



COAST || HABITAT NEWS



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DANA/DICK WILLIAMS WAY GOES GREEN WITH SOLAR; VAUGHAN FAMILY MOVES IN; KITES AND SPIRITS SOAR



Habitat continues to point the way to the future. We were the first local development to have fire sprinkler systems. Now, thanks to PG&E and Mendocino Solar Service, we have installed solar systems as well. These panels will be sufficient to reverse the meter for most of the Partner's to zero and for others with larger families, to a nominal monthly amount. The panels will generate large amounts of electricity during the sunny months when power is most valuable which will offset winter overcast and evening usages at lower costs. Each family helped to install their own unit.

(See inside pages 2 &3 for details and photos.)



Dale and Angie Vaughan, like every other Habitat Partner, has waited and worked for a long time to earn the right to buy their new home. They were part of the first work crews when we broke ground on Dana in 2003 and have labored on five other homes before starting theirs. Habitat requires 500 hours of sweat equity labor before move-in; like most others, they passed that mark long before driving the first nail on their own home.

Overwhelmed by a blizzard of paperwork and new responsibilities at first, they quickly settled in and made lunch for the Martinez crew June 5th.



With beautiful blue skies and a brisk wind blowing off the ocean, Habitat's 10th Annual Kite Festival was the "place to be" on Saturday, June 7th. Hundreds of kite-fliers, mostly kids dragging their Moms & Dads along, got their faces painted by Starla & Diedre, ate good food from Silvers-At-The Wharf, topped off their meals with fine fare from Mendocino Cookie Company and Cowlicks Ice Cream and made their kites soar. The stiff wind was no problem for the dozens of small handmade kites, decorated by the kids on the site under the expert tutelage of Pat Dunbar and her fantastic crew of "kite helpers". (Con't on Insert)

The effort to place solar panels on Dana/Dick Williams Way was truly a public-private Partnership. PG&E committed resources to Habitat from 2007 forward. Fortunately Karalee Brown of PG&E advocated for us to extend the grant for the homes sold in 2006 so neighbors would not have radically different bills forever. Bruce Erickson and Maggie Watson of Mendocino Solar Service gave their time for free to chase a ton of paperwork, provided their employees at cost and got discounted materials. Habitat families and citizen volunteer crews pitched in. The result: 6 homes done with a 3 home grant! Photos and stories below and P. 3 from the various players.



Juan Gaeta works with MSS to put 102 DWW online



Salvador Hurtado with MSS setting the panels at 106 DWW



Jaye Fraser at 104 DWW with Laura of MSS laying out panels



Bruce Erickson, owner MSS setting an inverter
HFH GOES SOLAR by Bruce Erickson

Mendocino Solar Service recently installed 1.6 kilowatt solar electric systems, producing an annual average of between 175 and 200 kilowatt-hours per month on Habitat's Dana/DWW homes.

Each system is connected to the PG&E electrical grid. When the sun shines, the solar panels generate electricity that is used in the home. When excess power is produced, the meter runs backwards. This gives the homeowners a credit for use at night and on days when there is little sunlight, cutting homeowners bills by 50-70% depending on their usage. If the families want to, they can add additional panels in the future to eliminate their bills entirely.

Mendocino Solar Service designed the systems, completed rebate paperwork, ordered equipment and supplies, interfaced with PG&E, installed the systems with the help of the home owners and the Build Committee, coordinated with the local building department for inspections and educated homeowners about use and maintenance of their units.

PV systems currently sell for about \$8 to \$9 per "installed watt", or between \$13,500 and \$15,000 retail for the Habitat systems at 1690 watts. PG&E provided \$45,000 for 3 homes in an effort to place solar on all newly built Habitat homes in CA. In order to stretch this amount to cover the whole subdivision, Mendocino Solar provided most of its services pro-bono and the rest at cost, found a deal on the materials and filed rebates from the CA Solar Initiative (CSI,) bringing the total cost down to the point where PG&E's grant could cover all 6 homes at no cost to Habitat's donors or families.

