

GREEN JOBS

A Resource Guide for Individuals with Disabilities



TABLE OF CONTENTS

Why all the interest in green jobs?

What is a green job?

Which green jobs are most likely to grow in number?

What resources are available to help people with disabilities search for green job opportunities?

What steps should be taken to request reasonable accommodation at work, in training, or in school?

Useful employment search engines

How do I find out what specific job skills are required?

How do I locate green job training and education in my community?

Conclusion

Acknowledgements/Disclaimer

Everyone is talking about "green jobs". But finding out what a green job really is, what training and education is required, and how to access these jobs can be a difficult task, especially for individuals who have a disability.

This guide is designed to direct people with disabilities and their advocates to the information and resources they need to begin an effective job search for green occupations. It addresses key questions most people have on topics including:

- The emerging green economy
- Job assistance services for people with disabilities
- Requesting reasonable accommodation on the job, or in training and education settings
- Obtaining certification in critical green skills
- Useful resources on green job training and employment



As the population of the United States increases throughout the 21st Century, many experts predict that current supplies of fossil fuels will be insufficient to meet the nation's long-term energy needs. They foresee the growth of a "green" energy sector, driven by alternative fuels from renewable sources and energy-efficient devices made possible by new technology. Energy conservation and environmental sustainability projects may also expand.

The American Recovery and Reinvestment Act of 2009 sought to spur the creation of more green jobs with \$50 billion in federal tax incentives, loan guarantees, and grants for clean energy. State incentives, increased consumer awareness, and an expected rise in the price of traditional energy sources will also encourage greater demand for workers with green skills in jobs at all levels in industries ranging from construction and manufacturing, to research & development and others.

66 LONG-TERM PROJECTIONS STILL POINT TO INCREASED OPPORTUNITIES FOR EMPLOYMENT. 99

Although the recession of 2007–2009 has slowed the rate of job growth in many industries, the rapid pace of new technology ensures that the demand for certain green jobs and skills may change dramatically within a short time. Long-term projections still point to increased opportunities for employment.

People with disabilities who are searching for work in this growing field are naturally curious about the potential job growth in energy renewal, energy efficiency, and related areas.

WHAT IS A GREEN JOB?

ost green jobs are not brand new jobs. Many are actually traditional jobs within traditional industries, such as manufacturing and construction. These jobs require strong core skills in a traditional area and, sometimes, an additional layer of **green** skills or knowledge.

While the exact definition is still being debated, the U.S. Bureau of Labor Statistics has stated that green jobs are either:

- Jobs in businesses that produce goods or provide services that benefit the environment or conserve natural resources, or
- Jobs in which workers' duties involve making their establishment's production processes more environmentally friendly or use fewer natural resources.

CORE SKILLS IN A TRADITIONAL AREA AND, SOMETIMES, AN ADDITIONAL LAYER OF GREEN SKILLS OR KNOWLEDGE. 17

Examples of jobs in firms that **produce** green products or services include solar panel manufacturing and installation jobs, weatherization workers, and scientists that develop new energy efficiency and renewable energy technologies, as well as many others. Jobs involved in developing green processes include Chief Sustainability Managers, Energy Engineers, Green Manufacturing professionals, and others.

KEY LINKS:

O*Net

http://www.onetonline.org/find/green

Job seekers can use O*Net's green jobs report to identify interesting green job titles in a wide range of industry sectors. Detailed skill profiles for each of these occupations can be found through the main O*Net Web site at http://online.onetcenter.org/.

Bureau of Labor Statistics (BLS) — Green Jobs Initiative

http://www.bls.gov/green/

More than 300 industry groups have jobs that meet the BLS definition of a green job. This link provides a valuable overview of current and future data resources for green employment.

American Association of People with Disabilities (AAPD) — Green Jobs Initiative

http://www.disabilitymentor.net/images/stories/Green Jobs/green%20jobs%20report.pdf

AAPD's guide for its Disability Mentoring Day program includes a select list of green jobs and skill requirements in industries such as transportation, energy, research & development, construction, and manufacturing. It also lists more than 35 academic and technical fields of study that can lead to "green-collar" work.



WHICH GREEN JOBS ARE MOST LIKELY TO GROW IN NUMBER?

