

# GOING GREEN

**T**he Department of Cultural and Visitor Services is increasingly *Going Green*, teaming up with State and County agencies to reduce the environmental impact of our facilities, fairgrounds and programs and raising awareness about green products, technologies and issues. As Marin County's largest event venue with over 700,000 guests annually, we want to further the connection between our audiences and the County of Marin's mission to create a sustainable future.

## GOING SOLAR

Schott Solar ASE 330 photovoltaic panels – 770 total – have been placed on the roof of the Exhibit Hall, which will provide for about 40% of the Marin Center's annual kilowatt usage, equaling 950,000 kilowatts. The panels feed two, 100-kilowatt Xantrex inverters and the solar array size when complete is 205.6 kilowatts.

Thanks to the financing and funding from the California Construction Authority and leadership of the State of California Division of Fairs and Expositions, Marin will join the ranks



## SOLAR FACT SHEET

**Panel Manufacturer:** Schott Solar, Inc. of Rocklin, California

**Number of Panels:** 744 Schott Solar ASE 330 Photovoltaic Panels

**Inverters:** Panels feed two (2) 100 Kilowatt Xantrex inverters.

**Funding:** \$1.3 million. California Construction Authority secured a rebate from PG&E's Self-Generation Incentive Program. The balance of the project cost is financed with zero percent interest Clean Renewable Energy Bonds (authorized by the IRS as part of the Energy Policy Act of 2005).

**Solar Array Size When Complete:** 205.6 kW

### Annual Electricity Generation

**Expected:** 374,000 kWh/yr. (the average California home uses about 6,500 kWh/year)

### Average Annual Energy Use of Marin

**Center Complex:** 950,000 kWh/yr. (array will provide for about 40% of the Marin Center load).

### Annual Electricity Costs before the

**solar energy installation:** \$135,000 per yr.

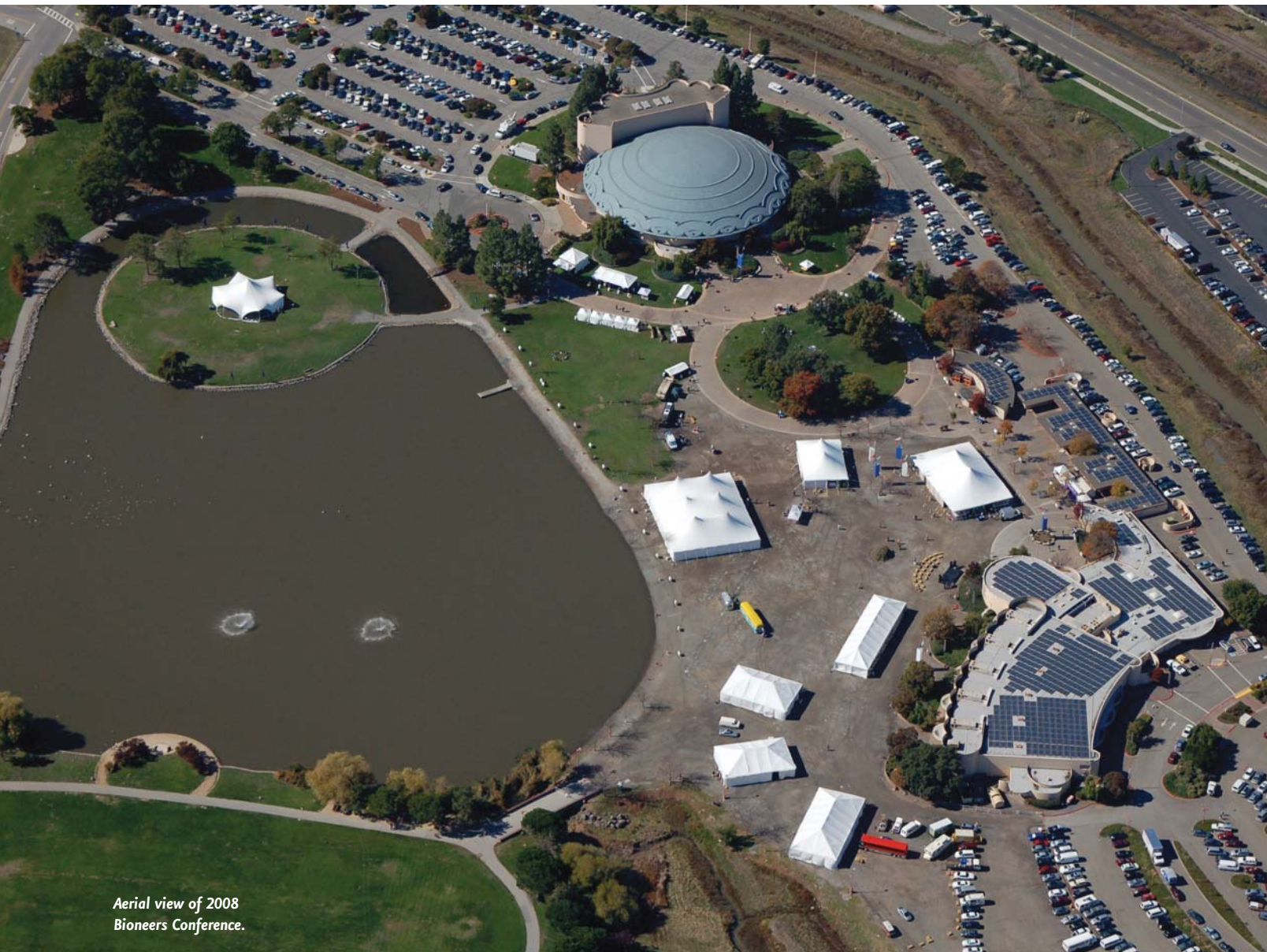
### Expected Annual Electricity Bill after the solar energy installation:

