



Solar Education and Technology Acceptance

Heliographs

www.IllinoisSolar.org

"In most areas of the world the majority of people still do not have access to electricity in their homes."

National Geographic, *The Energy Issue*, spring 2009

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Newsletter of the Illinois Solar Energy Association

20 April 09 Vol. 28 No. 2

Illinois Steps Up for Solar

ISEA SECURES 2-YEAR \$40,000 DCEO GRANT TO SUPPORT, EXPAND PROGRAMMING

By Mike Johnson

The Illinois Solar Energy Association has finalized a groundbreaking grant agreement with the Illinois Department of Commerce and Economic Opportunity. The 2-year, \$40,000 grant is the largest in this organization's history and the first multi-year grant year ISEA has received. The state funding will help support the Illinois Solar Tour, which, every October, invites the public into homes and businesses that generate solar energy. It will also help fund ISEA's Renewable Energy Credit Aggregation Program (RECAP), which bundles members' solar energy production credits to earn them higher returns on renewable energy they produce. The grant, which totals \$80,000 over 2 years, will also support the *Heliographs* newsletter and improvements to the organization's website.

We are grateful for DCEO's long-standing support of our efforts in solar energy in Illinois. The importance of this grant in difficult economic times can not be overstated. As Executive Director of ISEA, I am thrilled to have DCEO's generous continued support to unlock the promise of green jobs, energy independence and climate action. The timing and level of DCEO's support couldn't have been better.

One of the best ways we educate and have a lot of fun is Illinois' Solar Tour. The tour has grown rapidly since its 2006 inception. Last year, it drew more than 2,000 visits to 110 sites across Illinois. In addition to the efforts of Tour Coordinator Lisa Albrecht, intern Bonne Sucherman and ISEA Board and Staff, ISEA invested in outside public relations support for the first time. ISEA's PR firm, Terracom, helped garner wide coverage in major news outlets, including the Chicago Tribune, Sun-Times, Daily Southtown, Daily Herald and Pioneer Press newspapers in **(Continued on page 2)**

SOLAR GAIN; US SOLAR MARKET SEES RECORD GROWTH IN 08 DESPITE ECONOMIC CRISIS

By Sarah Lozanova

The last year has been filled with news of plummeting property values, widespread unemployment, and bankruptcies. However, judging from stock values of solar companies, you would never know the industry experienced record growth last year in both photovoltaics (PV) and solar water heating, according to a report recently released by the *Solar Energy Industries Association*.

Even though solar stocks dropped with the rest of the market last year, unlike other sectors, this one saw increases in both capacity and jobs. The US now boasts a total 8,775 MW of solar capacity, enough for around two million homes, from both solar electric and solar thermal technology. Each new megawatt of solar electricity is enough to power 150 to 250 more homes.

Despite the credit crisis, 2008 will be remembered in the solar industry as a year where federal incentives were enhanced and extended for eight years. This ends the boom and bust cycles that have plagued the industry for decades. **(Continued on page 4)**

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David Wokosin, "For the first time we have 8 years of tax credit support for renewable energy."



Solar Tour '09

Save the Date : Saturday October 3rd, 2009

Join us for the National Solar Tour, the largest renewable energy tour in the world.

Our goal is 200+ sites and over 4,000 visitors attending this year. We'll need your help to reach those goals. To participate, please contact Lisa Albrecht by email at

Lisa.Albrecht@illinoissolar.org

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LETTER FROM THE PRESIDENT



THE WHOLE TREE

I used to pick apples in upstate New York and Virginia to make a few bucks during college. One thing I remembered was that the foreman at each site had very different but equally undecipherable accents foreign to my New York City-raised ear. But they both made it clear in their own way that I was to pick every single apple on every tree or get lost.

I think about this when I hear from the usual suspects who denigrate solar and renewable energy in general in favor of going after “low hanging” fruit, whether it’s energy efficiency or draining what’s left of our fossil fuel resources in the US. It’s invariably followed by the shibboleth, “when solar (or other renewable energy) is proven and cost-effective....”

The latest variation of this criticism came from an analysis that derided the innovative Berkeley, California program of financing photovoltaic systems through property tax-based loans, where the loans are paid off at the end of the term or when the property is sold. The analyst said that photovoltaic electricity is not cost effective, will never be cost effective and that financing like that should be used only for energy efficiency like insulation.

Other variations include energy saving packages that have artificial cutoffs, either by the hated payback or even life cycle method of ten years, or less. So the “low hanging fruit” gets done while other items, especially capital intensive, are ignored. I have worked for years in the Chicago Energy Savers’ Fund and other energy efficiency ventures so I know the value of caulking, insulation and related measures, but I have always been amazed by this thinking. My religious commentator side of me wonders what would have happened if the forbidden fruit was at the top of the Tree, instead of at the bottom?

