

HELI GRAPHS

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Newsletter of the Illinois Solar Energy Association □ January 2007, Vol. 26, No. 1

ISEA Membership Meeting December 9 Nominations, state speakers



President of ISEA Mark Burger and Illinois State Rep. Deborah Graham field questions from members.

Nominations, name changes, and state officials were on the agenda for the Illinois Solar Energy Association Membership meeting held on Saturday, Dec. 9 at the Chicago Center for Green Technology, 445 N. Sacramento Blvd., Chicago. More than 65 people attended.

Bill Haas, energy division representative from the Illinois Department of Commerce and Economic Opportunity gave a presentation on Illinois renewable energy policies and programs. In addition, State Representative Deborah Graham (D-Chicago) offered her thoughts on where Illinois should be heading regarding renewable energy and what the state legislature may be able to do about it.

Howard Alan, Carol Gulyas, Mark Hasen, and Mary Eileen O'Keefe were nominated to fill the four open positions on the Board of Directors. In addition, an advisory question will be included on ballots asking members whether the name of the Illinois Solar Energy Association should be changed to

Illinois Sustainable Energy Association to reflect members' and the organization's expanding interest in wind power and other forms of clean, sustainable energy. The ballots were mailed out Dec. 23.

Other ISEA business discussed were the upcoming Wind 101 and Solar 101 Workshops, which will begin on March 3, 2007, statewide; a report by Mark Hasen on strengthening ISEA's financial management systems; and upcoming membership meetings.



Bill Haas of ILDCO describes the state's renewable energy to the members.

STATEMENTS BY THE CANDIDATES FOR ISEA BOARD DIRECTOR

Howard Alan

I wish to continue being a member of the ISEA Board of Directors because I am personally and architecturally devoted to changing the way our society relates to our ecological/natural home and because I enjoy interacting with other board members who offer their solar-related information.

I wish to continue offering knowledge based on continual efforts to design and construct sustainable building environments.

Carol Gulyas

For the past year and a half I have been the Member Events Coordinator for ISEA. I am running for the board because I see green energy as an area where people of all political parties can unite to turn around global warming and contribute to a more peaceful planet.

My husband David and I have recently launched the "MidwestGreenPeople" blog at www.midwestgreenpeople.com, which provides a forum for local homeowners, businesses, and others interested in green building and alternative energy. In 2005, Oak Park's *Wednesday Journal* recognized me as a "Villager of the Year."

My background is in advertising and direct marketing. I am now a Reference and Instruction Librarian at Columbia College, Chicago, and am active in the American Library Association. I've served two years as Secretary of the Intellectual Freedom Round Table, and am presently serving a three-year term on the Social Responsibilities Round Table (SRRT) Action Council.

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Mark Hasen

I have many (20-plus years) experience in financial management and regulatory compliance. I would like to offer my services in this capacity.

I have a long-standing passion for the growth of the use of renewable energy to sustain ourselves and our children. I believe that each of our member's continued dedication of time, talent, and expertise will contribute further to our organization's continued success. I am happy to offer to combine my passion with my talent to help ISEA!!!

Mary Eileen O'Keefe

I feel that ISEA is the effective local platform to further solar energy in future fuel decisions in our country. The year 2007 should be an exciting year in the solar industry. If reelected to the ISEA Board, I plan to use my efforts to furthering solar awareness and use.

My company, Lake Shore International, Ltd has been in the coal and oil end of the energy business since 1975. In 1999 Solar Gold became a division of Lake Shore.

Since 1984, I have been on an Advisory Board to the Secretary of Energy in Washington D.C. At a meeting with Secretary Bodman in November, I was greatly encouraged to hear a presentation of the American Energy Security Study mentioning The Investment in American Energy Independence Act of 2006. Solar, wind, biomass, coal and liquid fuel are specifically mentioned in the bill. I think, finally, our federal and state governments need to understand that alternative energy has a lot to do with homeland security and averting a full-blown energy crisis in the U.S.

Ballot Questions

NAME CHANGE FOR ISEA

Shall the Illinois Solar Energy Association be renamed the Illinois Sustainable Energy Association?

ELECTING A BOARD DIRECTOR WITH LESS THAN ONE YEAR MEMBERSHIP IN GOOD STANDING

Should the ISEA by-laws be changed to allow an ISEA Member with less than one year membership to be nominated and elected to the Board of Directors if approved by a two-thirds vote of the Board of Directors?

The choices are "yes" or "no." The ballot questions are non-binding advisory.

To Market, to Market Letter from the President

For 10 years, Illinois electricity rates have been frozen as part of a comprehensive shift of disaggregation and some deregulation. The ComEd and Ameren utilities want the freeze ended because cost increases—especially from recent electricity acquisitions—threaten profitability. Opponents claim that utilities and their parent companies have profited inordinately, the recent acquisitions have been questionable, and utility rates are too high as it is and rate hikes would cause hardships.

