

HELI GRAPHS

www.IllinoisSolar.org

Newsletter of the Illinois Solar Energy Association December 2005, Vol. 24, No. 4



World's Largest Laundromat Installs Largest Solar Thermal System in Illinois

In April 2002, a ceremony to dedicate a large solar hot water system at the World's Largest Laundromat in Berwyn, was a great success. On a beautiful, sunny spring day, hundreds of attendees, including State and local officials, 4 television stations as well as major and local press reporters, all learned first-hand, how solar energy can be used to heat thousands of gallons of hot water daily for laundromat customers.



Tragically, in August 2004, a natural gas leak, led to a fire that destroyed the Laundromat. Fortunately, no one was injured, and owner Tom Benson vowed to rebuild. Scheduled to reopen before the end of this year, the new facility is bigger, better and more energy efficient than the previous one. The new solar hot water system is 50% larger than the original, designed to produce over 2400 gallons of hot water daily. The new, 36 panel solar system is unique, utilizing a closed-loop gravity drain-back system that uses only water as its heat transfer fluid.

("World's Largest" continued, page 5)

State Cuts All Funding for Solar Rebate and Grant Program

On November 7, 2005, the Illinois Department of Commerce and Economic Opportunity (DCEO) announced that funding for the Renewable Energy Resources Program (RERP) would not be appropriated for fiscal year 2006 (FY 06).

In 1997, the State Legislature voted to create a Renewable Energy Trust fund to encourage the utilization of renewable energy and support economic development in Illinois. Funding for this ten-year incentive program comes from a tax collected from ratepayers of investor-owned utilities in Illinois.

Since 1999, about five million dollars each year has been collected to support the RERP. In Fiscal year 2005, some of these funds were diverted from a special trust fund to the general revenue fund to shore up a hole in the State budget. This current fiscal year (FY 06 began in July, 2005), no funds for the rebate and grant program were appropriated. In August, ISEA leaders were told that this funding oversight would be corrected at the Fall veto session. Unfortunately, this did not happen, as all funds collected from utility customers were diverted into the general revenue fund.

Hans Detweiler, DCEO Deputy Director of the Bureau of Energy and Recycling has told ISEA that he expects funding for the grant and rebate program to be restored for FY 07.

("Solar Funding Cut" continued, page 7)

Late Breaking News: Funding to be Restored (?)

Illinois DCEO spokesman, Justin DeJong, has announced that funding will likely be restored for the State's RERP. Late in November, Mr. DeJong contacted ISEA, in response to inquiries about the loss of funding for this year's (FY 06) Solar Grant and Rebate Incentive Program. This popular program, created by law in 1997, offers financial incentives to Illinois citizens, organizations, municipalities and businesses for investing in renewable energy. Funding for the program comes from a tax collected by Illinois utilities.

Earlier this month, ISEA learned that funding for the Renewable Energy Trust Fund was diverted into the State's general revenue fund. Attempts to restore program funding at the legislative Fall veto session were unsuccessful. ISEA leaders contacted State officials, as well as non-governmental organizations involved in energy and environmental issues, to express concern over loss of funding. Many pending solar projects were at risk, with clean energy jobs and energy dollars likely to leave the State.

In the State of the State Speech earlier this year, Gov. Blagojevich announced his commitment to a Renewable Energy Standard - a plan to supply 8% of Illinois' total energy from renewable sources by 2012 (from less than 1% today). *"Relying more on our homegrown energy sources will not only make our air cleaner to breathe, but will also provide consumers some relief from high gas prices, help make the energy grid more reliable and bring much-needed jobs and economic growth to our Illinois communities,"* Gov. Blagojevich said.

Chicago Solar Partnership Update - 11/21/05

Progress continues at the Chicago Solar Partnership (CSP). The Pipefitters Local 597 has recently joined the CSP. Local 597, representing over 6,000 members, offers a large training facility for solar thermal installers and long standing relationships with businesses who can invest the time and resources to develop solar thermal installation services as the solar industry grows in the State of Illinois. Together with the IBEW, the CSP will continue to work toward developing solar projects that will result in new jobs and economic development.

Another milestone was marked with the **Solar Means Security: How Safe is Your Community?** conference that was held at the Harold Washington Social Security Administration building in Chicago. The Chicago Solar Partnership, along with the US DOE Midwest Regional Office, City of Chicago, IBEW, ComED, Spire Solar Chicago, and the Illinois Solar Energy Association presented the first conference of its kind in the nation.

Attendees from five states, surrounding municipalities, the British Columbia and Chile came to learn how solar energy systems can be effectively integrated into emergency response planning.

A ribbon-cutting ceremony was held at the beginning of the conference to celebrate the 100kW solar installation on the Harold Washington Social Security Administration building. **Solar Energy Day (November 9, 2005)** in the State of Illinois was proclaimed by the office of Governor Rod Blagojevich in honor of the event.



(Cutting Ribbon, L-R: Cantrell, Dreyfuss, Quinn, Leyden, Johnston, Marquez)

James F. Martin Regional Commissioner, Social Security Administration welcomed Peter Dreyfuss, Director, US DOE Midwest Regional Office who reviewed the importance of solar energy in emergency operations, our nation's infrastructure support and energy surety. F. Daniel Cantrell, District Director for the Honorable Danny K. Davis, 7th Congressional District, championed the development of the solar industry as part of our nation's move toward energy independence. Lt. Governor Patrick Quinn also sounded strong support for the use of solar energy systems in emergency response operations and recognized the importance of the solar energy industry in creating jobs in the State of Illinois and benefiting the environment. Other participants included Sadhu Johnston, Commissioner, Department of Environment, City of Chicago, Fidel Marquez, VP External Affairs, ComEd, and Tom Leyden, Vice President, PowerLight.

