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Editor: [Jane Pulaski](#)

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The NABCEP Newsletter highlights activities about its certificants and other stakeholders. There is no fee for this newsletter which is distributed six times/year and published on [NABCEP's website](#).

If you have comments about this newsletter, email Jane Pulaski at [janep@irecusa.org](mailto:janep@irecusa.org).

As always, thanks for your interest in and support of NABCEP.

*Jane Pulaski*  
Editor

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### **From the Chair**

***By Ezra Auerbach***

NABCEP is growing and maturing; we have over 500 PV Certificants and the pool of Solar Thermal Certificants stands at 72. The Entry Level Certificate of Knowledge has proven to be a high-demand certificate – currently, it's offered at 32 schools and training institutions. We're proud to say that NABCEP is emerging from its crucial early years to becoming a highly-regarded certification organization, thanks to a steadfast board dedicated to developing strategies to keep NABCEP moving ahead. In fact, one of our foremost challenges moving forward is developing and articulating a plan for NABCEP's growth and operations over the next several years.

Last year, NABCEP was fortunate to receive support from the New York State Energy Research and Development Authority (NYSERDA) to hire [Think Energy](#) to help NABCEP draft a strategic business plan to guide the organization through the next four to seven years.

Through an extensive consultation process which included interviews with board members, stakeholders, certificants and education providers, Think Energy produced a

draft extensive and far-ranging strategic plan. After the Executive Committee reviewed it, and based on its suggestions and responses, a second, more detailed draft was developed and presented to the Board for its consideration.

The plan focuses on how NABCEP can grow to sufficient scale and scope to become self-sustaining.

Currently, NABCEP's funding comes from federal (Department of Energy) and state grants (NYSERDA), and to a lesser degree, from certification and educational provider fees. The draft plan strongly recommends widening the range of NABCEP's funding sources. It also recognizes the need for a considerable increase in marketing the value of NABCEP's certifications to consumers and its certificants.

Now our work really begins. This is where you come in.

NABCEP's board and committee chairs will meet in Washington, D.C. from June 27-29 for a strategic planning meeting to pore over the draft Business Plan. It's our goal to emerge from that meeting with a clearly articulated vision for NABCEP's future. Think Energy will facilitate, and based on our recommendations, they'll produce a final version for consideration by the full NABCEP board.

If you're a NABCEP certificant, or one of our education providers, if you're planning on sitting for the September exams, or just interested in NABCEP, we want to know your ideas for NABCEP as it moves forward. Just one request: keep them brief – no more than a page please. I'll collect all submissions and take them to our June meeting. We want as many voices at the table as possible as we go through this important long-term planning process.

I hope you'll take a few minutes and send in your suggestions and inspirations for the future of NABCEP. I look forward to reading them all.

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**Installer's Corner: Updated Job Trends Index: Listing of Recent Reports on Labor Forecasts for the Renewable Energy Industries, June 2008. *Prepared by the Interstate Renewable Energy Council (by Jane Weissman)***

Since 2003, the Interstate Renewable Energy Council (IREC) has been tracking reports on labor forecasts and job trends. This Index is usually updated once a year. If you know of other reports that should be added, please [contact IREC](#).

**Recent Reports**

[Renewable Energy and Energy Efficiency: Economic Drivers for the 21st Century](#) (November 2007). This report estimates the size and composition of the Renewable Energy and Energy Efficiency industries including technology, sales, tax revenue, jobs, occupations and skills. It also forecasts the growth of these industries to 2030 under three scenarios. Management Information Services, Inc. for the American Solar Energy Society.

[Defining Energy Technologies and Services](#) (March 2008).

This report addresses the energy workforce needs by providing educators with information needed to develop relevant curriculum that prepares students for energy technologies and services careers. One of the most widely used tools in the report is the "Energy Technologies and Services" careers chart, which provides a snapshot of the occupational areas and jobs. The Advanced Technology Environmental and Energy Center (ATEEC).

[California's Solar Industry Workforce](#) (April 2008).

This report identifies solar firms in California, identifies solar occupations that are most relevant to community colleges, develops projections of future employment growth and defines skill sets and education requirements needed for solar occupations. Economic Workforce Development through the California Community Colleges.

[Green-Collar Jobs in America's Cities](#) (2008).

This publication outlines strategies for developing green-collar job initiatives and pathways out of poverty at the local level. The report describes a 4-step approach for local initiatives. It includes 14 case studies of successful green-collar job training or policy in 11 communities on both coasts, the Midwest, and the South. Green For All, in partnership with the Apollo Alliance, Center for American Progress, and the Center on Wisconsin Strategy.