The cost of energy is going up whether we like it or not. In 1997, the average cost to utilities was the following: \$29.11 for a ton of coal, \$2.91 for 1,000 cubic feet of natural gas and \$12.50 for a pound of uranium hexafluoride, the raw material for uranium fuel.

In 2005, coal was \$35.12 a ton, natural gas was \$7.54 per cu. ft., and uranium hexafluoride was \$36.00 per lb. Much of the stability in coal prices has been due to relatively cheap, low-sulfur western coal. That commodity is getting less cheap and more difficult to transport, with most of the price increase occurring in the last two years.

Natural gas, always a volatile commodity, is being imported from outside North America. Like fossil fuels, the most concentrated and accessible uranium ore has been mined out, and most of what's left is in unstable regions like central Africa or Asia. There also are pollution control costs associated with mercury, excessive carbon dioxide, nuclear waste storage, or coal or uranium ore mining. Costs will go up, one way or another, through increased rates, subsidies, or the costs that may result from an ignored hazard—until some disaster comes along.

The desire to freeze electricity prices is understandable, but no business can put rates on hold indefinitely.

We are not likely to have a so-called "California crisis" like the one that occurred earlier this decade. California's situation resulted from huge population growth and accompanying burgeoning energy demand. In areas that require power plants, high-voltage transmission lines and, most important, increasingly scarce water resources to cool power plants. But gone are the good old days of massive, centralized power plants churning out low-cost power with a "reasonable" rate of return from endlessly cheap energy sources.

Essentially, there are two choices: Either let the market work through the establishment of competitive forces that will take time to develop or transition to public power entities whose primary objective is to serve the public, not to make a profit.

Renewable energy can exist under either scenario. Public utilities like Austin Energy and Sacramento Municipal Utility have considerable solar and wind assets. Investor-owned utilities like ComEd buy wind power, and the utility with the most photovoltaic interconnections in the U.S. is investor-owned Pacific Gas and Electric. The real choice is long-term thinking versus instant gratification. The latter can occur in payouts to CEOs and shareholders, or bread and circuses for the masses. Or we can do what's best in the long run.

I want to welcome Kate Bachman to her first issue as Editor of *Heliographs*, and to thank Jim Camasto for his years of journalistic service.

Also, welcome to the increasing number of volunteers who are helping us out on our strategic planning.

I am looking forward to new Solar 101 Workshops, introducing the Wind 101 Workshop, the new dues structure, and a great slate of membership meeting sites of new solar and wind installations for 2007.

Mark Burger, ISEA President

(Contents of this letter may have appeared in the Rock River Times)

Info@Illinoissolar Is No Longer

If you have tried to email us at the info@ address, you probably have found it is no longer active. Our info@ address has been around for a long time and has been sold and bought and stolen so many times that about 99.9 percent of the email it elicits is spam.

Therefore, to contact us, please use www.illinoissolar.org/contact. This web page lists our (current) email address, so you can still email us. However, the email address is displayed in graphical form, so a spambot will not be able to read it.

This makes contacting us a little bit harder but, hopefully, you will take the time to use this new method. This scheme should put an end to the spam-mess associated with our inbound email address.

Also, if you have not gotten emails from ISEA and wish to get them, please send us your current email address to www.illinoissolar.org/contact.

As usual, comments/suggestions are welcome anytime.

Ted Lowe, ISEA Treasurer and Webmaster

ISEA and the National Tour of Solar Buildings

The ISEA will be launching a major effort to showcase the many solar-powered (and maybe wind-powered) buildings in Illinois, culminating in the National Tour of Solar Buildings on Saturday, October 6 with much of the rest of the country.

A tour guide is being planned that will feature the buildings along with much useful information.

If you are interested in featuring your solar- or wind-powered building, being a volunteer, advertising, or sponsoring the Illinois activities, please go to www.illinoissolar.org/contact, or call Sharon Stuertze at 773-426-9206.

Massive Change Exhibit at Museum of Contemporary Art



Eco-Pimp Your Ride: A forward-thinking Ford prototype in the William McDonough-inspired "Manufacturing Economies" gallery. Photo: Paul Natkin

Climate change, poverty and famine, AIDS, wars in the Middle East, waste choking the planet, skyrocketing home costs and poisons accumulating in our food and water. Are these ills indicative of the world's largest design failure?

In the shadow of hopelessness, it might be surprising to meet the animated and eternally optimistic Bruce Mau, the man behind Massive Change, a project that "explores the legacy and potential, the promise and power, of design in improving the welfare of humanity." In simplest terms, Mau might be called a graphic designer. He's known for his revolutionary design books like S, M, L, and XL. However, as the exhibit itself shows, Mau is much more than that. He's a change agent.

The Massive Change exhibit, currently occupying 12,000 square feet of Chicago's Museum of Contemporary Art, is a collaboration between Bruce Mau Design and the Institute without Boundaries, a design think tank tasked with researching the capacity of human efforts to change the world.