Speakers from across the nation addressed topics including solar powering mission critical facilities and 911 centers, solar powered traffic and transportation controls and communications, solar thermal applications for emergency shelters, solar distributed generation and grid security and net metering and interconnection considerations. David Menicucci, Manager, Energy Surety Office, Sandia National Laboratories, Bill Kosik, Managing Principal, EYP Mission Critical Facilities, Mark Burger, President, ISEA and Sales Manager, Spire Corporation, Matthew Watson, Vice President Corporate Development, Carmanah Technologies, Inc., Valerie Rauluk, Principal, Venture Catalyst Inc., Russ Reed, Vice President Manufacturing and Business Development, Solargenix, Janice Miller, Project Manager, OEMC, City of Chicago, Rich Griswold, Midwest Sales Manager, Kyocera Solar Inc., Tom Leyden, Vice President, PowerLight Corporation, Jigar Shah, CEO, Sun Edison Inc., and Maryl Freestone, Senior Energy Engineer, ComEd all provided expert information. Gary Nowakowski, Team Lead, Technology, US DOE Midwest Regional Office, moderated the session and led the discussion.

Importantly, as a direct result of discussions at the conference, significant solar projects were identified for development in the State of Illinois. Interest was also expressed by attendees and speakers for developing solar energy emergency applications in other states and in the surrounding metropolitan area.

With much organization groundwork laid for the CSP as we close the year, we are looking forward to continuing success in 2006.

Kathy Quasey, Program Developer
Chicago Solar Partnership
www.chicagosolarpartnership.com

ISEA Winter Membership Meeting Saturday, 12/10, 10a-12pm

Come join the ISEA at the **Chicago Center for Green Technology (CCGT)** for our winter membership meeting, featuring:

- Katie McClain, Senior Policy Advisor for the Environment (from Lt. Gov. Pat Quinn's office) will join us to discuss the status of renewable energy in Illinois.
- ISEA '06 Board Nominations
- Member Raffle
- Tour of CCGT

For more information, contact:
Ted Lowe
info@illinoissolar.org
(630) 260-0424

**Chicago Center
for Green Technology
445 N. Sacramento Blvd.**



The CCGT is the 3rd building in the U.S. designed using the highest standards of green technology available - LEED's Platinum rating. It is the only one of the three that is a renovation of an existing building & accessible by public transit.

CCGT Directions and information:
www.cityofchicago.org/environment/greentech/sub/about.html

Benign Neglect, Big and Small

Letter from the ISEA President

This letter will be longer than usual and will eschew one of my favorite topics, sports. As the holiday season approaches, I find it my responsibility to issue an alarm and call for action regarding the future of significant renewable energy growth and economic activity in Illinois.

The next few years will determine whether Illinois will have a major share in the growth of solar energy and other small-scale renewable energy installations. In numerous states in the U.S. and many European and Asian countries, double-digit growth rates in renewable energy technologies are contributing to economic development and job creation opportunities. But in Illinois, the outlook is not good. From a promising start in the early part of the decade, policies and incentives supporting solar energy growth have ground to a halt. State grants and rebates have been whittled down to nothing. Funding from the Illinois Clean Energy Community Foundation has dwindled in the name of "cost effectiveness." And Governor Blagojevich's Sustainable Energy Plan has not addressed solar or any other small-scale renewable resource in a meaningful way. Illinois as a leading state in solar thermal and electric installations is becoming a myth.

It is very disturbing that funding designated for supporting renewable energy, especially small-scale systems, has been diverted to close the general revenue budget gap, leaving the Renewable Energy Trust Fund empty. While this may be considered worthwhile and legal, the fact is that the millions of dollars paid by ratepayers have not gone to their intended use to support renewable energy installations in Illinois.

Our state faces a budget deficit. But taking dollars earmarked for small-scale renewable energy to help balance the budget will cost revenue in the form of lost sales, payroll and income taxes from businesses and employees. Throughout Illinois people are struggling with higher energy prices. Natural gas,

petroleum and coal have all gone up in price, and the specter of higher electricity prices looms after 2006 with the end of the present state of regulation. The Renewable Energy Trust Fund needs to be put to its intended use - helping to fund installation of renewable energy systems that produce energy savings over the next 20-30 years or longer. In fact, the State of Illinois should lead by example and install renewable energy systems at its own facilities, thereby reducing its own energy expenditures. Large-scale renewable energy installations, like the wind farms at Mendota Hills and Crescent Ridge, are critical to Illinois' clean energy needs and economic growth. But small-scale renewable energy, solar thermal, photovoltaic and kilowatt-scale wind, also creates jobs, keeps dollars in Illinois instead of sending them out of state to pay for energy and will help create a more diverse and secure energy supply.

Illinois needs both significant amounts of large-scale and small-scale renewable energy installations for economic, environmental and energy security reasons. But the time is past for politeness and relying on assurances. On a personal basis, my employer, Spire Corporation, moved its photovoltaic panel manufacturing business back to Massachusetts, resulting in layoffs and only a small office remaining in Chicago. Larger operations like Solar Service, Inc. are also planning layoffs and smaller ones like Solar Gold in DuQuoin have ceased active operations.