[Growing Green-Collar Jobs: Energy Efficiency](#) (December 2007).

This is a first in a series of reports that explore how sustainability can be an economic engine for New York City. Prepared for the New York City Apollo Alliance, each report in the series is based on secondary research and interviews with business, labor, civic, community and environmental leaders. Following reports will include Clean Energy: Renewable Energy systems (which will include photovoltaics and solar thermal). Urban Agenda.

[Road to Energy Independence](#) (October 2007).

This report documents the potential of a national Renewable Electricity Standard to create thousands of jobs making parts for wind turbines, solar panels and other clean energy technologies. There are summary reports for Alabama, Arkansas, Florida, Illinois, Indiana, Iowa, Louisiana, Michigan, Minnesota, Missouri, New Jersey, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, Washington and Wisconsin. There are more detailed reports for California, Massachusetts, Michigan, Ohio, Pennsylvania and Wisconsin. Produced by the Blue Green Alliance and the Renewable Energy Policy Project.

[Massachusetts Clean Energy Industry Census](#) (August 2007).

The census identified 556 entities in Massachusetts engaged in renewable energy, energy efficiency and demand response, consulting and support, and university research related to clean energy. Employment in these firms, most of which are young and small, was estimated at 14,400, with an annual projected job growth rate of 20 percent. Prepared by Global Insight of Lexington for the Massachusetts Technology Collaborative's Renewable Energy Trust.

[Opportunity on the Horizon: Photovoltaics in Texas](#) (June 2007).

This white paper discusses the potential for economic growth in Texas through the creation of a solar power industry. The report concludes that the state could create

123,000 new high-wage manufacturing and electrical services jobs by 2020 by actively moving toward solar power. IC2 Institute at the University of Texas at Austin.

## **Other Reports**

[The Work That Goes Into Renewable Energy](#) (November 2001).

This report uses survey data to estimate direct jobs created by wind, photovoltaics, and biomass co-firing energy projects. Jobs are reported by skill type and occupational category. Renewable Energy Policy Project.

[Labor Calculator](#)

Tool that calculates the number of direct jobs resulting from renewable energy development under Renewable Portfolio Standard legislation or other programs to accelerate renewable energy development. Renewable Energy Policy Project.

[Wind Turbine Development: Location of Manufacturing Activity](#) (September 2004).

This report shows that a substantial portion of the benefits from wind energy will result from manufacturing the equipment and will flow to those states and localities that either have or can develop the firms to supply the subcomponents. Renewable Energy Policy Project.

[Solar PV Development: Location of Economic Activity](#) (January 2005). Development of solar PV will lead to jobs and investment in areas of the country that manufacture the parts that make up a PV system, in addition to locations that install the systems. Renewable Energy Policy Project.

[Renewable Energy and State Economies](#) (May 2003).

The Council of State Governments.

[Energy for Colorado's Economy: Creating Jobs and Economic Growth with Renewable Energy](#) (February 2007).

Environment Colorado Research and Policy Center. Travis Madsen, Timothy Telleen-Lawton, Will Coyne, and Matt Baker

[Energizing Michigan's Economy: Creating Jobs and Reducing Pollution with Energy Efficiency and Renewable Electric Power.](#) (February 2007).

Environment Michigan Research & Policy Center. Travis Madsen, Timothy Telleen-Lawton and Mike Shriberg.

[Putting Renewables to Work: How Many Jobs Can the Clean Energy Industry Generate?](#) (April 2004).

The Renewable and Appropriate Energy Laboratory at University of California, Berkeley. Daniel M. Kammen, Kamal Kapadia & Matthias Fripp.

[Component Manufacturing: Ohio's Future in the Renewable Energy Industry](#) (October 2005). Renewable Energy Policy Project State Report.

[Component Manufacturing: Wisconsin's Future in the Renewable Energy Industry](#) (January 2006). Renewable Energy Policy Project State Report.

[The Economic and Environmental Impacts of Clean Energy Development in Illinois](#) (June 2005). University of Illinois at Chicago.

[Renewable Work: Job Growth from Renewable Energy Development in the Mid-Atlantic](#) (Spring 2004). NJPIRG Law and Policy Center, Dave Algoso and Emily Rusch, authors.

[Economic Impact Analysis of a 20% New Jersey Renewable Portfolio Standard](#) (December 2004). Center for Energy, Economic and Environmental Policy at Rutgers.