What has emerged from the alliance is an inspiring, if not sobering, look at the transformative power of design. In a world where technological capacity doubles every 12 months, the next 20 years will bring a "billion-fold increase in new possibilities." The Massive Change exhibit identifies and explores 12 of these changing landscapes, or "economies."

And while the widgets and wonders on display are often hard to believe, Massive Change isn't like the old World's Fair model of futuristic gizmos that may one day come to pass. Every piece exhibited already exists in today's world. "This is what differentiates Massive Change," says Doug Chapman, a former student of the Institute without Boundaries. "It is forward-thinking and forward-looking, but is based solidly on what we know today."

Passing through the Movement Economy gallery—which features sustainable vehicles ranging from the everyday (an Indian bicycle rickshaw) to the out-of-this-world (the Twike, the most efficient motorized vehicle on the market at 550 miles per gallon)—Mau muses, "In a world that has not embraced secular democracy, we have, nevertheless, embraced traffic."

Indeed. With China fast abandoning the bicycle for the car, one shudders to think what a world with a billion more drivers might look—and feel—like. Mau opines that "the radical success of the car is also its failure," pointing out that the average speed of a car today is eight miles an hour, with 43 percent of its fuel usage occurring while idling or grid-locked.

"We will design evolution," Mau proclaims in the Living Economies, and he's not just being provocative or bombastic. "People think of dogs and tomatoes and they think these things are natural. But look at the Labradoodle and tell me we aren't influencing the design of nature."

"Not everything [exhibited] is the perfect thing," Chapman points out. "This is part of what makes this project different. It isn't so quick to say what is right and what is wrong."

"In human history, being able to see change coming made the difference between life and death," Mau proffers. For what we can see, we can believe, and what we believe, we can change. Massive Change's mission is to make designers, or responsible change-agents, out of us all.

SOURCE: Manda Aulochs Gillespie, Conscious Choice, Nov. 2006
www.consciouschoice.com

Springfield Coal-Wind Deal Approved

SPRINGFIELD – City Water, Light and Power could start construction of its new coal-fired generator within days. The Springfield City Council on Thursday approved the latest deal struck between Mayor Tim Davlin's administration and the Sierra Club.

The agreement, passed 7-3, requires the city to ask the Illinois Environmental Protection Agency to modify the new power plant's operating and construction permits to incorporate stringent emission limits once it is operational in June 2010.

For its part, the Sierra Club has agreed to drop its objections to the construction permit within two days, allowing the months-delayed project to go forward. The agreement also requires the city to contract to buy 120 megawatts of wind capacity - 60 for itself and 60 for state government - within 90 days.

Aldermen had already approved ordinances directing CWLP to buy the wind power and to reduce emissions. But the Sierra Club said the ordinances were not good enough because there was no enforcement mechanism.

Aldermen will be asked to complete one more step in the Sierra Club saga: sign off on an agreement with a wind farm to buy the necessary wind power.

Renfrow pledged again that there would be no need for further electric rate increases because of the deal.

Wind power has been the most contentious part of the pact because of its unknown cost and the fact that the city will have more than enough power from its 200-megawatt plant.

But the Sierra Club and Davlin administration have agreed that the purchase of environmentally friendly wind power will help offset emissions of carbon dioxide from the new generator.

SOURCE Chris Wetterich, *Springfield Journal*, Nov 17, 2006, www.sj-r.com

Naperville Renewable Energy Achieves Five Percent Participation

Naperville, IL – The City of Naperville and Community Energy, Inc. (CEI) announced that more than 2,600 Naperville households have chosen to purchase clean, environmentally friendly renewable energy through the City of Naperville's Renewable Energy program. The enthusiastic support of Naperville residents has enabled the city to reach and surpass its renewable energy goal of five percent participation three months earlier than planned.

The Naperville Renewable Energy program has become one of the fastest growing green power programs in the country and is well on its way to becoming one of the U.S. Department of Energy (DOE) Top Utility Green Power Programs in the nation, based on customer participation rate.

"We are excited about the response to the Naperville Renewable Energy program, and we are pleased residents are making a choice in how their electricity is generated. By offering renewable energy to our utility customers, we have strengthened our relationship with the members of our community because they understand we care about the environment that we all share," said Naperville Mayor George Pradel.

The environmental benefit of the City of Naperville's renewable energy program is equal to offsetting approximately 9.3 million pounds of carbon dioxide per year, which is equivalent to planting more than 635,000 trees or not driving almost 8 million miles. In addition, Naperville has also been recognized with the Clean Air Award from the Partners for Clean Air (April 2006), the Environment Award from the U.S. Green Building Council-Chicago Chapter (May 2006) and the Illinois Environmental Heroes Award for 2005.

The Naperville Renewable Energy program is supplied by marketer and developer, Community Energy, Inc. The renewable energy product is comprised of ninety percent wind energy, five percent solar and five percent small-hydro energy. A portion of the wind energy is

sourced from the Crescent Ridge Wind Farm, located approximately 90 miles southwest of the City of Naperville.