Meantime, the solar and other small-scale renewable energy industries are growing elsewhere in the U.S., not just in California, but in the cloudy Northeast, where New Jersey is on the verge of becoming the number two market in solar electricity ahead of Arizona. One of many other northeastern states, Connecticut, one fourth of Illinois' population, is committing over \$9 million for solar alone in 2005-06 and is already attracting manufacturing businesses to set up operations. Even Oregon, of the cloudy Northwest, has more solar installations than Illinois, despite lower energy prices. Wisconsin Energy has instituted the first photovoltaic tariff by an investor owned utility in the U.S.

Michigan's development of serious green power policies may have been instrumental in the manufacturing growth of two major solar power companies, United Solar Ovonic and Hemlock Semiconductor, a solar cell manufacturer, adding hundreds of high-paying jobs.

While factories shut down in Chicago, Galesburg and Herrin, there should be no expectation that any of these businesses will be replaced by solar, small-scale wind or other renewable energy manufacturers or major service centers as long as Illinois confines support for these applications to rhetoric. Federal incentives will not be enough in the next two years; the states that leverage their resources will gain the advantage. Businesses around the world, when they decide on the U.S. for a site, are highly unlikely to locate in a state that does not have serious, meaningful policy or incentive support for their product.

Funding program decisions rest with the Governor's office and the budgetary process. Please take a moment to make your voice heard regarding the importance of supporting renewable energy. Contact:

Bradley Tusk, Deputy Governor
(312) 814-2121
Bradley_Tusk@gov.state.il.us

Tell him you want:

- Renewable energy funding cuts restored and a commitment from the State not to raid the funds again
- Renewable energy funding extended beyond 2007
- Illinois to make a long-term commitment to solar and renewable energy, preferably as part of the Governor's Sustainable Energy Plan
- Illinois to take the lead in installing solar and other renewable energy systems on its own buildings, thereby helping to save taxpayers millions

I hope your actions will help start the dialogue on what Illinois will do to enable a major portion of the state's energy, both large-scale and small-scale, to come from renewable sources.

Mark Burger, ISEA President

Indiana Energy Conference

The Indiana Energy Conference will feature film screenings, DVD presentations by various speakers, discussion, networking activities and opportunities to consider our culture's relationship with energy.



Saturdays, Jan. 7, 14, 21, 28
1 - 5 p.m.

The Vanity Theater
122 South Washington St
Crawfordsville, IN

The Conference is designed for people to explore our culture's relationship with energy. The purpose of gathering together is to discuss our experiences, share ideas, explore action, and build community. Admission is free.

For more information, registration directions, conference schedule:
www.indianaenergyconference.org

Frank Cicela, Indiana Energy Conference

Green Power Purchasing Up 1000% in Five Years

Renewable energy capacity in the United States supported by voluntary demand rather than regulatory requirements now tops 2,200 megawatts (MW) - up more than 1000% in just five years, according to a new report from the U.S. Department of Energy.

The report notes that purchases by large businesses, institutions and governmental entities are driving the growth of the U.S. voluntary green power market.

Green power currently accounts for about 2% of America's electricity supply, but voluntary purchasing of renewable energy is accelerating development of new renewable energy sources.

The report, from DOE's National Renewable Energy Laboratory (NREL), Green Power Marketing in the United States: A Status Report, shows that renewable generating capacity in the United States installed to meet voluntary green power purchasing soared from 167 MW in 2000 to more than 2,200 MW by the end of 2004.

While the number of residential customers buying green power has more than doubled over the past 5 years, green energy purchases by large businesses and other U.S. organizations have increased dramatically. This is further illustrated by new data released by the U.S. Environmental Protection Agency's Green Power Partnership. The partnership, a voluntary program that encourages large organizations to switch to green power for a specified minimum portion of their annual electric usage, has grown from 21 founding partners in 2001 to over 600 partners, including Fortune 500 companies, universities, trade associations, and local, state, and federal government agencies.

These green power partners are collectively purchasing over 3.1 billion kilowatt hours of green power annually, a figure which has doubled over the past 15 months. This represents a growth of 1000% since the partnership began in 2001, with founding partners purchasing 3.1 million kilowatt hours annually. Three billion kilowatt hours is enough electricity to power about 300,000 average American homes for a year, and is roughly equivalent to the annual output of a 1000 megawatt wind farm.

"Five years ago, the voluntary green power market was focused primarily on residential purchasers, and there were only a handful of significant non-residential purchasers," said Douglas L. Faulkner, acting assistant secretary for Energy Efficiency and Renewable Energy at the U.S. Department of Energy. "The entry of commercial, industrial, and government purchasers into the renewable energy market has resulted in tremendous growth in the development of clean and limitless renewable energy resources."

"Leading retailers, universities, manufacturers and federal agencies are demonstrating outstanding

environmental leadership by choosing to purchase clean, renewable energy sources for their electricity," said Kathleen Hogan, director of EPA's Climate Protection Partnerships Division.

The new report also notes that over the past five years, average renewable energy price premiums for utility programs have declined at an annual average rate of 8% as wind-generated power becomes increasingly competitive against natural gas-fueled generation. In Colorado and in Texas, escalating natural gas prices have pushed electricity rates for regular utility customers higher than rates being paid by customers subscribing to green power options.

SOURCE:
Clean Edge News
www.cleandedge.com

Notice of 2006 ISEA Board of Directors Nominations and Elections

Nominations for expiring ISEA Board of Directors' positions are being accepted by mail, email, or in person at our Winter Membership meeting.

All current, full ISEA members, of at least one year, are eligible. Self nominations are welcomed. (At the end of December, ballots will be made available to ISEA members; they will be due within 2 weeks of their delivery.)

