incorporating a selection of the most important green building practices.

Guided by the Smart Growth Network's 10 principles of smart growth and the Charter for New Urbanism, it will include compact design, proximity to transit, mixed use, mixed housing type, and pedestrian- and bicycle-friendly design." USGBC plans to launch the pilot program in December, with the public comment period beginning in the spring of 2008 and ballot and launch in the fall of 2008.

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"We've been given some indication that we probably will be part of that pilot, so we'll be one of the first projects to certify through LEED for neighborhood design," says Syphers. "We have tried to think about this project in terms of four environmental concepts. The first is minimizing harm. That's the first step: to use the materials, water, and energy efficiently; recycling job-site waste; reduce greenhouse gas emissions, and so on.

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"The next concept is restoring what's here now. It's an industrial site and fortunately Hewlett-Packard and Agilent were pretty clean operators. We don't have any ground fuels out here, which is terrific, but there are a lot of asphalt parking lots and a lot of areas that have been plowed over that can be restored, so we're improving the quality of the soil and the local wetlands and waterways by improving cleanliness and reducing the total storm-water runoff.

"The third and fourth concepts are designing for a different future and creating a place for learning. In planning for the future, we recognized that people want to be healthier. They want to walk to do their errands. We're investigating whether we can put a bio-fuel filling station on site. We want to promote alternative fuels, and we also want to have extensive transit bicycle connections. The place-of-learning idea is important to us because we really want environmental indicators and researchers and consultants to be here, live here, and study this project. We want this to be a living case study of how to do things right. And whenever we make a misstep, we definitely

want to learn from that and do it right the next time."

Making it livable

Codding Enterprises wants Sonoma Mountain Village to be a vibrant, healthy, diverse community. To meet that goal, they are planning to build a wide range of home sizes and styles. There will be approximately 900 apartment and condominium units and 1,000 single-family homes that provide modern features with a strong focus on energy-saving designs. Says Syphers: "We're planning for apartments and lofts as small as 500-600 square feet all the way up to large single-family homes, with everything in between, including English Row Houses, live/work units, and duplexes. We're creating a very wide variety of housing so we can get a mix of incomes here."

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In planning for the new homes, Codding considered the benefits of building new schools on the site for residents, but decided that it was more appropriate to use the K-8 school already in place. Notes Syphers: "The school that's a block north of the site is in danger of being closed because enrollment is so low [due to the withdrawal of Agilent], so the idea of adding another school here, at least for the first 6 or 7 years, didn't make any sense because it wouldn't be able to sustain itself. We need to send the kids across the street and a block up to that school, so we're making special provisions to design pedestrian-friendly streets that will be safe for unsupervised kids to cross."

The draw of walkability and sustainability

A central tenet of New Urbanism and sustainable design is locating services, entertainment, and recreation within the community. Sonoma Mountain Village will have a Village Square that serves as a vibrant gathering place with plenty of opportunities for shopping, dining, and entertainment. Additional planned amenities include a civic center, more than 25 acres of parks, a dog park, an international all-weather soccer field, a wellness and fitness center, and miles of trails for bicycling or walking/jogging.

Sonoma Mountain Village hopes to draw a diverse group of companies to the business park, particularly ones in the areas of sustainable resources, medical devices, construction, agricultural technology, and financial services. Already in place is a small-business incubator, headed by a former Agilent vice president, that focuses on bringing sustainable-resources start-ups into the area. These businesses are planned to occupy more than 500,000 square feet of custom industrial and office space ranging



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from 10,000 to 250,000 square feet.

“There hasn’t been a lot of clean building here,” according to Baker. “But I think more and more people are interested in that, and we expect it to be a bigger demand driver going forward. We’ve found that some companies have come just because they’ve heard what we’re doing [with making the campus sustainable]. All of them seem to appreciate the effort.”

Reference:

SMV Project Team

- Developer: Coddling Enterprises, Inc.
- Landscaping Allen Land Design
- Civil Engineering and Habitat Consulting: Balance Hydrologics, Inc.
- Civil Engineers/Surveyors/Planners: BKF Engineers
- Civil Surveyor: arlenzoli and Associates
- Homes Architecture: Farrell, Faber & Associates
- Urban Planner: Fisher and Hall Urban Design
- Green Building Consultants: KEMA Green
- Commercial Architecture: MBH Architects, Inc.
- Lofts/Condominiums/Apartments Architecture: Wix Architecture.