The Naperville Renewable Energy program is available to residential and business customers in 200-kilowatt hour (kWh) blocks for an additional monthly fee of \$5 per block, added directly to customers' monthly utility bills.

Naperville is located 28 miles west of downtown Chicago and has a population of nearly 140,000. In 2006, the city was named as one of best places to live in the U.S. by *Money Magazine*.

SOURCE: Community Energy, Inc.
www.communityenergy.biz

School Board Approves Wind Turbine Request



WOODLAND —

Woodland School Board members Monday agreed to take the next step in the proposed wind turbine project. The board agreed to grant Kirk Heston of Johnson Controls his request to proceed with studies and estimates on the \$2.4 million project, including related work.

Superintendent Doug Foster said the board is not locked into anything -- approving the request allows Heston to gather and present more information, including costs.

"I prefer keeping costs on the conservative side so the board members won't be disappointed in the future," said Heston. He said he would rather have the members be surprised if the cost is lower than predicted.

A grant has been applied for with the Illinois Clean Energy Foundation. "Usually the grants are awarded in April," Heston said. Heston also said that as many certified local businesses will be employed as possible. He will proceed with the gathering of information for the approximate \$2.4 million project.

SOURCE: Dee Hillyer, MyWebTimes,
www.mywebtimes.com, Nov. 21, 2006

Recent Illinois Solar Installations



A solar thermal system is being installed on the Christy Webber Landscape, Inc. Greenworks, which also features a transpired solar air heating system. It is Gold LEED_{tm} rated.

While attending the ISEA Membership Meeting December 9 on, you might have noticed improvements going on next door at 457 N. Sacramento Ave.

A 10-panel solar panel array on the Greenworks building will heat water and assist the geothermal system with space heating. The former site of the Chicago auto pound is being developed as an Eco-industrial Park and is now one of the greenest buildings in Chicago. The building features a rainwater retention pond, a 2 kW wind tower, and a green roof.



Spin World Laundromat, Rockford, Ill., had a solar hot water system installed. The system can heat over 170,000 gallons of hot water annually and significantly lower the business' natural gas bills. A State of Illinois grant and federal tax incentives considerably lowered the cost of the system.

Both systems were installed by ISEA business member Solar Service, Inc., Niles, Ill.

German Wind Turbine Maker to Open Shuttered Plant, Employ Hundreds



DES MOINES, IA (AP) - Rapid growth in the wind turbine business has prompted German manufacturer Siemens AG to build its first U.S. manufacturing plant in Iowa.

Munich-based Siemens Power Generation said it will buy a shuttered truck trailer factory in Fort Madison, a Mississippi River community located 135 miles southeast of Des Moines.

The company also was provided a financial aid package that included \$1.6 million in forgivable loans and \$880,288 in tax breaks from the state, said Tina Hoffman, deputy director of the Iowa Department of Economic Development. The first blades to be manufactured at Fort Madison will be for the company's 2.3 megawatt wind turbines. The blades measure 150 feet long—half the length of a football field.

A patented technology developed by Siemens casts the blades in one piece in a single step from glass-fiber-reinforced epoxy resin. Production of the rotor blades is scheduled to start in the first half of 2007.

Siemens will employ 250 people, the company said in a statement. The new jobs provide a boost to the southeast corner of the state, where factory closings in recent years have left thousands of workers without jobs.

The property Siemens is buying was owned by truck trailer manufacturer

Wabash National Corp., which closed the plant in 2001. More than 500 employees once worked at the plant.

Siemens Power Generation CEO Randy Zwirn said that the company's wind turbine blade manufacturing production has been growing since 2004 when it expanded an existing plant and opened an additional factory in Denmark. The U.S. Department of Energy's goal is to get 6 percent of the nation's electricity from wind by 2020.

Iowa has nearly 900 wind turbines capable of producing 836 megawatts of electricity, enough to power about 226,000 average homes, according to the American Wind Energy Association. Planned projects would add another 120 turbines capable of generating and additional 249 megawatts of electricity.

Market for ZEH Homes Seen as Early as 2012

Although Zero Energy Homes (ZEH) have yet to make much of a dent in the new home marketplace because of their cost, market penetration of high-efficiency homes with solar energy systems has already begun and will continue in certain areas where financial incentives are provided, Thomas Kenney, vice president of contract research for the NAHB Research Center, said last month.

Addressing members of the Construction Marketing Research Council, Kenney reported on the driving forces behind the anticipated proliferation of highly-efficient ZEH through the year 2050, drawing on research in the center's special report on "The Potential Impact of Zero Energy Homes." Kenney said that many ZEH homes exist today, proving that they are technically feasible. Connected to the utility grid, the homes combine highly energy-efficient design and technology with solar electric and thermal systems to produce as much energy as they use on an annual basis, resulting in net zero energy consumption and a dramatic reduction in greenhouse gas emissions.