Please indicate "Nominations" on the outside of your envelope, or in your email subject line - and send to:

Illinois Solar Energy Association (ISEA)
P.O. Box 634, Wheaton, IL 60189-0634
info@illinoisolar.org

Quotable:

"Imagine pushing your car for 20 miles. You can use rope and pulleys, but no motors, no electricity. That's the hard work that we pay \$3 a gallon for."

Richard Heinberg
Author of: *Powerdown: Options and Actions for a Post-Carbon World*

Solar Array Dedicated at Chicago Social Security Administration

CHICAGO, IL - Department of Energy (DOE) and Social Security Administration (SSA) officials today dedicated the new solar array atop SSA's downtown Chicago office building at 600 West Madison. SSA contracted with ComEd to complete downtown Chicago's largest federal solar energy installation, and one of the largest solar electric systems in the Midwest.



Since September, this solar array has been powering the SSA building by generating 100kW of clean reliable electricity -- the equivalent energy to power more than 100 homes during the day.

"This solar power system is a great example of using renewable energy to carry out a vital government function," said Lt. Governor Pat Quinn. "We need to encourage everyone to invest in clean energy to save money and help the environment."

"The Social Security Administration is proud to be a leader in the country's movement toward green energy use. We are committed to energy efficient building design, construction and operation," said James F. Martin, Regional Commissioner for SSA in Region V. "This project is helping our valued customer, the Social Security Administration, achieve important renewable energy and energy efficiency goals," said Frank Jiruska, ComEd's Vice President of Customer and Marketing Services.

"This SSA solar project is one of many examples where ComEd is delivering on its environmental commitments and, in

doing so, helping Chicago become one of the nation's leading green cities."

"This solar photovoltaic array delivers significant environmental savings for the SSA, enhances air quality in Chicago -- and contributes to resource conservation nationwide," said PowerLight vice president Tom Leyden. According to U.S. Environmental Protection Agency calculations, the solar panels atop SSA's building will displace more than four million pounds of greenhouse gas such as CO₂ over its 30-year design life. This is equivalent to the CO₂ absorbed by 20 acres of trees.

The system also will save the equivalent of almost 6,000 barrels of oil. ComEd, in conjunction with PowerLight Corporation, one of the nation's leading solar firms is providing technical and environmental expertise to cover 7,920 square feet of roof space on SSA's building with photovoltaic (PV) modules, comprised of Sanyo HIT cells. These PV modules convert 18.5 percent of the solar energy captured into electrical energy -- among the most efficient PV cells in mass production.

ComEd and PowerLight also are using a specially designed PV tile system that offers roof shading and protection from ultraviolet rays, and thermal energy savings in winter. Today's solar electric system dedication kicked off a one day meeting sponsored by the DOE's Million Solar Roofs Initiative and the Chicago Solar Partnership entitled "Solar Means Security - How Safe is Your Community?"

The conference addresses the role of solar energy installations in powering emergency management and response operations, and will be attended by hundreds of mayors and municipal leaders from the Chicago metropolitan area. For many years, ComEd has partnered with government, civic, and educational institutions to install nearly two megawatts of solar power in Chicago, distinguishing itself among all cities outside the Sun Belt.

As part of ComEd's ongoing partnership with the City of Chicago, Chicago Public Schools (CPS) facilities are being developed to meet Leadership in Energy and Environmental Design (LEED)

requirements for green certification. ComEd is currently commissioning four new CPS schools to achieve LEED certification, and is also helping CPS reduce energy consumption by installing new building energy management systems.

SOURCE:
Solar Buzz
www.solarbuzz.com

"World's Largest" (from page 1)

Designed and installed by Solar Service of Niles, all 36 solar panels and piping are pitched to drain, allowing water instead of anti-freeze to be used to collect the solar heat. Even on a freezing January day, the solar panels can reach temperatures over 200 degrees. By using gravity to drain the fluid from the panels whenever the system is satisfied, the water in the panels will never freeze. Using water increases performance and simplifies operation. Solar Service guarantees freeze protection forever.



Mr. Benson plans to dedicate his new solar-powered Laundromat on Earth Day, in April 2006.

SOURCE:
Deny Reynolds, Solar Service Inc.
www.solarserviceinc.com

Solar Chicago

Spire Solar Chicago's *Bethel New Life Commercial Center's* building-integrated photovoltaic (BIPV) system was featured in the November-December 2005 issue of eco-structure magazine.

Also, the Claretian Associates' South Chicago development, the first multi-house development to feature photovoltaic installations in the Midwest, recently won an award from the Home Depot Foundation.

Touch of Green Added to Building Materials

Greenmaker targets those careful about what's in their homes

The EcoTimber, Marmoleum and Neil Kelly brands displayed at Greenmaker building-supply company in Chicago may not ring a bell with the general public, but for a growing number of homeowners the brands are a welcome alternative.

The labels appeal to environmentally concerned or chemically sensitive consumers who are as careful with what goes into their homes as they are about what goes into their bodies.

"Greenmaker saved me from driving to Fairfield, Iowa," said Greg Walker of Chicago. He and his wife, Terri, were willing to travel that far to find non-toxic paint and other supplies to redecorate a room before the recent birth of their first child.

While shopping at Greenmaker, Chicago bar owner Rob McLennan and his wife found carpeting for their home that can be installed in squares with double-sided tape.

"There is no glue involved, and it's made of recycled materials," said McLennan.

Though still a niche segment in the building-supply industry, green building materials are growing in sales as consumers, businesses and governments search for ways to preserve natural resources.