In stressful economic times as these, the tendency to pull back toward the “low hanging fruit” is understandable. The problem is, this tendency also existed in more prosperous times, where short sightedness, the fast buck mentality and fear of change reigned. It’s often clothed in compassion, as in the recent decisions by a couple of New England governors to shift funds from green energy development to defray utility bills of struggling constituents. Low hanging fruit that eats the seed corn of future economic development.

We are still in a low hanging fruit mentality that ignores more and more of the tree. I recently read the Solar Energy Industries Association’s “2008 Year in Review”, which may be downloaded at http://www.seia.org/galleries/pdf/2008_Year_in_Review-small.pdf. (See Sarah Lozanova’s story on page 3) In spite of the darkening economic horizon, 2008 was a banner year for the US solar industries, for both photovoltaic and solar water and space heating applications. That was the good news. The other news was that in the report Illinois was nowhere to be found, except as an afterthought lumped in with “other” or the “rest of” states of little consequence.

We have had successes of improved policy, such as net metering and interconnection programs for our largest utility companies, the continued growth of utility-scale wind projects and some highlights, such as the announcement of a photovoltaic module manufacturing plant coming to Rockford, and a multi-hundred kilowatt photovoltaic installation planned in Chicago. But these successes look increasingly isolated against states, sunny and cloudy, large and small, that are pressing ahead with more “whole tree” approaches and commensurate economic development in solar and small wind power markets. The recent ‘sweeping’ of our relatively modest Renewable Energy Trust Fund, to cover a budget shortfall, ignores the *whole tree* of the need for substantial, consistent incentive policy to match what the federal government has done, to make the Illinois markets grow. Otherwise, the promise of green collar jobs, reducing pollution and imported energy from outside Illinois and the U.S., will remain just that, a promise. It’s like staring at all of those apples in the upper part of the tree. Sorry, we can’t get them anymore, it’s not cost effective.

Having said all of that, I am happy to report that we are pursuing our own improvements, low hanging and beyond; our website has been revamped for easier use by individual and business members. I want to thank the Illinois Department of Commerce and Economic Opportunity for our first multi-year grant that will support our various activities in a more comprehensive and strategic fashion, and we look forward to working closely with the agency. Last, but not least, I want to welcome Ms. Robbie Harris, our new *Heliographs* Editor.

Sincerely,

Mark Burger, President
Illinois Solar Energy Association

Enjoy a Day with Solar Enthusiasts, as Illinois homeowners proudly demonstrate the effectiveness of their solar electric, solar thermal, passive solar, wind and geothermal systems and energy efficient designs.

In 2008 over 2,000 people toured over 100 businesses and homes across the state. This year we hope to top that attendance – but we need your help.

How? There are plenty of ways you can participate and help promote renewable energy in Illinois. You can join the tour by car or bicycle. If you have a solar system you help by opening your home or business to a full or partial tour. It’s fun to meet like minded people and help them gain an understanding of your experience with solar power.

You can also become a volunteer, a guide, a sponsor, or you can offer your services to help with any of the many tasks it takes to create the tour -- and you can learn something in the process.



Go to Page 8 for details about all of the roles described above and to take part in a special event on May 30th.

Your participation on any level is a great way to do your part to support solar energy development in Illinois.



**GREEN
STIMULUS
MONEY
HEADED FOR
ILLINOIS**



*ISEA, Members Partner with
Climate Cycle to bring Solar to
Schools*

Federal Funding for Illinois Energy Efficiency

Obama Administration Announces Additional \$112,175,600 for Local Energy Efficiency Improvements in Illinois

Block Grants to Support Jobs, Cut Energy Bills, and Increase Energy Independence

WASHINGTON – Vice President Joe Biden and Energy Secretary Steven Chu say the Federal Government will invest \$3.2 billion in energy efficiency and conservation projects in U.S. cities, counties, states, territories, and Native American tribes. This includes \$112,175,600 for state, county and city efforts in Illinois.

This builds on an investment of \$343,847,619 in Illinois weatherization and energy funding announced by the Administration on March 12th and detailed at energy.gov/recovery. Funded by The American Recovery and Reinvestment Act, it provides formula grants for projects that reduce total energy use and fossil fuel emissions, and improve energy efficiency.