SOURCE:

www.nbnnews.com/NBN/issues/2006-11-13/Research/index.html

Energy Firms Come to Terms With Climate Change

While the political debate over global warming continues, top executives at many of the nation's largest energy companies have accepted the scientific consensus about climate change and see federal regulation to cut greenhouse gas emissions as inevitable.

"We have to deal with greenhouse gases," John Hofmeister, president of Shell Oil Co., said in a recent speech at the National Press Club. "From Shell's point of view, the debate is over. When 98 percent of scientists agree, who is Shell to say, 'Let's debate the science'?"

Hofmeister and other top energy company leaders, such as Duke Energy Corp.'s chief executive, James E. Rogers, back a proposal that would cap greenhouse gas emissions and allow firms to trade their quotas.

Paul M. Anderson, Duke Energy's chairman and a member of the president's Council of Advisors on Science and Technology, favors a tax on emissions of carbon dioxide, the most prevalent greenhouse gas.

"If we had our druthers, we'd already have carbon legislation passed," said John L. Stowell, Duke Energy's vice president for environmental policy. "Our viewpoint is that it's going to happen. There's scientific evidence of climate change. We'd like to know what legislation will be put together so that, when we figure out how to increase our load, we know exactly what to expect."

Exxon Mobil Corp., the highest-profile corporate skeptic about global warming, said that it was considering ending its funding of a think tank that has sought to cast doubts on climate change. And the company announced that it will contribute more than \$1.25 million to a EU study on how to store carbon dioxide in natural gas fields in the Norwegian North Sea, Algeria and Germany.

The Democratic takeover of Congress makes it more likely that the federal government will attempt to regulate emissions.

These changes come as Democratic leaders prepare to take over key committees on Capitol Hill. Sen. Barbara Boxer (D-Calif.), who calls global warming "the greatest challenge of our generation," will replace Sen. James M. Inhofe (R-Okla.) as chairman of the Senate Environment and Public Works Committee. Inhofe refers to global warming as a "hoax."

One reason companies are turning to Congress is to avert the multiplicity of regulations being drafted by various state governments. California is drawing up its program. Other states are also contemplating limits.

SOURCE:
Steven Mufson and Juliet Eilperin
Washington Post, Nov. 25, 2006
www.washingtonpost.com

Rising Son: For Chinese Tycoon, Solar Power Fuels Overnight Wealth

WUXI, China -- When he arrived in Australia 18 years ago as a physics student, Shi Zhengrong scraped by on a meager stipend from the Chinese government that he supplemented by working at a restaurant.

A doctorate, several patents, two solar-power companies and a \$455 million initial public offering later, Dr. Shi is now one of the richest people in China.

Suntech Power Holdings Co., the company he founded in 2001 has quickly become one of the world's largest producers of photovoltaic equipment, which converts sunlight into electricity. The company's combination of first-world technology and developing-world prices helped it gain market share from more-established, and expensive, producers.

Dr. Shi's wealth currently is valued at around \$1.7 billion. It is, by some estimates, the largest private fortune of anyone living in mainland China. On a list of the 500 richest people in China, compiled by the Chinese-language New Fortune magazine, Dr. Shi debuted this year at No. 1.

SOURCE: Andrew Batson
The Wall Street Journal, Oct. 12, 2006

California Banks Bank on Green

SAN FRANCISCO -- Former U.S. Bancorp vice chairman Daniel Yohannes has joined several veterans of the San Francisco financial community to launch what they call the country's first commercial bank targeting green industries.

Environmental groups such as the Rainforest Action Network have been waging noisy campaigns to pressure the largest banking companies, including Wells Fargo & Co. of San Francisco, to do more to protect the environment. At least 41 large companies, including Wells Fargo, HSBC Holdings PLC, and Citigroup Inc., have signed the Equator Principles, which set guidelines for reviewing the environmental impact on multimillion loans.

New Resource plans to focus on lending to small and midsize businesses. It will seek opportunities among environmentally friendly businesses, "as exemplified by companies in the organic, clean energy, and green real estate sectors," according to the prospectus for the bank's initial share offering, completed last month.

SOURCE:
Jim Cole, American Banker, Oct. 13, 2006
www.americanbanker.com

ISEA Thanks Chicago and Illinois for Funding

The Illinois Solar Energy Association gratefully acknowledges the funding support it has received from the City of Chicago's Department of Environment and the Illinois Department of Commerce and Economic Opportunity's Energy and Recycling Bureau.

We particularly wish to thank Commissioner Sadhu Johnston, Deputy Commissioner Brendan Daley and Project Manager Mike Johnson from Chicago, and Director Jack Lavin, Deputy Director Hans Detweiler, and Program Manager Bryan Clow.