Greenmaker, the brainchild of childhood friends Ori Sivan and Joe Silver, is aimed at those buyers. The duo, both 29, are working in space rented from Remodelers Supply, a North Pulaski Avenue fixture. The home-improvement center is a division of Logan Square Building Material Supply Inc., which operates five Chicago-area locations, including Studio 41 in Lincolnwood and Highland Park. Logan Square was founded by Silver's grandfather.

The idea for a green building-supply company evolved after Sivan tried to buy non-toxic, low-odor paints for his home in December. He found what he wanted at a traditional home-

improvement retailer, but a salesperson tried to persuade him to go with other brands, claiming the eco-friendly paint was poor quality.

Sivan, who has a master's degree in environmental engineering, discussed his business concept with Silver, who had worked in his family's construction supply business for 15 years and was the company's top salesman.

Silver was skeptical at first but did some research. He resigned from the family firm to join Sivan, convinced that the green building industry is at the same point as the organic food industry was when Whole Foods and other companies decided to amass a multitude of organic foods in a one-stop shopping environment.

The 2,000-square-foot Greenmaker showroom offers product lines from 25 companies. Among the items sold are non-toxic caulks, sealants and stains as well as two brands of water-based latex paint, low-flow bathroom fixtures, solar and tankless water heaters, wheatboard veneer cabinets, cork and reclaimed flooring, insulation, drywall, lumber, permeable pavers, energy-efficient windows, eco-friendly carpeting and modular green roofs.

The pricing in most cases is competitive with other retailers, though there is a 5 percent to 25 percent premium for some eco-products because there is "a lack of economies of scale," Silver said.

"As volume of production of eco-friendly products goes up ... the relative price difference can be expected to drop," he said. "We're not getting stuff nobody's ever heard of. We're just putting it together in one place."

Although the Greenmaker retail space opened Oct. 1, the owners have been in business for several months, thanks to orders from the company's Web site, links to manufacturers' Web sites, referrals from officials at Chicago's Center for Green Technology and word of mouth among those in the local environmental community. Last week, Greenmaker received a city contract for residential weatherization kits.

Environmentally friendly buildings are part of a growing trend among municipal and state governments in the drive to cut long-range costs and improve quality of life.

Mayor Richard Daley issued an executive order in 2004 that all new public buildings in Chicago are to be built using green principles. The city has a green projects administrator at the Department of Planning and Development and developed a green building standard.

The private sector is moving in the same direction. Nationally, most commercial buildings built within the next seven to 15 years will meet a green code, according to estimates. This year, the National Association of Home Builders released a 200-page voluntary model green home-building guide for its members.

The growing government and private interest is spawning a crop of independent retail home suppliers, said Mark Piepkorn, associate editor for the Vermont-based monthly newsletter Environmental Building News.

"No one has a listing of the retail centers, but they are popping up across the country," he said.

Long-established operations include Truitt & White, Berkeley, Calif.; Planetary Solutions, Boulder, Colo.; and Green Building Supply, Fairfield, Iowa. The greatest concentration of outlets is in Colorado, California and Washington, states where protecting the environment has been a hot-button issue for years, said Piepkorn.

Many green merchants are online, but there has been an upswing in bricks-and-mortar operations.

While large architecture firms and major construction companies may have the staff to research which wallboard is green, smaller operations and consumers may not.

But, Sivan said, "We've done the research. That's the value-added we've provided."

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"It's a completely different world" in green products than five years ago, said William Worn, a principal at Chicago's Worn Jerabek Architects. "The real problem today is sorting through the green wash," which he defines as producers who market products as green when they're not.

Worn urges consumers to do their homework on green technologies because there are many claims and few standards.

Many of the products are becoming more mainstream and are on the shelves of big-box home improvement stores, but they are not labeled, Worn said.

"You have to know what you are looking for," he said.

"The niche businesses tend to show materials and product that is more cutting edge, the next tier of innovation," said Nathan Engstrom, director of Green Built Home, a voluntary program of the Wisconsin Environmental Initiative in partnership with the Madison Area Builders Association.

Green building materials appeal to Chris Parkinson, owner of Whitney Woodworks in Chicago, who buys bamboo plywood and wheatboard--a plywoodlike, formaldehyde-free material made from wheat straw--from Greenmaker. She prefers these alternatives to traditional plywood because they are good for the environment and people, she said.

"I specialize in eco-friendly shelving and cabinetry. Right now, [Greenmaker is] the only place in town where I can buy those materials," Parkinson said. The next nearest retailer is in Wisconsin, she said.

"You notice [the difference] in the dust," she said. "When working with wheatboard, it smells like food, but when you work with plywood, you can almost feel it in your lungs."

SOURCE:
Sharon Stangenes, Tribune staff reporter
www.chicagotribune.com

ISEA Event Reviews:

Fall Membership Meeting, DuSable Museum (Chicago, IL)

The October Member Meeting was held at the Chicago DuSable Museum of African American History. Antoinette Wright, President and CEO of the Museum, welcomed us and handed off the meeting to Mark Burger, ISEA President, who shared information on DuSable's solar installation.

The DuSable Museum's PV system has a capacity of 21.6 kilowatts, which will be supplemented next year with the installation of PV awnings totaling another 10.8 kilowatts. The Museum is Chicago's only major independent institution established to preserve and interpret the historical experiences and achievements of African-Americans. This is Spire Solar Chicago's sixth PV system to be installed on a Chicago museum through the City's Solar Museums project.

Mike Johnson, Project Coordinator for the City of Chicago's Department of the Environment, summarized the city's efforts and accomplishments in the area of solar installations and renewable energy. (Mike stood in at the last minute for Russ Reed of Solargenix, who had to travel to Italy on business at the last minute. We appreciate Mike's informative and thorough report on such short notice.)

