

Land a Green-Collar Job

Find your niche and then get all the hands-on training possible.

By DAN CHIRAS, PH.D.

It's one of the questions I hear most often during my presentations and classes on green building and renewable energy: "How do I get a job in this field?"

Job openings in green building and renewable energy have fallen off due to the recession, but there are always positions out there for people with the right qualifications. And more jobs will open as the economy recovers. I tell job seekers to get going now. The strategies I've outlined below can help you prepare for a job in the construction-related green building and renewable energy sectors, so you'll be ready for the right opportunity as soon as it's available.

1. Find Your Focus.

First, determine what industry you'd like to work in. Are you interested in green building? Renewable energy? Energy efficiency?

In any of these fields, you could find employment in design, estimating, sales, project management or construction. Green building professionals can specialize in sustainable techniques for retrofits or new construction, including design and installation of efficient systems for HVAC, lighting, water and landscaping, to name a few.

The renewable energy sector includes jobs in passive solar heating and cooling, solar space and domestic water heating, solar electricity, wind, micro-hydro, geothermal and biofuels. It helps to decide early on whether you are interested



FLORIDA SOLAR ENERGY CENTER

Often, a training organization will offer a series of classes in a particular study — for example, intro to solar electricity, intermediate solar electricity, photovoltaic (PV) system site assessment and a PV installation class. In a few weeks over the course of a year, you can complete your training, acquiring knowledge and practical experience.

in residential systems or large commercial-scale systems. In residential renewable energy, you may want to train in two or more technologies. A lot of companies in the residential renewable energy sector offer solar water-heating and solar electric systems — and sometimes small wind systems, as well. You might even want to consider site assessment for solar and wind systems as a career or a service you offer.

If you're interested in making homes and businesses more energy efficient, you'll find jobs in home energy rating, home energy audits and retrofitting.

Don't forget that green-collar jobs are available in equipment design and manufacturing, as well as marketing, accounting and all of the other positions any company needs in order to operate. Educators are sorely needed, though you need quite a lot of training and hands-on experience to be a knowledgeable trainer. See "Transfer Your Professional Skills to Solar" on

page 36 for more about landing an "office" job at a green company.

2. Get Up to Speed.

Once you have narrowed your focus, obtain as much education as possible.

Training and Certificates. If you have the time, a two- or four-year college or university degree in a related field offers a solid foundation. Numerous community colleges and technical colleges offer training in renewable energy, especially solar electricity.

Another way to get up to speed is to take short courses on renewable energy, green building or energy efficiency. The industry boasts many top-notch educational centers, such as my training center, the Evergreen Institute (evergreeninstitute.org); Solar Energy International (solarenergy.org); the Solar Living Institute (solarliving.org); and the Midwest Renewable Energy Association (the-mrea.org). The International Brother-

hood of Electrical Workers (ibew.org) also offers training and certificates for its members.

Such organizations offer one-day, two-day, three-day and even weeklong courses. You can often take a series of classes in a particular study — for example, intro to solar electricity, intermediate solar electricity, photovoltaic (PV) system site assessment and a PV installation class. In a few weeks over the course of a year, you can complete your training, acquiring knowledge and practical experience. Some programs offer certificates in green building, solar electricity or even renewable energy education.

Note that a certificate reflects that a recipient has completed a certificate program. It does not mean he or she is professionally certified (more about that below). For full details about solar credentials, see Dunlop and Weissman, “The Qualified Solar Installer,” September/October 2009 *SOLAR TODAY*, tinyurl.com/2dn8yan.

As you secure your training, be sure to sign up for hands-on courses. Practical experience will help distinguish you from a growing legion of job applicants.

To locate a renewable energy training program, check out the Interstate Renewable Energy Council’s Workforce Development web page at irecusa.org/irec-programs/workforce-development. It lists post-secondary programs and training providers by state/province.

Professional Certification. If you are interested in becoming an installer, you may also want to consider certification by the North American Board of Certified Energy Practitioners (NABCEP; nabcep.org). NABCEP offers certification in PV and solar thermal and will soon offer certification for small-wind system installers. NABCEP certification is neither a license nor official endorsement, but it’s increasingly becoming a qualification to take part in the industry, especially among incentive program administrators.

Depending on your previous experience and education, there are a number of routes by which you can obtain NABCEP certification. If you are new to the field, you’ll need to complete education and training, perform some installations and pass a written test. Check out the NABCEP web site for other avenues, for example, for electricians or individuals with engineering degrees.

If your field of choice is green building, you might consider becoming a Leadership in Energy

and Environmental Design (LEED) Accredited Professional (AP). LEED was created by the U.S. Green Building Council (usgbc.org). LEED APs provide guidance and technical advice on all aspects of residential and commercial buildings — retrofits and new construction — to builders and developers interested in creating greener buildings.

If your interests lie in energy efficiency, consider certification by the Residential Energy Services Network (RESNET; resnet.org) or the Building Performance Institute (BPI; bpi.org). Training for RESNET’s certification, which can be procured online and at a number of educational centers throughout the United States, enables one to rate new and existing homes for energy efficiency. Certified raters provide guidance on energy retrofits. BPI provides training through affiliated training centers and credentialing for residential energy-efficiency retrofit work.

Don’t forget, you can also learn a lot through reading. In recent years, there’s been a dramatic increase in the number of good books on renewable energy and green building. Check out magazines, too, like *SOLAR TODAY* and *Green Builder*.

3. Meet and Greet.

Another important step when seeking employment is to meet professionals. Shake hands. Get to know the industry’s movers and shakers in your area.

Attend local or regional meetings and the annual conferences of renewable energy and green-building organizations. You can locate state and local organizations online. The American Solar Energy Society has chapters throughout the country (check ases.org/chapters or see pages 70-71). It hosts the ASES National Solar Conference annually (ases.org), co-located with the Solar Success! training program. The U.S. Green Building Council also has an annual conference and chapters nationwide (usgbc.org). If you are interested in small wind energy systems, you may want to attend the Small Wind Conference in Stevens Point, Wis., in June each year (smallwindconference.com).

Some industry entrants find success in meeting with local professionals. Set up an appointment to talk with local green builders or owners of renewable energy or energy-efficiency companies — installers, manufacturers, consultants or whatever aspect you are interested in.

If relocating is an option, look for jobs in renewable energy hotspots — states where local incentive programs are driving the industry at a fast pace.

Remember, though, many of them are exceedingly busy. Make an appointment for a five- or 10-minute visit at their office — and stick to your word. Bring an updated resume that lists your relevant coursework, certificates or certifications and hands-on training. If the company is not hiring, you might consider offering to work as an unpaid apprentice for a month or two, if you can afford the time.

If relocating is an option, look for jobs in renewable energy hotspots — states where local incentive programs are driving the industry at a fast pace. You can read about incentives offered by various states at the Database on State Incentives for Renewables and Efficiency site (dsire.usa.org).

Finding a job in this field can be a challenge. However, if you are persistent, gain the knowledge and practical experience you need, and meet folks in the industry, your chances will improve dramatically. **ST**



Dan Chiras (danchiras@evergreeninstitute.org) is author of numerous books on residential green building and renewable energy and is director of the Evergreen Institute’s Center for Renewable Energy and Green Building (evergreeninstitute.org), which offers hands-on training for aspiring professionals.