\$71,000 per yr. (savings of about \$64,000.)

**Project Supervisor:** Tom Baker, California Construction Authority

The SCHOTT Solar ASE 330 watt panels used on this system are the largest standard size module available. They are big, industrial, hardy modules - made especially for utility-scale installations such as Marin Center. Double glass construction means the ASE 330 has a Class A fire rating - the toughest fire rating from UL. A 20 year power warranty gives confidence that these modules will be providing power for decades to come.

SCHOTT Solar, a division of the worldwide technology company SCHOTT, is a worldwide leading supplier to the solar industry. SCHOTT Solar manufactures expert solutions in photovoltaics, thin-film, and the receivers used in Concentrated Solar Power (CSP) plants. Worldwide production is complimented by a 15MW PV manufacturing facility in Billerica, Mass as well as a sales office in Roseville, CA. The company's technological and economic expertise is closely linked with its social and ecological responsibility.



Aerial view of 2008 Bioneers Conference.

of over 25 fairgrounds statewide to install major photovoltaic projects. The California Construction Authority also secured financing and funding from the Clean Renewable Energy Board and P.G.&E and their Self-Generation Incentive Program. The project is funded with zero-percent interest Clean Renewable Energy Bonds.

**By producing 374,000-kilowatt hours from the sun, the Marin Center will prevent the emission of 203 tons of equivalent carbon dioxide, 26 tons of volatile organic compounds and 151 pounds of particulate matter.**

### E WASTE

The faster technology changes, the faster piles of cell phones, computers, printers, televisions and fax machines grow making their disposal a serious

problem. Since these items contain elements that are hazardous to our environment once they're dumped in landfills, responsible recycling is imperative. The department and the county of Marin's sustainability team took the lead in these efforts by hosting E-Waste weekends in celebration of Earth Day in April and in September in 2007.

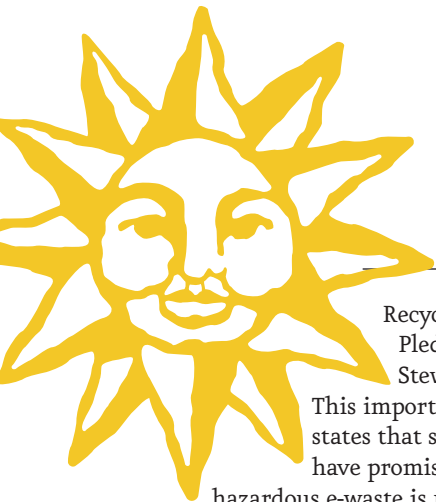
**Both events resulted in a record collection of SB20: 113,009 lbs. and e-waste: 134,697 lbs., for a grand total of 247, 706 lbs. recycled!**

Our next E-Waste weekend will be held on **Saturday, April 12 and Sunday, April 13**, from 8 a.m. to 3 p.m., and once again everyone is invited to bring their old electronics, computers, cell phones, etc. and have them properly recycled.