Brandon Leavitt, Founder and President of Solar Service, Inc., gave a comprehensive overview of federal tax credits for solar installations, and shared the news on Illinois solar tax credits (see the President's letter in this issue of Heliographs).

Members and guests then lingered to network and share information.

Carol Gulyus, ISEA Events

Kane County Energy Futures Conference (Elgin, IL)

The conference focused on Kane County's newly released Energy Plan, the culmination of a project to plan for the region's energy future. Participants included more than 50 concerned citizens, government officials and planners, utility representatives, and members of local community and environmental organizations.

Jim Camasto, ISEA Editor

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He hopes to have new grant guidelines in place in March or April of next year, with funding available in July, 2006. Under current rules, the State offers 50% grants up to \$400,000 per solar project.

Bryan Clow, DCEO rebate program administrator, is telling prospective solar system purchasers, that they can submit their rebate paperwork to his office, where upon funding approval they will be paid in order of receipt. Some rebate requests from early in 2005, are still awaiting payment. Under current rebate rules, the State offers up to \$10,000 to Illinois homeowners and businesses who invest in renewable energy.

Brandon Leavitt, ISEA Director

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Membership information, updated information, and assistance in locating other resources can be obtained on the ISEA website: www.illinoissolar.org

Comments & questions directed to:

Illinois Solar Energy Association (ISEA)
P.O. Box 634, Wheaton, IL 60189-0634
info@illinoissolar.org

(630) 260-0424

ISEA PREMIER BUSINESS MEMBERS

This listing is provided as a Premier Business Member benefit and does not imply endorsement by ISEA. However, ISEA thanks these businesses for supporting our common goals of promoting renewable energy technologies & energy education.



SOLAR SERVICE INC.
Renewable Energy Specialists Since 1977

A Solar Thermal System delivers more energy for every dollar spent AND pays for itself many times over.

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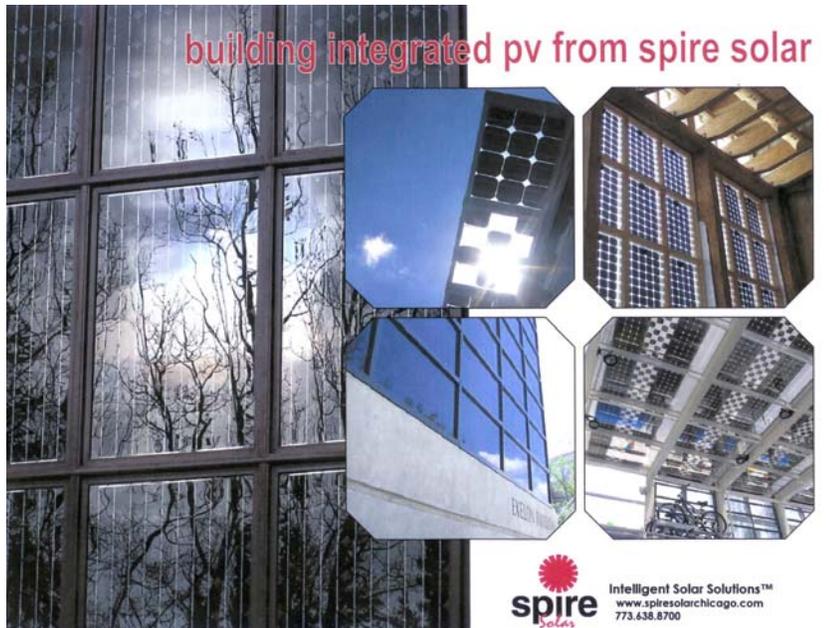
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ISEA BUSINESS MEMBERS

This listing is provided as a Business Member benefit and does not imply endorsement by ISEA. However, ISEA thanks these businesses for supporting our common goals of promoting renewable energy technologies and energy education.