IL Energy Office	\$21,834,600
Aurora	\$1,574,100
Bloomington	\$746,400
Champaign	\$763,200
Chicago	\$27,648,800
Elgin	\$1,002,600
Joliet	\$1,346,400
Peoria	\$1,174,300
Springfield	\$1,225,600
Cook County	\$12,696,000
DuPage County	\$4,653,700
McHenry County	\$2,475,900
St. Clair County	\$2,040,800
Will County	\$3,009,700

Partial List; Federal Green Stimulus Funding by Illinois city and county.

For entire list see :

<http://www.energy.gov/recovery/index.htm>

The federal funding will support energy audits and energy efficiency retrofits in Illinois residential and commercial buildings, the development and implementation of advanced building codes and inspections, and the creation of financial incentive programs for energy efficiency improvements. Other activities eligible for use of grant funds include (Continued on page 5)

If you were to ask most people what the number one operating cost of a school is, few would guess that it is literally 'keeping the lights on.' That, however, is reality across the United States according to Climate Cycle Executive Director, Joey Feinstein, who explained, "Most American grade schools spend more money on utilities than on books and computers combined. In 2007, Chicago Public Schools spent more than \$83 million on utilities, 30% more than it spent on books." CPS's own 2008 Environmental Scorecard broke these numbers by school and revealed that many grade schools spend more than \$100,000 every year and that some high schools spend more than \$1 million annually.

Gas and electricity use have not only strained school budgets, but they produce significant greenhouse gas emissions. "Many people don't realize that residential and commercial buildings are responsible for more greenhouse gas emissions than automobiles, planes and trains combined; and our schools represent almost one third of those buildings," Feinstein explained. Concerned by these harsh realities, Feinstein founded Climate Cycle, a Chicago-based organization dedicated to promoting solar awareness in schools through solar energy. Climate Cycle will hold its inaugural charity bike ride on May 9 on the Chicago's Lakefront Path to support solar energy curriculum development and solar electric installations at schools across Chicagoland.

ISEA Executive Director Mike Johnson has assisted in planning Climate Cycle's upcoming ride and will sponsor an ISEA team. Not only are ISEA members helping the rubber meet the road on the 22-mile ride (a 12-mile ride is also offered), but they are also playing a more 'bricks and mortar' role as well. ISEA Member Matt Tirpak, of Matteson, coordinated a team of IBEW Local 134 members to provide no cost installation labor for the first two installations at Perspectives Charter School and Talcott Elementary. Matt will also be sponsoring a team through IBEW Local 134. Erik Holston, of Solar Electric, Inc., an ISEA Business Member and Local 134 signatory located in Thornton, provided the system components for these two 1.2kW systems. Perspectives' system was dedicated two weeks ago and Talcott will be brought online in May.

To sponsor a team or make a contribution, visit www.firstgiving.org/michaeljohnson4 for the ISEA page or www.firstgiving.org/local134 to give on behalf of Local 134.

(continued from page 1)

Solar Gain; US Solar Market Sees Record Growth in '08 Despite Economy

By Sarah Lozanova.

Photovoltaic Growth in 2008

Grid-tied photovoltaic installations led the gains with an 81% increase in capacity during 2008 compared to 2007, with a total of 343 MW total. Of this, 50% was installed in California, due in large part to that state's robust statewide incentive.



Photo
[Solar Service Inc. of Illinois](#)

Illinois Renewable Energy Incentives

Funding for the State of Illinois' incentive programs for renewable energy were limited in the last year, due to the state's fiscal crisis. The Illinois Department of Commerce and Economic Opportunity manages the Illinois Renewable Energy Resource Programs, which includes rebates for 30% of the cost of a photovoltaic or solar thermal system up to \$10,000. The program

awards rebates on a first-come first-served basis and is available only to customers of utilities that impose the surcharge for the renewable energy fund.

Though funding for Illinois' overall renewable energy program was reduced this current fiscal year, the state has approved more solar energy rebates this year than ever before. 190 projects requesting about \$1.3 million in rebates have been approved. Funding for this fiscal year has been depleted, but new funding is expected for the renewable energy programs when the next fiscal year begins in July. Furthermore, some of the funds the Department receives from the American Recovery & Reinvestment Act for energy programs may be used for current and/or new renewable energy programs. Illinois also offers grants, periodically, for larger solar thermal systems but does not include solar pool heating in these incentives.

PV Manufacturing Up Big in '08

Photovoltaic manufacturing in the US grew by a whopping 65% last year. With end users buying more solar electric panels made in the U.S., they cut transportation and shipping costs compared to previous years. They also helped fuel an increase in domestic solar jobs, from manufacturing and installation, to sales.

Solar Water Heating Growth in 2008

The solar thermal segment experienced robust growth as well, with a 50% increase in capacity in 2008 compared to the previous year for solar water heating. A total of 139 MWh (thermal equivalent) was installed, with Hawaii comprising 37% of the total. The solar pool-heating segment slowed by 3%, but still saw 762 MWh installed in 2008.