— Mark Burger, ISEA President

Illinois Solar Energy Rebates Still Available



CHICAGO – Funding still is available for rebates on the cost of solar energy systems installed in Illinois. Through the Solar Energy Rebate Program, offered by the Illinois Department of Commerce and Economic Opportunity (DCEO), homeowners, small businesses, and other electric and gas utility customers in Illinois are eligible for awards of up to 30 percent of the cost of solar energy system installations, with a maximum grant of \$10,000 per customer. ILDCEO recently has released its latest guidelines for the solar thermal grants of eligibility for 30 percent of the cost of a large system up to \$400,000. The agency also has a grant for developing (not including material or installation) costs of a wind energy system of up to \$25,000.

"As energy bills are continuing to climb, now is a great chance for families and businesses across Illinois to look to the sun to save money. Relying more on homegrown energy sources like solar power will not only make our air cleaner to breathe, but it will also put more people to work. Solar power is a viable and better option than importing energy from other countries," Gov. Blagojevich said, as he announced the funding last year.

The Energy Policy Act of 2005 includes 30 percent federal tax credits that are also available for residential and commercial solar energy projects. The federal tax credits are capped at \$2,000 for residential systems, but are not capped for business taxpayers. Applicants for the DCEO Solar Energy Rebate Program are encouraged to seek both the federal tax credit, as well as the state rebate if eligible.

For further information or to download applications, call 217-785-3416, call 217-785-3416 or visit ILDCEO's Energy and Recycling Bureau website at www.illinoisenergy.org.

Please direct comments and questions to:
Illinois Solar Energy Association (ISEA)
P.O. Box 634, Wheaton, IL 60189-0634
(630-260-0424)
www.illinoisolar.org/contact

Upcoming ISEA Events

On **Feb. 10**, the ISEA Winter membership meeting will be at Evacuated Tube, 526 Ashland Drive, River Forest, Ill.

An **April 7** meeting/tour will be held at the Governors State University, University Park, Ill. The university boasts one of the largest solar thermal systems in the state of Illinois, to heat its hot water system and pool.

The solar system has 27 thermometers and four digital displays to help visitors observe the operation.

From the CSP On-line Information Request Form

Q: I'm researching how solar-power-generating structures are taxed in Illinois, generally.
– Submitted by Jacob F.

A: They are taxable, but only comparable to any other appliance for a residence or business, like a rooftop air conditioner, which is an assessed value, not a production value. PV systems are a cost reducer, like insulation. There are no multi-megawatt utility-scale installation "commercial" PV systems in Cook County whose purpose is to generate production revenue.

–Mark Burger, ISEA President

Illinois Solar Energy Association Board of Directors

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Membership information, updated information, and assistance in locating resources can be obtained on ISEA's website:

www.illinoisolar.org

ISEA Offers Solar 101, Wind 101 Workshops



Are you thinking about investing in a solar or wind energy system, but want to be able to compare all the options?

Do you have friends, neighbors, prospective customers or anyone asking about all kinds of info about solar that you can't answer or just takes a lot of time?

The Illinois Solar Energy Association, a 501-C-3 organization dedicated to educating the public about solar, wind and other forms of renewable energy, will be conducting workshops in the Chicago metropolitan area this summer and fall.

The workshops, called **Solar 101** and **Wind 101**, will provide comprehensive and generic information on how solar energy can be used. The workshops will be held on Saturday mornings and are designed for the following audiences:

- Home and business owners, and decision makers for public and non-profit facilities who are considering solar and wind energy systems for their buildings.
- Architects, engineers, realtors, developers, contractors, government officials and other professionals who are seeking basic information about solar and wind energy systems.

The workshops will cover a basic overview of how solar and wind energy systems work in Illinois, the types of systems that provide heating, hot water, cooling and electricity, how to choose between different types of systems, economics and regulatory issues.

Over 160 people took Solar 101 in 2006, and we look forward to helping many more with Solar 101 and Wind 101 in 2007.

Information on dates, locations, costs & registration, contact:

www.illinoisolar.org/contact
(708) 524-0799 (or)
(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.

Save Money & the Environment



Make a smart investment in your home and future. With soaring energy prices, State Rebates up to **\$10,000**, along with Federal Tax Credits up to **\$2,000**, now is the time to put the sun to work for you.

Our systems work with your existing heating equipment. Find out today how much you can save with clean, reliable and affordable solar energy.

Solar energy is also terrific for landlords, businesses and pools.

 **SOLAR SERVICE** INC.
RENEWABLE ENERGY SPECIALISTS - SINCE 1977
847-677-0950 solarserviceinc.com

Congratulations to the ISEA
on another successful year
from the

 **Illinois League of Conservation Voters**
A better environment, one candidate at a time.

ILCV is a bipartisan organization devoted full time to its mission of electing a pro-environment political majority in Illinois.

In addition to campaigning, our philosophy is to promote sustainable economic development.

To learn more or become a member
call 312-731-6108 or
visit www.lcvillinois.org.