[Economic Impact of Renewable Energy in Pennsylvania](#) (March 2004). Black & Veatch for the Community Foundation for the Alleghenies.

### **State Incentives – [DSIRE database](#)**

The Database of State Incentives for Renewable Energy (DSIRE) is a comprehensive source of information on state, local, utility, and selected federal incentives that promote renewable energy. Incentives are listed by state and type.

Summary tables provide an overview of state, local and utility incentives available in each state with links to incentive summaries. The Financial Incentives table provides federal government incentive information as well.

Color-coded maps have been developed using the DSIRE database to provide a geographical view of the availability of selected financial and regulatory incentives across the U.S.

*Index last updated: June 1, 2008*

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### **Featured Certificant: Ed Murray, Aztec Solar, Inc., and ELM Distribution**

Ed Murray's been involved with the solar industry since 1978. A recent NABCEP solar thermal certificant (2007), Ed is a California-licensed building and solar contractor. He was involved with the original writing and implementation of the California Solar license and helps the California Contractors State License Board rewrite the test every five years.

Since 1984, Ed has served as a Director of Cal SEIA, as its secretary, treasurer, vice president, and chair of its Ethics Committee (1987-2000). Currently, he's treasurer. Recognizing his commitment and dedication to solar, Ed was voted California's "Solar Man of the Year" in 1993.

He has been involved in the formulation of legislation and policy advocacy on numerous solar energy related issues in California, as well as on the federal level. His office is located in Sacramento, California, which serves the industry well as he is called upon to testify on solar issues at the California Legislature and Energy Commission. Mr. Murray operated solar thermal companies in Northern California and recently was the Solar Thermal Director of [SunTechnics Energy Systems](#). He is the President of Aztec Solar Inc. and ELM Distribution, a solar wholesale company.

*NABCEP: Ed, you've got quite the resume: in solar energy industry since 1978, active with Cal SEIA, voted California's Solar Man of the Year, recent NABCEP solar thermal certificant. Do you sleep?*

EM: I do work a lot; usually six days/week. I can say that I've been directly involved in the installation of more than 7,500 solar systems, including residential and commercial water heating, space heating and swimming pool heating, using products from a wide variety of manufacturers.

*NABCEP: Like I said, do you ever sleep? You became NABCEP-certified for solar thermal in 2007. What made you decide to become certified?*

EM: Of course I sleep. When I do, I dream of having a world which is less dependant on fossil fuels and more upon solar heating. I live, breathe and drink solar. I decided to become certified because I wanted to add another layer of professionalism to my resume. I am proud to be a NABCEP certificant.

*NABCEP: Are your customers aware of NABCEP as a value-added proposition for them? Have you found NABCEP to be a marketing advantage for you?*

EM: My sales representatives proudly boast of my NABCEP Certification. It definitely gives us the competitive edge versus our competition.

*NABCEP: Does that huge number of systems you were involved with installing include some that weren't yours? Were there some that you inherited?*

EM: As you can imagine, Northern California has every type of solar thermal system imaginable. In addition to the systems I installed personally, I also "adopted" orphaned systems and maintained many of them.

*NABCEP: I understand you were involved with SMUD's water heating program.*

EM: Yes, I was a major participant in that program where SRCC certification was first applied. I've also been involved in the development and introduction of San Diego's SWH Pilot Program where SRCC is also required.

*NABCEP: Since you've been in the industry for so long, how do you find today's solar customers: are they educated about the technologies, or do you spend a lot of time with them to bring them up to speed?*

EM: Unfortunately, people still remember the early days of solar, so we still educate them how far this industry has come with organizations and certifications like SRCC and NABCEP. Today, we market heavily using all types of media. We find that most customers are interested in the savings solar provides. Our trained sales force does a stellar job educating today's consumers about the benefits of solar energy.

*NABCEP: Is this with Aztech Solar or ELM Distribution?*

EM: This is primarily with regards to Aztec Solar. I do tell the contractors to whom ELM sells about the benefits of being NABCEP-certified.

*NABCEP: You've been in the business so long, and you've seen a lot of ups and downs in the industry. What's been your biggest surprise as a solar thermal installer?*

EM: I would say that as an industry, we're finally recognized as an alternative to fossil fuels. It goes without saying it's been a long, rocky road.