Solar Industry Employment Opportunities Look Bright

"Despite severe economic pressures in the United States, demand for solar energy grew tremendously in 2008," said Rhone Resch, president and CEO of SEIA. "Increasingly, solar energy has proven to be an economic engine for this country, creating thousands of jobs, unleashing billions in investment dollars and building new factories from New Hampshire to Michigan to Oregon."

Globally, the photovoltaic and wind energy industry directly and indirectly employed 600,000 people in 2008. The photovoltaic industry possessed 190,000 of those jobs, according to [Clean Energy Trends 2009](#), a report released by Clean Edge.



Photo
[Solar Service Inc. of Illinois](#)

Sarah Lozanova writes frequently about solar energy issues. This article was adapted from an article she wrote for TriplePundit.com

Illinois Steps Up for Solar

ISEA Secures 2-Year \$40,000 DCEO Grant for Programming

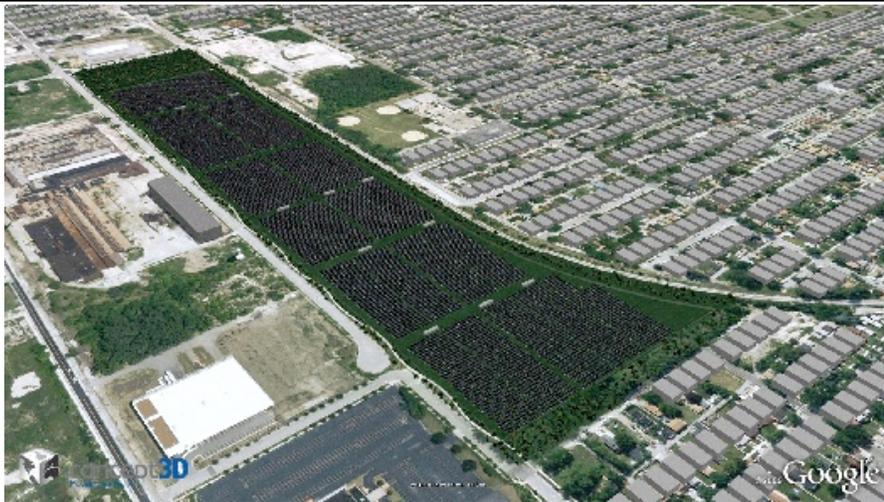
(Continued from page 1) addition to radio coverage on WBBM, WLS and WMAQ radio stations. A portion of the grant, in the form of a \$5,000 Tour sponsorship, will support Tour publicity designed to expand the Tour's reach in 2009.

In March, ISEA launched a new website that, once again, allows online registration for all ISEA events and features a new members-only area. Through the support of DCEO's grant, ISEA will expand the Public Forums and online resource library you'll find on our site. The new members-only area will also serve an increasingly important role in communication with members. For business members, the site also allows both ISEA members and the general public to search for contractors by city. In so doing, homeowners and business owners can more easily connect with ISEA Business Members near them.

DCEO's grant will also help ISEA further develop and promote its Renewable Energy Credit Aggregation Program (RECAP), in partnership with Community Energy. The DCEO grant will fund an intern position to assist in marketing the program. For 2009, Community Energy has agreed to purchase up to 200,000 kWh of power produced by ISEA member-owned solar electric systems. In many cases, the \$0.06/kWh incentive not only pays for an annual ISEA membership, but also puts money in ISEA members' pockets. Many homeowners can earn \$100 per year, while larger commercial and municipal systems can generate upwards of \$5,000.

With DCEO's support, ISEA has also hired on a professional editor, Robbie Harris, to bring a high standard of journalistic quality to ISEA's quarterly *Heliographs* newsletter. As can be seen with this issue, readers can expect to see more original ISEA news pieces, in-depth reporting and a new design. Look for member and business profiles in *Heliographs* highlighting the efforts of ISEA members to make solar happen in their communities.

Mike Johnson is the Executive Director of the Illinois Solar Energy Association



An aerial-view rendering of the proposed Exelon Chicago Solar Power Plant. (Exelon)

By Joshua Boak | Tribune reporter
April 22, 2009

Exelon Corp has unveiled plans to build a \$60 million solar power plant on Chicago's South Side, a small step to fighting climate change that leans heavily on government funding due to the high cost of turning sunlight into electricity.

"It's a way to start participating in renewable energy," said Tom O'Neill, Exelon's senior vice president of generation development. "Ultimately, we are putting 10 megawatts of electricity on the grid. It's not much. But you've got to start somewhere."