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• Conservation • Healthy Living Environment*

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• Innovative Multi-Media Marketing • Prominent
Internet Presence • World-Wide Relocation



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Phone: 312-382-8440
Fax: 312-382-8442
Email: wau@lmglasfiber.com
Web: www.lmglasfiber.com



Advanced Geothermal Plumbing & Heating, LLC

Dirk Dypold, Manager
323 S. Commonwealth Ave.
Elgin, Illinois 60123
Phone: 847-695-1657
Email: geodd@sbcglobal.net
Web: www.advancedgeothermal.com

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>Able Distributors Piotr Zelasko 0N246 Cumnor Ave. Glen Ellyn, IL 60137 Phone: 773-889-5555 Email: pz@abledistributors.com Web: www.abledistributors.com</p>	<p>All Town HVAC & R. Inc J. Jorge Ramirez 1000 W Diversey Pkwy Suite 3-E Chicago, IL 60614 Phone: 312 925-3828 Email: jjorgerc@aol.com</p>	<p>Becker Renewable Energy Bil Becker Renewable Energy Engineer 2155 Wolpers Road Park Forest, IL 60466 Phone: 262-642-4707 Fax: 262-642-4707 Email: bil@aeritecture.com</p>
<p>Birkestrand Corp. OJ Birkestrand 105 9th St Rock Island, IL 61201 Phone: 312-981-2815 Email: info@rabbitttool.com Web: www.rabbitttool.com</p>	<p>Building Energy / Jim Gill Associates, LLC Jim Gill 850 S Kenilworth Ave Oak Park, IL 60304 Phone: 708-969-0345 Email: james.t.gill@sbcglobal.net</p>	<p>Chicago Green Power Foundation Rick Prohov 30 N. LaSalle St. Suite 4300 Chicago, IL 60602 Phone: 312-807-3965 Email: rprohov@chigreen.org</p>
<p>Ebener Construction/Sustainable Building Systems LLC Paul Ebener 2989 E 419th Rd LaSalle, IL 61301 Phone: 815-343-5014 Email: clebener@hughes.net</p>	<p>Evolution Engineering John Dorfman 1576 Ridge Ave. Apt. 703 Evanston, IL 60201 Phone: 847-523-4997 Email: johnd@evo-engineering.com</p>	<p>Exposition Management International Kathy Quasey 1126 W. Morse Ave. Chicago, IL 60626 Phone: 773-274-8748 Fax: 773-274-8744 Email: kquasey@comcast.net Web: www.expositionmanagementintl.com</p>
<p>Habi-Tek Tom DeBates 524 Summit St Geneva, IL, 60134 Phone: 630-262-8193 Email: habitek83@yahoo.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>Howard Alan Architects 849 Armitage Ave. Chicago, IL 60614 Phone: 773-929-2121 Fax: 773-929-2122 Email: h.alan@howardalanarchitects.com Web: www.howardalanarchitects.com</p>
<p>Kestrel Development Co. Mark Burger 1042 Gunderson Ave Oak Park, IL 60304 Phone: 708-267-7965 Email: info@kestreldevelopment.com Web: www.kestreldevelopment.com</p>	<p>Klimatech, LLC Dorelian Comanescu 5256 N Cicero Ave Chicago, IL 60630 Phone: 773-744-1989 Email: dorelian@hotmail.com Web: www.klimatechllc.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>Midstate Renewable Energy Services Bill Fabian PO Box 6345 Champaign, IL 61826-6345 Phone: 217-398-6601 Fax: 217-398-8701 Email: info@midstatepower.com Web: www.midstatepower.com</p>	<p>NekoluxSolar John Berton 4807 N Hoyne Chicago, IL 60625 Phone: 773-334-7529 Email: nekoluxsolar@gmail.com Web: www.nekoluxsolar.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>

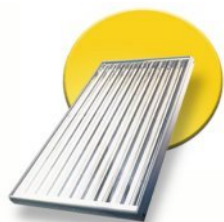
ISEA BUSINESS MEMBERS

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<p>ReUselt Center Monica Jenkins 213 W. Walnut St. St Charles, IL 60174 Phone: 630-584-1996 Email: monica@mvnia.org Web: www.reuseitcenter.com</p>	<p>Robert Bair Services Plumbing Heating Air 447 Rogers St. Downers Grove, IL 60515 Phone: 630-964-1700 Email: rybair@hotmail.com Web: www.bairservices.com</p>	<p>ShoreBank Joel Freehling, Manager 4659 S Cottage Grove Chicago, IL 60653 Phone: (773) 420-4336 Fax: (773) 420-4780 Email: joel_freehling@sbk.com Web: www.sbk.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>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: mwwpv@stelle.net Web: www.sunwize.com</p>	

ISEA CHARTER BUSINESS MEMBER

SHAMROCK GREEN ELECTRIC



Shamrock GREEN Electric,
a division of
Sedco/Shamrock
Electric, Inc., is
dedicated to
installing systems
powered by

renewable energy. Solar energy is currently

the most cost-effective way to generate your own energy and regain more control over your energy costs.