*NABCEP: So now that you're a NABCEP-certified installer, what do you see as challenges for the organization? Perhaps you're interested in becoming more involved with NABCEP?*

EM: The challenges NABCEP faces are the training of installers at the entry and intermediate areas of solar. There are not many places where a person can become educated in solar. I would love to help in any way possible to get the message out that NOW is the time to get certified!

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## **Special NABCEP Report: NABCEP Goes to ASES 2008**

*By Karen Christopher, Operations Manager, NABCEP*

With over 4,600 registered attendees, The American Solar Energy Society's SOLAR 2008 Conference in San Diego, California from May 3-8 explored the theme "Catch the Clean Energy Wave." Sessions addressed the growing movement towards sustainable energy as a key component in climate recovery, a healthy economy, a secure energy future, and the trillion-dollar opportunity it brings.

Bad weather in Chicago delayed Operations Manager Karen Christopher's arrival, so NABCEP Board member Les Nelson and solar thermal certificant Ed Murray manned the booth the first day. NABCEP vice-chair Jane Weissman represented NABCEP at several presentations throughout the conference.

Because traffic at the NABCEP booth was always brisk, Karen was unable to attend any of the sessions. "NABCEP's largest number of certificants are from California," said Christopher. "We had the usual inquiries like, 'how do I get certified,' and 'where do I get training,' to college professors interested in establishing training courses leading to the NABCEP Entry Level Certificate of Knowledge exam."

Helping Karen at the booth was newly-certified Ed Murray. "Ed was such a go-getter," said Christopher, "with tons of enthusiasm who seemed to know everyone who wandered by the booth. It was just great having him help out."

Karen said that she ran out of national exam applications early. "I could have brought tons more of both PV and solar thermal applications," she said. "Next year."

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**Featured Board/Technical Committee Member: Don Loweberg, [Off Line Independent Energy Systems](#), North Fork, CA**

This issue, we talk with Don Loweberg, current NABCEP board member and NABCEP-certified PV installer (May 2004). Don, a former chair of NABCEP's board of directors, now represents the certificants on the board. In addition to running his successful business, OffLine Independent Energy Systems, Don also writes a column for Home Power magazine. You can read his article for the June/July issue, [Protecting the Interests of PV Pros](#). Here's our conversation.

*NABCEP: Don, you've been in the renewable energy industry for a long time. How long have you been on the NABCEP board, and how did you come to being a board member?*

DL: I joined the NABCEP board in 2004. My intention was to represent the interests of PV installers.

*NABCEP: So four years...that's a long time to watch NABCEP grow. What would you say have been some of the changes NABCEP has experienced as a young certifying organization?*

DL: NABCEP has continuously sought and incorporated the highest level professional support in developing our certifications. NABCEP has recently been awarded ANSI certification and most recently contracted with Think Energy to act as our management team. The goal is for NABCEP to move to the next level and expand our certification programs while developing additional financial support mechanisms.

*NABCEP: Absolutely. So apart from finding supplemental funding sources, what do you think are some other critical issues confronting NABCEP?*

DL: As the number of certificants increases, the logistics of administering tests, maintaining financial viability while developing new programs and seeking financial self-sufficiency will continue to be challenging issues.

*NABCEP: How important is it that people have a positive impression of NABCEP?*

DL: Very important. "People" can be broken down to at least four communities; installers as potential certificants, purchasers of renewable energy systems, equipment manufacturers and investors. NABCEP certification's value must be recognized by all user communities.

*NABCEP: As with any organization, whether emerging or well established, there are bound to be obstacles. What kind of obstacles has NABCEP experienced, and how has the board helped to overcome them?*

DL: Because the NABCEP board is an all-volunteer board, finding time for the ever increasing number of tasks and new programs has been and continues to be challenging. The board has continuously sought and brought on board high-level professional support to deal with our success. And we're always looking to our certificant community to get more involved in NABCEP. New, fresh eyes and ideas are critical to the long-term health and vitality of any organization.

*NABCEP: What issues does the board see coming down the pipe?*

DL: Certainly the demand for trained installers will continue to increase for many years. High quality certification for the best installers and designers will be an important part of the development of a viable renewable energy workforce and industry.

*NABCEP: What has been the biggest surprise for you as a NABCEP board member?*

DL: Not really a surprise, but it has been my extreme pleasure to get to work with and get to know the other board members and committee members contributing to NABCEP. We've come a long way over the past five years. I'm optimistic that NABCEP will continue to grow and succeed as the one of the top certifying organizations for green collar jobs.