Solar power won't replace coal power plants anytime soon. The unaffiliated coal-fired Crawford plant in Chicago has a capacity that is 50 times greater than the Exelon solar project, which would be constructed only if the company qualifies for federal Energy Department loan guarantees.

America gets about one-ten-thousandth of its electricity from the sun, according to the Energy Department. There's room for growth.

But reducing the price of solar panels to a competitive level is the challenge. To produce the same amount of electricity, solar panels are four times more expensive than building a natural gas plant; and three times more expensive than a nuclear plant, according to recent

analysis by [Moody's](#) Investor Service, the debt ratings agency.

Still, utilities are pushing forward with solar projects, figuring the price tags could drop as solar power becomes more popular.

Whenever the number of solar panel installations doubles, the associated costs drop by 20 percent, said Ken Zweibel, director of the Institute for Analysis of Solar Energy at [George Washington University](#). On average, installations double every 30 months.

"As the size of market increases, manufacturers can ramp up production and drive down cost," said Julia Hamm, executive director of the Solar Electric Power Association.

Orders are streaming in. [Florida Power & Light Co.](#) said this month that \$350 million worth of solar panels could meet the electricity needs of a planned city there. Pacific Gas and Electric Co. announced in February a program to develop up to 500 megawatts of solar power for northern and central [California](#).

[New Jersey](#) also has a sunny outlook on solar power. Its [Public Service Electric and Gas Co.](#) proposed in February a \$773 million project to install solar panels on streetlights and public schools, among other locations. Due to federal tax credits and state incentives, the average PSE&G residential bill of \$1,270 a year would increase by about \$4 if

officials approve the project.

The advantage of solar power is panels do not have to be clustered in one location, unlike a nuclear, gas or coal plant. Exelon would install 32,800 panels on a 39-acre former industrial site in Chicago's [West Pullman](#) neighborhood, the largest project in a U.S. urban center.

The [SunPower Corp.](#)-made panels would track the sun's path, maximizing exposure. Gray Chicago skies should not be an obstacle, said Julie Blunden, vice president of public policy for SunPower.

"Chicago has better sun than Germany," Blunden said. "And Germany is the largest solar market in the world today."

The economic stimulus package made funds available for more solar power projects. The Energy Department can guarantee the loans used to pay for construction. So Exelon can explore renewable energy, even though the parent of Chicago utility Commonwealth Edison Co. has staked its future on expanding its fleet of 17 nuclear reactors.

"We're a nuclear company," said O'Neill. "But we know which way the wind blows, no pun intended. Nothing is off the table."

This article is reprinted from the
[Chicago Tribune](#)
[chicagotribune.com](#)

Exelon plans to build solar power plant on Chicago's South Side

Company would rely on Energy Department loan guarantees for \$60 million project

Federal Funding for Illinois Energy Efficiency

Obama Administration Announces Additional \$112,175,600 for Local Energy Efficiency Improvements in Illinois

(Continued from page 3)

transportation programs that conserve energy, projects to reduce and capture methane and other greenhouse gas emissions from landfills, renewable energy installations on government buildings, energy efficient traffic signals and street lights, deployment of Combined Heat and Power and district heating and cooling systems, and others. To ensure accountability, the Department of Energy will provide guidance to and require grant recipients to report on the number of jobs created or retained, energy saved, renewable energy capacity installed, greenhouse gas emissions reduced, and funds leveraged. Funding is based on a formula that accounts for population and energy use.

Secretary Chu said, "The funding will be used for the cheapest, cleanest and most reliable energy technologies we have – energy efficiency and conservation – which can be deployed immediately. The grants also empower local communities to make strategic investments to meet the nation's long term clean energy and climate goals."