Partnering with Electronic

Recyclers, the largest e-waste recycler in California, the County is helping families and businesses eliminate electronic waste in an environmentally responsible manner. Since it's now illegal to throw away such items in household trash, combined with the constant turnover of new technological devices, the need to get rid of electronics safely continues to increase. Electronic Recyclers make this process easy by taking care of all the details and by using the most technologically advanced CRT crushing and monitoring system in California. Their machines shred hard drives to secure privacy and confidentiality of data, plus supply Certificates of Assured Destruction and even provide Video Verification of Destruction.

Electronic Recyclers also has taken the Basel Action Network's Electronics



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## Recyclers Pledge of True Stewardship.

This important pledge states that signatories have promised that all hazardous e-waste is 100% recycled, and will not be exported to developing countries or be sent to landfills or incinerators.

## ENERGY CONSERVATION

Thanks to a grant from the California Energy Commission, all of the lighting fixtures in the Exhibit Hall and Meeting Rooms were recently replaced with more energy-conserving fluorescent bulbs. This lighting retrofit will result in savings of nearly \$20,000 per year, while improving lighting levels and quality.

We are also near completion with replacing our 35-plus-year-old HVAC units with new equipment, resulting in an additional cost savings of about \$18,500 per year, while improving comfort and reliability. The cost savings will be greater than the payments on the low interest loan of \$426,000 that the County of Marin obtained from the California Energy Commission, meaning that the energy savings are paying for the capital improvement.

**All of this is particularly important with the passage of the State of California Assembly Bill 32 that mandates the reduction of greenhouse gases. These two projects are eliminating the emission of 122,000 pounds of CO<sub>2</sub> from the atmosphere annually, which is equal to the amount offset by about 16 acres of trees.**

## BACKSTAGE CATERING

For our backstage services for Marin Center Presents, we're putting into place plans to use recycled and unbleached paper products, including cups, plates and towels, as well as biodegradable cutlery, bowls and straws. Other green improvements

include eco to-go containers, natural soap products, and reusable shopping bags.

## BIONEERS®

We were very proud to host Bioneers in October. This inspiring, annual three-day conference is a forum for connecting the environment, health, social justice, and spirit within a broad progressive framework. Founded in 1990, Bioneers is a nonprofit organization that promotes practical environmental solutions and innovative social strategies for sustainable living.

The conference, organized by Kenny Ausubel and Nina Simons, is a gathering of scientific and social innovators who have demonstrated visionary and practical models for restoring the Earth and communities. Bioneers offers pragmatic solutions that honor the living web of the natural world as the most fertile source of inspiration and models. For more information visit [www.bioneers.org](http://www.bioneers.org).

## PRINTING - MARIN CENTER MAGAZINE

The magazine is now printed on post-consumer, recycled paper content of 30% and Forest Stewardship Council



paper content of 70%. We're also having our Marin Center Presents

postcards printed at PS Print on "tree-free" 100% recycled paper made with 50% post-consumer content, using soy-based inks and acid-free paper.

## MARIN CENTER ONLINE

Working with the Marin Info team from Sausalito, we are creating better content and navigation on our paperless portal – [www.marincenter.org](http://www.marincenter.org). Our goal is to provide more information for users of the Center and thus reduce mailings of facility information and drawings to users in the future.

## BECOMING A GREEN CAMPUS

We are working with the Community Development Agency Sustainability Team Business Coordinator, Dana Armanino, to join the County of Marin's Green Business Program and become certified in 2008. This program celebrates the pledge to:

- ✓ Comply with all applicable regulations and strive to exceed compliance.
- ✓ Conserve energy, water, materials and other resources.
- ✓ Develop and implement practices that prevent pollution and waste.
- ✓ Be an environmentally responsible business within our community.
- ✓ Strive for continuous improvement.

Our staff is working with the sustainability team to select and record measures and develop policies and programs that will help make the Marin Center and Marin County Fair healthy, vibrant and sustainable for many generations into the future.

For more information on County of Marin Sustainability Initiatives go to [www.marinsustainability.org](http://www.marinsustainability.org).

## 2008 MARIN COUNTY FAIR

We look forward to promoting what has become one of the most important issues of our time – sustainability – at the next Marin County Fair. From recycling cans and bottles to installing solar panels and driving hybrid vehicles, *Going Green* is an integral part of everyone's day-to-day living. At the 2008 Marin County Fair, to celebrate our theme of *Going Green*, we plan to present the latest in these exciting and evolving technologies. We will be working with state and county agencies to create educational and entertaining exhibits, contests, and programs to celebrate Marin County's environmental heritage and leadership.