<p>Advanced Geothermal Plumbing and Heating, LLC Dirk Dypold, Manager Elgin, Illinois Phone: 847 695-1657 Email: geodd@sbcglobal.net Web: http://www.advancedgeothermal.com</p>	<p>Howard Alan Architects 849 Armitage Ave. Chicago, IL 60614 Phone: 773-929-2121 Fax: 773-929-2122 Email: halan@xsite.net Web: www.howardalanarchitects.com</p>	<p>American Renewable Energy David Dwyer, President 805 Greenwood St Evanston, IL 60201 Phone: 847-424-0288, 800-454-1461 Fax: 847-424-0289 Email: david@americanrenewable.com Web: www.americanrenewable.com</p>
<p>AMV General Contractors Tom Mulcrone 13430 Glen Entrance Homer Glen, IL 60491 Phone: 815-462-7372 Email: tom@amvcontractors.com Web: www.amvcontractors.com</p>	<p>Baldwin Properties John Porter 6134 W Roosevelt Rd. Oak Park, IL, 60304 Phone: 708-383-1888 Email: j.porter@comcast.net</p>	<p>Becker Renewable Energy Bil Becker Renewable Energy Engineer 2155 Wolpers Road Park Forest, IL 60466 Phone: 262-642-4707 Fax: 708-481-6178 Email: bilbecker@bigplanet.com</p>
<p>Bergey Windpower Co., Inc. 2001 Priestley Ave. Norman, OK 73069 Phone: 405-364-4212 Email: mbergey@bergey.com Web: www.bergey.com</p>	<p>Chicago Dept. of Environment Sadhu Johnston, Commissioner 30 North LaSalle Street, Suite 2500 Chicago, IL 60602 Phone: 312-744-7606 Fax: 312-744-6451 Email: environment@cityofchicago.org Web: www.cityofchicago.org/environment</p>	<p>EcoLogical Products, Inc. Glenn Hunter, President and Sales Mngr 739 N Elmwood Oak Park, IL 60302 Phone: 708-445-0341 Fax: 708-445-1112 Email: info@ecopro.biz Web: www.ecopro.biz</p>
<p>Facilities Research Nancy Hamill Governale North Barrington, IL 60010 847-712-6251 Email: hamill@jit.edu</p>	<p>Habi-tek Tom DeBates 524 Summit St Geneva, IL, 60134 Phone: 630-262-8193 Email: habitek83@yahoo.com</p>	<p>HarleyEllis Architecture, Design & Planning Susan F. King, AIA Associate 401 West Superior St. Chicago, IL 60610 Phone: 312-951-8863 Fax: 312-951-1719 Email: sking@environ-inc.com Web: www.environ-inc.com</p>
<p>Harmony Home Inspectors, Inc. PO Box 31 Huntley, IL 60142 Phone: 847-340-0402 Fax: 773-326-0773 Email: sales@inspect-il.com Web: www.inspect-il.com</p>	<p>Home Patron, Inc. 7311 W Diversey Ave Elmwood Park, IL 60707 Phone: 708-452-7258 Fax: 708-452-3126 Email: info@homepatron.com Web: www.homepatron.com</p>	<p>IBEW/NECA Technical Institute Kevin Lynch Electrical Program Coordinator 6201 W. 115TH Street Alsip, IL 60803 Phone: 708-389-1340 Fax: 708-389-2840 Email: klynch@in-techonline.org Web: www.in-techonline.org</p>
<p>Illinois Clean Energy Community Foundation Ed Miller, Program Director 2 North LaSalle Street, Suite 950 Chicago, IL 60602 Phone: 312-372-5191 Fax: 312-372-5190 Web: www.illinoiscleanenergy.org</p>	<p>Illinois Dept. of Commerce and Economic Opportunity Bryan Clow, Program Manager 620 E. Adams St., Springfield, IL 62701 Phone: 217-785-3420 Email: bclow@ildceo.net Web: www.illinoisbiz.biz/dceo/Bureaus/Energy_Recycling/Energy/Clean+Energy/rerp_program.htm</p>	<p>Illinois Solar Products, Inc. Ernie Nathan 1920 Northland Ave Highland Park, IL 60035 Phone: 847-612-2789 Email: ernie@illinoisolarproducts.com Web: www.illinoisolarproducts.com</p>

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<p>Image Plus Ron Burzynski 412 Ogden Ave Downers Grove, IL 60515 Phone: 630-852-4920 Fax: 630-852-6088</p>	<p>Marshall, Gerstein & Borun LLP Lisa Glancy, Marketing Director 233 S Wacker Dr. 6300 Sears Tower Chicago, IL 60606-6357 Phone: 312-474-6300 Fax: 312-474-0448 Web: www.marshallip.com</p>	<p>City of Naperville Municipal Electric Utility Allan L. Poole, Director 400 South Eagle St. Naperville, IL 60566 Phone: 630-420-6131 Fax: 630-420-6744 Email: poolea@naperville.il.us Web: www.naperville.il.us</p>
<p>Nekolux Vladimir Nekola 1433 W. Chicago Ave. Chicago, IL 60622 Phone & Fax: 312-738-3776 Email: Vladimir@nekolux.com Web: www.nekolux.com</p>	<p>OCULUS Architecture P.C. Paul E. Sterner, AIA 9525 South 79th Avenue Hickory Hills, IL 60457 Phone: 708-598-4255 Fax: 708-599-6440 Email: oculusdesign@att.net Web: www.oculusarchitecture.com</p>	<p>RLD Resources, LLC Kelly Shelton 333 North Michigan Ave Suite 2800 Chicago, IL 60601 Phone: 312-795-0798 Fax: 800-282-6415 Web/Email: www.rldresources.com</p>
<p>S.N. Peck, Builder, Inc. Neil Peck, President 1647 W. Fulton St. Chicago, IL 60612 Phone: 312-738-2600 Email: npeck@snpeck.com</p>	<p>Solargenix Energy LLC Joanna Rybus, Chicago Office Manager 3622 S Morgan St Chicago, IL 60609 Phone: 773-847-8333 Fax: 773-847-8555 Email: jrybus@solargenix.com Web: www.solargenix.com</p>	<p>Solar Gold Mary Eileen O'Keefe 1362 N State Pkwy Chicago, IL, 60610-6104 Phone: 312-482-9701 Fax: 312-482-9703 Email: maryeileenokeefe@aol.com Web: www.solar-gold.com</p>
<p>Solar Service, Inc. Brandon Leavitt 7312 N Milwaukee Ave Niles, IL 60714 Phone: 847-677-0950 Fax: 847-647-9360 Email: bl@solarserviceinc.com Web: www.solarserviceinc.com</p>	<p>Spire Solar Chicago Mark Burger, Sales Manager 629 W Cermak Rd, Unit 305 Chicago, IL 60616 Phone: 312-492-1370, x222 Fax: 312-492-137 Email: mburger@spirecorp.com Web: www.spiresolar.com</p>	<p>Michael Stavy, Consulting Energy Economist 432 N Clark St, Suite 204 Chicago, IL 60610 Phone: 312-832-1631 Fax: 312-832-1632 Email: michael@michaelstavy.com Web: www.michaelstavy.com</p>
<p>Sun Ovens International Inc. Paul Munsen, President 39W835 Midan Drive Elburn, IL 60119 Phone: 800-408-7919 Fax: 630-208-7386 Email: sunovens@execpc.com Web: www.sunoven.com</p>	<p>SunWize Technologies, LLC Mark W. Wilkerson VP Business Development #1 Sun Street, Stelle, IL 60919 Phone: 815-256-2274 or 1-800-683-4837 x-22 Fax: 815-256-2221 Email: mwwwpv@stelle.net Web: www.sunwize.com</p>	<p>Wynne D. City Power, Inc. Robin Schulemann Director of Product Development 2035 S Racine Ave, Chicago, IL 60608 Phone: 312-243-6414 Fax: 312-243-6781 Email: robins@windycitypower.com Web: www.windycitypower.com</p>