BEST WAY TO LEARN FUNDAMENTALS OF RENEWABLE ENERGY

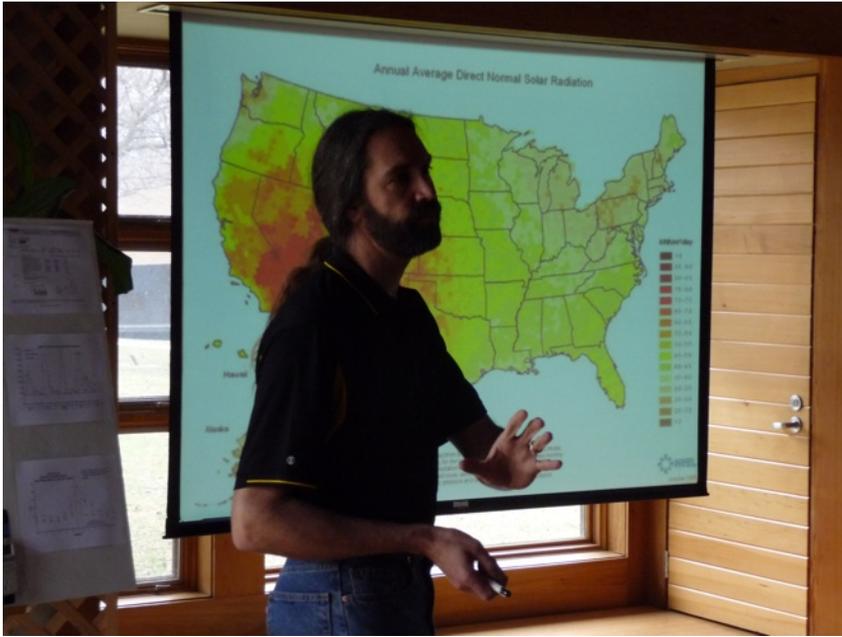
ISEA'S SOLAR ENERGY 101 AND WIND 101

HALF-DAY OR FULL DAY SESSIONS AT
LOCATIONS AROUND ILLINOIS

See Schedule

Register Here :

<http://www.illinoisolar.org/>



David Wokosin

photograph by Kurt Holtz

By Robbie Harris

On a crisp, Saturday morning at the Evanston Ecology Center, ISEA Instructor David Wokosin asks a roomful people if they know what their energy bills cost each month. Most hands go up. They've come prepared for their introduction to solar and wind power; Solar 101 in the morning and Wind 101 in the afternoon.

The two dozen or so, are home or business owners, builders, real estate professionals, decision makers for their companies or condo dwellers from downtown Chicago. Since ISEA began offering these overview sessions of the basics of solar and wind energy, nearly 1000 people have taken part, at locations around the state.

Wokosin is medical researcher at Northwestern University. "I am not an expert. I am on a journey. Two years ago, I was sitting right where you are now. This course helped me focus (on solar and small wind). Then I went on the solar tour the first Saturday in October where you get to see people who have these systems in their houses. You get to talk to people and that brings you further along."

It's a process, he tells them. Context is important. He spends the next six hours exposing the group to a basic yet thorough survey of the world of renewable energy, the technology of solar and wind power, and the economic conditions and incentives. The federal government is offering a 30% tax credit on renewable energy installation in 2009. This makes adding solar and wind power more affordable for more people.

Joe Gordon, who helped coordinate the session and who answered more technical questions has worked for a local Chicago area solar and wind company for 30 years; Solar Service in Niles.



Joe Gordon, Solar Service Inc. photograph by Kurt Holtz

Evanston Ecology Center



photograph by Kurt Holtz

David Wokosin tells the group, "That's important because there are a lot of nuances to this industry and a lot of perspective is needed to help bring along people new to the concepts." ISEA also offer in-depth, technically oriented seminars called Solar 201 and Wind 201. See illinoisolar.org for locations and schedules.

Meet Jody Nord

SOLAR SITE ANALYST IN BLOOMINGTON/NORMAL AND ISEA MEMBER

by Robbie Harris

Twenty-four year old Jody Nord has her eyes on the future. A Site Analyst for Bauer Power, based at its Bloomington/Normal office, she visits the homes of people interested in adding renewable energy to their properties to determine what kind of system would be best for them. "This whole 'green revolution' is a brand new thing that the US is going to create for itself using the green stimulus money." That's a plus for people looking to add renewables *and* for people looking to get into the industry.

Because this burgeoning industry presents a learning curve for just about everyone, she says, women and men getting into it now, compete on a level playing field. She says, "The field is open to women today in a way that it never was before. This is an industry that's developing as we speak and women are jumping in."

Nord became interested in the world of renewables after her grandfather passed away and she honored his memory by visiting his family, who live in Sweden. She spent a summer there and "witnessed energy efficiency and passive design. I felt thermal heat, rather than forced air heat and a whole new way of doing things." She was inspired.

This was the time when hurricane Katrina had recently hit, war and energy prices were also raging. It was then she made her life plan.

She founded her own solar energy firm, *Yellow Dwarf Solar Company*. "Our sun is a yellow dwarf" she explains. But not a lot of people got it. It wasn't easy, working on her own, a sole proprietor in a new industry. Soon she met Jason Loyet and Mark Bauer of Bauer Power Bauerpower.com. They clicked, and realized they shared a vision. She agreed to join their company in January, 2009.

"We're going to set a standard in the renewable energy field. We've taken it to a new level from education and sales to planning and installation.