HOW MODERN SOLAR SYSTEMS WORK

by Bruce Erickson

Solar electric, also known as “photo-voltaic”, or PV, systems, have become simple to install and seamless in performance, leading to the tremendous growth in installations. Unlike earlier battery-based systems, modern grid-tied systems have no storage component. The elements are few and simple, depending on the size of the system. They consist of: mounting rails (for roof-mounted arrays—the most common); the solar panels themselves; wire and conduit to run to the inverter (which is an electronic device that converts the direct current produced by the panels into regular household current) and a circuit breaker in the service panel.

Output from the inverter feeds the service panel, powering the home and selling the excess back through the electric meter to create a credit when excess power is produced. The homeowner will not notice the system’s existence apart from seeing lower electric bills. No batteries are needed since the home can buy PG&E power as needed at night and on cloudy days. This all happens automatically with no human intervention. The only maintenance is occasional hosing of dusty panels in the summer.

Rebates from the California Solar Initiative (CSI) average about 20% of the cost and are available to any homeowner or business in California (except in the territories of municipal utilities). In addition a 30% federal tax credit, capped at \$2000, is available to system buyers who pay for their own systems. Businesses can receive the full 30% credit, plus often accelerated depreciation. The tax credits are due to expire at the end of 2008, however, unless Congress extends them.

Homeowners can also switch to “time-of-use” metering, maximizing the financial payback of a PV system. Summer weekday afternoons (May to October, 1 pm to 7 pm) are Peak Time when electricity is priced much higher to discourage use during maximum demand. If a PV system is selling back through the meter at this time, PG&E, through “net-metering,” must credit at this high priced power as well. In the evening, when the home is buying power after the sun goes down, the rate is cheaper than normal. Since summer afternoons are when the PV system is producing at its greatest rate, the benefit is substantial. To maximize this benefit, time-of-use homes must use as little electricity as possible during peak time so as much as possible can be sold. In many cases, installing a solar electric system enables the homeowner to ‘zero out’ or have no bill at the end of a year.



Mark & Laura of MSS with Mauricio Delgado at 112 DWW
PG&E, HABITAT SHINE NEW LIGHT ON AFFORDABILITY
by Karalee Brown PG&E Charitable Contributions/ Solar Program Manager

Six families in Fort Bragg are already saving money on their utility bills with solar technology thanks to a \$45,000 grant from Pacific Gas & Electric Company. Last year, PG&E donated the full cost of the solar equipment and installation services for three homes, but thanks to the installation donation of Mendocino Solar Service, Habitat for Humanity Of The Mendocino Coast, Inc. was able to make the gift stretch to benefit all six families.

“We are pleased to partner with Pacific gas & Electric Company,” said Chuck Greenberg, HFH’s President. “This partnership allows Habitat to continue its efforts to be an environmentally friendly builder and make our homes more affordable for families. We already use passive solar, tight insulation and good design and high efficiency heating systems, but these panels will make a tremendous impact on our Partner’s budgets.”

These solar installations will each generate about 200kWh of clean, renewable energy from sunlight each month, saving the families approximately \$400 a year on energy costs. Greenberg noted that that was the equivalent of one month’s mortgage payment for the life of a Habitat loan. Each setup will also help avoid the release of more than 132,000 pounds of carbon dioxide to the atmosphere over its typical 30-year lifespan.

In 2007, PG&E formalized their partnership with Habitat for Humanity International to sponsor the full cost of solar arrays on each and every newly-built Habitat home. Since then, PG&E has donated more than \$2 million dollars to help build 128 solar homes throughout Northern and Central California as part of its Solar Habitat Program. HFH has been awarded another \$15,000 for 2008. “The Solar Habitat Program is another example of PG&E addressing the future of California’s energy needs,” said Ophelia Basgal, PG&E vice president of civic partnership and community initiatives. “In addition to lowering energy bills for these families, this program promotes energy literacy in underserved communities.”

There will be a dedication in Summer 2009 for all 7 homes when the completed project is signed off.



**FROM THE BOARDROOM
CHUCK GREENBERG,
PRESIDENT**

We have begun to frame up the home of Ignacio (Nacho) and Angelina Martinez which is the 10th and final home of the Dana/Dick Williams Way complex, begun in 2000 with another unrelated Martinez: Auscencio and Juana.