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ISEA CHARTER BUSINESS MEMBER SOLARGENIX

WINSTON SERIES COLLECTOR SELECTED TOP-10 PRODUCT



The Winston Series Compound Parabolic Collector (CPC) solar thermal collector, manufactured by

Solargenix Energy, LLC has been selected as one of the BuildingGreen Top-10 products (2004). This annual award recognizes the most innovative and exciting green building products added to the GreenSpec® Directory during the past year.

This year's BuildingGreen Top-10 covers a wide spectrum of products and applications. Some are used primarily in commercial buildings, others in houses. Some are considered green because they utilize renewable energy, others because they avoid toxic chemicals or are made from recycled or independently certified green materials, and others because they save energy or water.

A big driver in the development of green products is the U.S. Green Building Council's LEED® Rating System (Leadership in Energy and Environmental Design), which awards points for certain product characteristics or the energy or water savings they can achieve. Designers of LEED buildings are looking for green products, and manufacturers are responding, said Wilson.

The Winston Series CPC solar thermal collector is the most advanced solar thermal product on the market. Manufactured at the Solargenix facility in Chicago, the collector is used for solar water heating, space heating, industrial process heat and solar cooling projects. The advanced science that allows the parabolic collector to be designed as a building integrated flat plate collector is the patented non-imaging optics developed at the University of Chicago by Dr. Roland Winston who

now is on staff at the University of California at Merced.

The Winston Series CPC collector is the only solar collector used in the Solargenix water heating product line of active and passive solar heating systems. The aesthetical design, integrated mounting systems and quality materials gives builders and designers flexibility in use and installation of the solar collector array.

GreenSpec is the leading national directory of green building products. The 1,800-plus products included in the directory are selected by editors of Environmental Building News (EBN) based on criteria developed over the past 13 years. Environmental Building News, founded in 1992, is the oldest and most widely respected publication in the green building field.

SOURCE:
BuildingGreen
www.BuildingGreen.com
800-861-0954

\$4 Million Development Fund to Promote Wind Energy Projects Across Illinois

On November 7, 2005, Governor Rod R. Blagojevich announced the launch of the \$4 million Renewable Energy Development (RED) Fund that will support community-scale wind energy projects throughout Illinois. The Illinois Finance Authority (IFA) will work with community banks to provide loans and loan guarantees to qualified farmers and farmer co-operatives who construct wind turbines for use as alternative energy.

The Illinois Clean Energy Foundation (ICECF) and the IFA worked together to develop the RED Fund to support a primary mission of both organizations: to encourage and support development of renewable resources. With the Foundation providing the financial resources, the IFA will use its financing expertise and community banking relationships to help Illinois farming operations obtain capital for wind-to-energy projects.

For additional information:
www.il-fa.com (800) 717-6066
www.illinoiscleanenergy.org

SOURCE:
Deny Reynolds, Solar Service Inc.
www.solarserviceinc.com



Katrina Evacuees Move in to Solar Home in Oak Park

Seguin Services of Cicero, a social service organization providing employment and training programs for adults and children with disabilities, owns 62 houses in 20 west suburban Cook County communities where over 200 adults with disabilities live in small, family-like settings with two-to-eight adults each. With financial support from the Illinois Clean Energy Community Foundation and a grant from the Illinois Renewable Energy Resources Fund, Seguin Services contracted with Solar Service of Niles, to install solar thermal hot water systems on twelve of their homes as well as a car center that washes, repairs and sells donated vehicles at a facility at Central and 31st Street in Cicero.

In addition to solar hot water, 6 of the homes and the car wash will also use solar thermal energy to provide space heating needs in partnership with the existing forced-air heating system. One of the first homes completed, in Oak Park, was vacant. Seguin Services reached out to Illinois-bound Katrina evacuees, and offered them use of the home.

Upon project completion, the thirteen sites will utilize over 2000 square feet of solar panels and collectively generate over 3500 gallons of hot water a day. Seguin Services expects to save thousands of dollars annually on energy costs, allowing them to conserve resources while continuing to provide support to more than 500 clients with special needs.

SOURCE: Deny Reynolds, Solar Service Inc.

UPCOMING EVENTS

December 10 <i>Saturday, 10am - 12pm</i>	ISEA Winter Membership Meeting <i>Chicago Center for Green Technology Chicago, IL</i>	<i>See Pages 2, 4</i>
January 7, 14, 21, 28 <i>Saturdays, 1 - 5pm</i>	Indiana Energy Conference <i>The Vanity Theater Crawfordsville, IN</i>	<i>See Page 4</i>

J.M. Reynolds Oil Co. became the first retail distributor in Wabash County to offer both B2 biodiesel and E85 ethanol.
(President Jim Reynolds (left) and Mike Sumpterstand)



Illinois Solar Energy Association
P. O. Box 634
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