When Nord visits a site, the main thing she looks for is the owners' usage. Are there ways to be more efficient? Then she asks about their plans for the future "These systems will last 30+ years." She helps them visualize a future that includes renewable energy.

She says she gets to know many interesting people that way. "I meet a lot of people who want to do the right thing for the environment even more than they want to save money on energy."

That reflects Jody Nord's own world view. Still she says, bringing costs down is key for the industry. She is looking forward to the day when solar power can be installed for \$4 per watt, down from \$10-\$12 today.



photo by: Emory Davis

Jody Nord at a recent Bauer Power solar installation in Peoria, IL



"I want to see our country have an image as being good stewards of the earth." says Nord.

She hopes to spread the word both in this country and beyond. A 2006 graduate of Illinois State University, with a major in political science and an emphasis in global issues, her dream is to someday be a US University Ambassador to a foreign country. And very likely, an ambassador for clean, renewable energy as well.

HOW TO
GET
INVOLVED

See Solar in Action



Visit the "Hybrid House" on May 30th

Talk about a dream house. Zero energy houses have long been the dream of the renewable energy industry, but this house, in Chicago is evidence that dream is coming true.

Join us as we explore the "Hybrid House", on an ISEA field trip on May 30th. We'll walk through this 2,000 sf, two-bedroom single family home specifically designed to be energy efficient; approaching zero net energy. If it's green, you can guess that this home will have it. It's an excellent example of smart design. When you add a passionate homeowner to the mix, you get a building that matters.

Green features include:

- Passive solar design
- Solar water heating
- 4.8 kW solar electric system
- Ground-source heat pump serving the air floor heating system
- Interior concrete slabs and masonry walls for thermal mass
- Advanced framing techniques
- Spray foam insulation
- Insulating window shutters
- Low-flow plumbing fixtures, including dual-flush toilets
- Low-VOC finishes
- Fluorescent and CFL lighting throughout
- Rain barrels, a rain garden, Energy Star roofing, and an organic garden

Date: Saturday, May 30th, 2009

Time: 10:00 – 12:00

Location: 454 E. 44th St., Chicago, IL 60653

For more information, contact us at info@illinoissolar.org. Additional details are available on the website.

*Plan Ahead for Solar Tour
October 3, 2009*



Be a Part of the Change You Seek

Be a visitor – Join us for the day as you pick solar systems that interest you in your area to visit. Bring neighbors, family, children and friends. This is particularly informative for individuals either looking to purchase their own solar system or looking to pursue a career in the industry.

Be a host site – Show off your solar system with either a full tour, partial tour or outside viewing only.

Be a volunteer – We need assistance recruiting new host sites, working with installers, informing local residents and leaders, mapping bike routes, organizing the guidebook, etc.

Be a sponsor – Advertise both online and in our printed guidebook for exposure to a highly motivated audience. Advertiser commitments due by June 15, materials June 30th. Contact Lisa Albrecht for a media kit.

Be a guide/docent – This year we plan to have a few key "Super Sites" where visitors can go for in-depth information, literature and to ask questions.

Be an advocate – Perhaps you don't have time to be on the committee but can help out with PR, guidebook distribution, etc. That is equally valuable and we'd love your help.

Contact: Lisa Albrecht by email at
Lisa.Albrecht@illinoissolar.org

What's New in Renewables Around Illinois

News, Notes, & Events

Chicago Unveils First Networked Solar Plug-In Station for Electric Vehicles

[RenewableEnergyWorld.com]

Carbon Day Automotive announced the unveiling of the first solar-powered electric vehicle charging station in the City of Chicago. Located and operational at the City of Chicago Department of Fleet Maintenance, it will be used daily by the City of Chicago to fuel the city's electric vehicles with power from the sun.

"Solar energy and electric vehicles are an inevitable partnership that is one more step to reducing our dependence on foreign oil."

-- Richard Lowenthal, CEO, Coulomb Technologies

The [Carbon Day Automotive](#) Solar Plug-In Station, built by Carbon Day Construction, was designed by the firm of [Adrian Smith + Gordon Gill Architecture](#). [Wanxiang America Corporation](#) manufactured the solar panels that form a tree-like canopy built by Residential Steel.

[Pure Energy LLC](#) installed the sculpted piece and interfaced it with the concealed underground battery pack enhanced to store solar energy, specially designed and developed by [All Cell Technologies](#), a thermal management and power pack solutions manufacturer.

"Carbon Day and the City of Chicago are demonstrating true innovation, ingenuity and initiative," said Richard Lowenthal, CEO of [Coulomb Technologies](#). "Solar energy and electric vehicles are an inevitable partnership that is one more step to reducing our dependence on foreign oil."