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## **Entry Level Certificate Program**

*By Karen Christopher, Operations Manager, NABCEP*

NABCEP's Entry Level program reached a milestone in May, welcoming it's 40th Entry Level Provider institution. The following are NABCEP's latest Entry Level Providers:

- Los Angeles Trade Technical College, Los Angeles, CA
- Northwestern Michigan College, Traverse City, MI
- Fond du Lac Tribal & Community College, Cloquet, MN
- Salt Lake Community College, Salt Lake City, UT

To date, over 1,000 students nationwide have taken the NABCEP Entry Level Certificate of Knowledge Exam.

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## **Continuing Education/Recertification**

*By Karen Christopher, Operations Manager, NABCEP*

As you know, recertification is required every three years for NABCEP certificants; requirements include 18 hours of Continuing Education Units (CEU's).

NABCEP welcomes its latest Continuing Education Providers:

- Wiley Electronics LLC, Saugerties, NY
- Midwest Renewable Energy Association (two new courses approved)
- Electrical Training Center, Inc., Lindenhurst, NY
- Xantrex Technology, Inc. (two new courses approved)
- Fronius USA, LLC (two courses)
- Conergy, Inc. (two courses)

For information on these and other NABCEP PV and Solar Thermal Continuing Education courses, refer to the [Continuing Ed & Recertification section](#) of NABCEP's website.

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## Employment Opportunities

### NYSERDA: Variety of Positions Available

[NYSERDA offers ongoing recruitment opportunities](#). Currently, it has openings for:

- ❖ Project Manager, Home Performance Programs, Residential Efficiency and Affordability Program (REAP), (Albany)
- ❖ Project Coordinator, Research & Development, Environmental Research, (Albany)
- ❖ Account Clerk, Finance, (Albany)
- ❖ Director of Energy Efficiency Research Programs, (Albany)
- ❖ Database Administrator (PeopleSoft Financials), (Albany)
- ❖ Programmer/Analyst (Peoplesoft Financials), (Albany)
- ❖ Project Manager, Energy Efficiency Services, (New York City)
- ❖ Project Manager, Residential Efficiency and Affordability Program (REAP), Home Performance Programs, (New York City)
- ❖ Project Manager, Residential Efficiency and Affordability Program (REAP), Multi-Family Buildings, (New York City)
- ❖ Information Technology Administrator, (Albany)
- ❖ Project Coordinator, (Albany)
- ❖ Paid Internship, (Albany)

Interested candidates should submit a detailed resume and a letter of interest to:

Recruiter@nyserda.org  
NYSERDA  
Attn: Human Resources  
17 Columbia Circle  
Albany, NY 12203-6399

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A variety of [job announcements](#) are on the NABCEP website. NABCEP lists job announcements as a service for our certificants. NABCEP does not endorse any company and is not responsible for any representations made by the companies listing job positions. Check the [NABCEP website](#) for detailed information about the current announcements.

Send any and all job announcements to [Karen Christopher](#).

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## Other News

The Next NABCEP Solar PV and Solar Thermal Installer Certification Exams will be held on September 13, 2008 at various cities across the U.S.A. Applications for that exam **must be received by July 4th, 2008**. Those applications received after July 4, 2008 will be automatically rolled over to the March 14, 2009 exam.

NABCEP encourages candidates for both the Solar PV and Solar Thermal Installer Certification Exams to complete the application electronically. [Click here](#) to start the Electronic Application Form process.

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### **NABCEP Salutes its Dual Certificants**

Congratulations to the most recent individuals who are now dual-certified after taking and passing the March 2008 exam:

- ❖ David Hippensteel, North Manchester, IN
- ❖ August Goers, San Francisco, CA

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NABCEP Operations Manager Karen Christopher asks that all Certificants check out their listings on [www.nabcep.org](http://www.nabcep.org) to ensure their contact information is accurate when consumers access the clickable map. Also, please note we are now able to associate websites with our Certificants, so please send an email to [kchristopher@nabcep.org](mailto:kchristopher@nabcep.org) if you wish to have any of your information updated.

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NABCEP is the national certification organization for professional installers in the field of renewable energy.

NABCEP issues voluntary certification credentials to those qualified professionals who satisfy eligibility requirements established by the Board of Directors.

NABCEP certification is not a professional license issued by a government agency, and does not authorize a certificant to practice.

NABCEP certificants must comply with all legal requirements related to practice, including licensing laws.

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The NABCEP News, an electronic newsletter published six times/year, serves the NABCEP-certificant and stakeholder community. There is no fee for this newsletter.

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