What a long and challenging road it has been to complete this nearly 1.5 million dollar project that included 12,000 volunteer hours, \$700,000 of Federal and private foundation money and

this community's astonishing and continuing generosity! And now we are at the threshold of another project on the same scale as we plan for McPherson St.

We applied for and unanimously received our special affordability incentive from City Council in June that makes the McPherson project feasible. We are proceeding with the Entitlement process at an October Planning Commission meeting towards a 2009 groundbreaking.

We have one more change in the Board membership to announce. Gayanne Alexander and her husband Scott got a wonderful job opportunity in Oregon with another family member and left to start their new life there in December. April Lopez-Cen will carry on her duties with Partnering and Events, assisted by Chet Anderson who remains on both committees.

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Want to help? Call 707-937-2418

or email chuckg@mcn.org

Check out our webpage www.habitatmendocino.org



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FUN IN THE SUN-WHAT IT WAS LIKE by Maggie Watson, co-owner of Mendocino Solar Service

When Habitat’s Chuck Greenberg first approached Bruce Erickson and myself about Mendocino Solar Service partnering with a potential PG&E program, there was no hesitation to the question of would we participate. It had long been a dream of mine to see solar panels on Habitat roofs, but previous explorations with Chuck could not be made cost effective. Everyone who has electric service pays a little part of their bills for the CSI (California Solar Initiative) program but the rebates only go to people who can afford to invest at least \$15,000 today for a future payback. MSS was happy to see that hard working low-income families, thanks to PG&E, were able to take advantage of the CSI program.

When we met with the families to tell them how solar worked, about the rebate program, and how they could be involved, every family was represented. This showed us the commitment of the families to the project. We saw them joking around and got a sense that there were some deep relationships formed out of this Habitat experience. We were pleased to see the spirit of the Habitat families working together and glad we could participate with them on another community building project. Bruce and I were inspired by Habitat’s philosophy. He said it is “a rare opportunity when people can receive something and it is not a hand out. They can put their time in, learning many skills that could serve them later on.”

When we worked with one family, they had their son, Jaey Fraser, help us on the roof. Laura Figoski (see photo P 2 & 3) of MSS, noted the excitement and skill of the young man. She enjoyed showing him how to put mounting rails on and discussed solar and other issues while working together on his home.

We love installing solar for people, whether it is a full on electric system that will handle all electric needs or a solar water pump, generating electricity from the sun inspires us. Installing systems for the Habitat families took this to another level. The staff, Bruce and I thank Habitat and its Partner families and volunteers Frank Richards, Bill Latham and Scott Anderson for the opportunity to serve our local community.

Blowing In The Wind!-kites, continued from page one

by Chet Anderson, excerpted from the Advocate News

Dozens of tourists saw dazzling kites soar from the comfort of hay bales provided by FB Feed & Pet. The kites flew to great recorded music by Danny Barca, Meridian Green, Holly Tannen and The Beach Boys. Free kites donated by The Village Toy Store were given to the smaller kids and others were sold to benefit Habitat.

The KiteFest happens each year because of the generous support of the Festival’s sponsors: Matson Building Materials, MacDonald Roofing, Mendocino Cookie Company and the Village Toy Store. It also takes a lot of volunteers: including the Jerry Dorsey set-up crew, the ticket-taking, food-serving, Kite-dealing Ron, Marisol, Kristi, Amanda, Autumn, Yadarra, Marie, Angie, Theresa, Ty, Irene, Liliana and Cecil. And finally, the Partner clean-up into WMI’s donated dumpster, leaving host Bill Patton’s land in pristine condition. The generosity of all the above, plus help from Café Vienna, Los Gallitos, Thanksgiving Coffee & Charlie Dimock, make the KiteFest a great event and puts a few dollars into Habitat’s mission of: Building Homes! Building Lives!





Habitat for Humanity



Authentic All You Can Eat

Mexican Dinner



Portuguese Hall

822 Stewart Street

Ft. Bragg

OCT 5, 2008

4 - 8 PM

Adults \$20 - 10 & under Free

Vegetarian Platters Available!

Tickets at the door

EAT IN OR TAKE OUT PLATTERS