Springfield has Renewable Energy Choice

From "Where there's a Will there's a Way."

Something big passed the Springfield city council last month without much notice or fanfare. An ordinance approving the Renewable Energy Choice program will allow City Water Light & Power CWLP customers to purchase renewable energy credits (RECs) through their monthly utility bill. The voluntary program will increase the use of renewable energy beyond the [120MW of wind capacity](#) already being used by CWLP. CWLP is partnering with a company called [3Degrees](#).

AWEA Conference in Chicago May 4-7 McCormick Place Convention Center in Chicago

From AWEA.org

American Wind Energy Association's WINDPOWER 2009 Conference and Exhibition is the largest annual wind conference and exhibition in the world featuring over 15,000 attendees and over 1,200 exhibitors. Each year, wind energy professionals gather at this event to learn about the latest industry developments and technologies, review new products and services in the expansive exhibit hall, and network with leading industry decision makers.

Wind power companies operating in the industry are coming off a record-setting 2008 and are laying the foundation for even more future growth. Wind energy has firmly established itself as a mainstream energy source for electricity, with new wind projects completed in 2008 accounting for about 42% of the entire new power-producing capacity added nationally last year, according to initial estimates. Meanwhile, the economic recovery package included an unprecedented three-year extension of the production tax credit for wind power, giving the industry a level of stability it has never before enjoyed.

Contact WINDPOWERexhibition@awea.org. For media accreditation information see http://www.windpowerexpo.org/press_media.cfm

AWEA is the national trade association of the U.S. wind energy industry.

The association's membership includes global leaders in wind power development, wind turbine manufacturing, as well as a broad range of component and service suppliers.

More information on wind energy is available at the AWEA Web site: www.awea.org.

2nd Annual Central Illinois Renewable Energy Expo To Be Green Sports Complex, Mossville

From ciree.net

The second annual **Central Illinois Renewable Energy Expo** will be held at the Green Sports Complex (formerly the Midwest Sports Complex) in Mossville, IL, May 2nd and 3rd. Among the sponsors and presenters for the second annual event are Peoria County Recycling, Bauer Power, Soy Capital Bank, media partner WMBD-TV and many others. New this year is the Heating, Ventilation and Air Conditioning (HVAC) Mobile Green Classroom — a new educational tool sponsored by the United Association of Journeymen and Apprentices of the Plumbing and Pipe Fitting Industry of the United States and Canada (UA), the Mechanical Contractors Association of America (MCAA), the Mechanical Service Contractors of America (MSCA) and the Plumbing Contractors of America (PCA). This state-of-the-art mobile classroom provides information about the latest green technologies being used in mechanical service and construction. The technologies featured on board allow visitors to see the many ways in which a building can become more energy efficient, use fewer natural resources and have minimal impact on the environment. The trailer will be in Peoria for a week, including both Saturday and Sunday at the Energy Expo. The **Central Illinois Renewable Energy Expo** features exhibitors and vendors displaying various types of renewable energy. There will be vendor displays focusing on topics from Geothermal to Solar Power, Wind Energy to Renewable Fuels, and even Hybrid Vehicles. For more information, contact Gene Pratt at (309) 370-1395 or Gary Sutton, Expo Coordinator at (309) 282-4839 or contacts us at the website at www.ciree.net.

See Page 10 for
Upcoming ISEA
events

Upcoming ISEA events See illinoissolar.org for details, times and locations

Solar Architecture-Chicago	May 2nd
Solar 201(Thermal) and 202(PV) Chicago	May 16
Green Festival:	May 16 17
Solar and Wind 101-East Peoria	May 23

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Members and Friends, What Does Your Renewable Energy Look Like?

I'd like to know.

As the Editor of Heliographs, The Newsletter of the Illinois Solar Energy Association, I hope to hear from you. Please share your photos, ideas, comments, and thoughts on renewable energy in Illinois, for future editions.

Heliographs is a reflection of you; a look at what you're doing, where you've been and where you're going.

From an outsider's perspective; you are an amazing group of knowledgeable and committed people supporting renewable energy in Illinois for the benefit of people everywhere. It's an important story to tell. I look forward to working with you to help tell it.

Sincerely,

Robbie Harris

Editor, *Heliographs*



Visiting a geothermal plant in Iceland

*Please forward your favorite
photos, clippings, and ideas for
future subjects for **Heliographs** to:
rharris@luciddreamproductions.net*

Heliographs is published quarterly by Illinois Solar Energy Association and edited by Robbie Harris.

Special Thanks to Mike Johnson and Deny Reynolds

Membership information, updates, and assistance in locating resources can be obtained at
www.illinoissolar.org

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