Two of the top advantages to solar energy are tax incentives and the opportunity to sell energy back to the utility. Plus, as technology advances, the payback time on a complete system continues to shrink.

Shamrock GREEN Electric has partnered with Solar Network to be our design consultant and SunWize Technologies to be our equipment supplier. All together you can have a turn-key approach to designing and building solar system that's right for you. Turn to Shamrock GREEN Electric.

With half a century of success in the greater Chicagoland area, Sedco/Shamrock Electric, Inc. and its subsidiaries is a leader in electrical contracting for the full range of energy/electrical projects. From design/build to retrofitting, Shamrock Electric is your source for expert, safe, and high-tech energy/electrical contracting.

You Want Shamrock Electric

You're looking for sharp customer focus, superior workmanship and excellence in project design, management and budgets from an electrical contractor. You'll get these results and more from Shamrock Electric - one of Chicagoland's and the Midwest's top electrical contractors.

You've probably heard about Shamrock Electric and its strong reputation for reliability, attention to detail, competitiveness, and forthrightness in doing business.

For nearly 50 years, word about Shamrock Electric has spread from our numerous, enthusiastic customers - the majority of which being loyal, repeat customers from all areas of building design and construction.

You want more than competitive bids on quality, service and price. You want high value for your investment. *You want Shamrock Electric.*

Please tour our Web site to learn more, then call us about your next project. It would be our privilege to work with you.

Email: kevin@shamrockelectric.com
Web: www.shamrock-GREEN-electric.com

UPCOMING EVENTS

February 10 <i>Saturday, 10 am – noon</i>	ISEA Membership Meeting <i>Solar Evacuated Tube Residence – 526 Ashland, River Forest, IL</i>	
April 7 <i>Sat., 9:30 am – 1 pm</i>	ISEA Membership Meeting <i>Hall of Honors, Governors State University – University Park, IL</i>	See Page 7 www.govst.edu
June 9 <i>Sat., 10 am – noon</i>	ISEA Membership Meeting <i>Evelyn Pease Tyner Center – Glenview, IL</i>	
March 3 <i>Sat., 9:00 am – noon</i> <i>(solar)</i> <i>12:30 pm – 3:30 pm</i> <i>(wind)</i> March 10 <i>Sat., 9:30 am – 12:30 pm</i> <i>(solar)</i> <i>1:30pm – 4:30 pm (wind)</i> May 5 <i>Sat., 9:30 am – 12:30 pm</i> <i>(solar)</i> <i>1:30pm – 4:30 pm (wind)</i> May 19 <i>Sat., 9:30am – 12:30 pm</i> <i>(solar)</i> <i>1:30pm – 4:30 pm (wind)</i> July 28 <i>Sat., 9:30 am – 12:30 pm</i> <i>(solar)</i> <i>1:30 pm – 4:30 pm (wind)</i>	ISEA Solar 101, Wind 101 Workshops <i>Chicago South- Illinois</i> <i>Batavia, Illinois</i> <i>Rockford, Illinois</i> <i>Oak Park, Illinois</i> <i>Chicago, Illinois</i>	See Page 7 www.illinoissolar.org THESE ARE CONFIRMED SITES AS OF THIS PRINTING. MORE LOCATIONS WILL BE ADDED AND ONLINE REGISTRATION WILL BE AVAILABLE.
June 28 – 29	Illinois Wind Conference <i>Bloomington, Illinois</i>	Contact Prof David Loomis, Illinois State University, dloomis@ilstu.edu
July 7 – 12	Solar 2007 Conference <i>American Solar Energy Society - Cleveland, OH</i>	www.ases.org www.solar2007.org
August 11 – 12 <i>10 am – noon</i>	Illinois Renewable Energy Fair <i>Oregon, Illinois</i> <i>ISEA Membership Meeting August 11</i>	www.illinoisrenew.org
October 6 <i>10 am – 4 pm</i>	National Tour of Solar Buildings <i>ISEA members will be assisting on the tour</i>	See Page 3 www.illinoissolar.org/contact
December 8 <i>10 am – 2 pm</i>	ISEA Membership Meeting Chicago Center for Green Technology	

The fourth annual
DuPage Environmental Summit
Is being held on

Wednesday, January 10, 2007
11:30 am –5 pm

at the
Benedictine University in Lisle, IL

This year's topic is
"How To Save Energy Costs and Help The Environment."

The ISEA will have an exhibit.

For more information, visit www.illinoissolar.org/events/2007/DuPage_Enviro_Summit_brochure_07.pdf

For directions:
www.ben.edu/about/directions.asp



Illinois Solar Energy Association
P. O. Box 634
Wheaton, IL 60189-0634

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Renew your membership faster & easier with ISEA's
On-line Renew & Pay page: <http://www.illinoissolar.org/renew>