The full range of green occupations and their growth patterns is still emerging. However, short-term growth is likely to be in areas such as **energy efficiency** and **renewable energy**, where national, state, and local governments are concentrating a range of incentives and other investments.

As oil prices continue to rise, these and other green areas are likely to grow even further. Experts agree that energy efficiency accounts for the largest share of current and future green energy jobs, with renewable energy sectors such as wind, solar, geothermal, and hydropower contributing only a small, but growing, fraction of the national market. In 2007, for example, the American Solar Energy Society estimated that 218,000 jobs nationwide related to renewable energy compared to nearly 3.75 million jobs in energy efficiency.

KEY LINKS:

Bureau of Labor Statistics' 2010–11 Occupational Outlook Handbook

http://www.bls.gov/oco/oco2003.htm#industry

Highlights many traditional jobs that are adding green job tasks to their job descriptions, including a new series of Bureau of Labor Statistics reports on green jobs in key sectors. Copies of the handbook are available through most libraries, or may be purchased at http://www.bls.gov/emp/ep_order_information.htm.

U.S. Commerce Department Report on the Size and Extent of the "Green" Sector

http://www.esa.doc.gov/sites/default/files/reports/documents/greeneconomyreport_0.pdf

A detailed 2010 report on employment patterns for sectors engaged in green goods and services.

Pew Center Report: The Clean Energy Economy

http://www.pewcenteronthestates.org/uploadedfiles/clean_economy_report_web.pdf

Describes America's clean energy sector on the state level.

U.S. Conference of Mayors: "Current and Potential Green Jobs in the U.S. Economy" Report

 $\underline{\text{http://www.usmayors.org/pressreleases/uploads/greenjobsreport.pdf}}$

A 2008 report on potential green job growth in U.S. metropolitan areas.



WHAT RESOURCES ARE AVAILABLE TO HELP PEOPLE WITH DISABILITIES SEARCH FOR GREEN JOB OPPORTUNITIES?

ooking for work in the green energy industry — or any other sector — can be difficult and confusing in today's volatile, fast-changing economy. Searching for a job can be a special challenge for people with disabilities, especially those who have not had many opportunities to work in the past.

Individuals with little or no prior work experience are encouraged to learn about basic workforce skills from One-Stop Career Centers and state Vocational Rehabilitation programs in their home state. State liaisons for disability and employment can also be identified through http://www.dol.gov/dol/location.htm.

The key to success is often the job seeker's ability to identify and develop their strongest skills, and match them to occupations requiring those same skill sets. Anyone, with or without a disability, can make use of the basic job search strategies recommended by the U.S. Department of Labor's **CareerOneStop** Web site (http://www.careeronestop.org/), such as:

- Researching career and job opportunities
 by networking with friends and family,
 learning more about employers and job
 openings online, requesting informational
 interviews to gain insight in target industries,
 and attending events held by professional
 organizations in one's area of interest.
- BE A SPECIAL CHALLENGE FOR PEOPLE WITH DISABILITIES, ESPECIALLY THOSE WHO HAVE NOT HAD MANY OPPORTUNITIES TO WORK IN THE PAST. 17
- Preparing key documents at the start of a job search, such as résumés, portfolios of past work products, and an up-to-date list of references.
- Maintaining contact with potential employers, not only with cover letters and résumés, but also through
 job fairs and other networking opportunities.

The Abledbody.com Web site (http://www.abledbody.com) advises that job seekers with disabilities go beyond job search basics, and actively seek out potential employers who have already demonstrated a commitment to disability employment. These include the Federal government (Office of Personnel Management, http://www.opm.gov/lob_seekers) and leading disability-friendly corporations identified by the U.S. Business Leadership Network (http://www.usbln.org/index.html), the National Business and Disability Council (http://www.business-disability.com/job_seekers.aspx), and Diversity Inc. (http://www.diversityinc.com/article/7554/).

Here is a selection of other online resources that offer useful information on relevant job search topics.

KEY LINKS:

Disability.gov

http://www.disability.gov/employment/jobs_%26_career_planning

This site's jobs and career planning section offers resources on career counseling, finding a job, and job preparation. Materials cover a wide range of topics, including transitioning to the workforce, employment predictions, One-Stop Career Centers, small business development, and entrepreneurship.

http://www.disability.gov/benefits

Describes the various work incentives and work support programs available to make it easier for people with disabilities to obtain employment and stay on the job.

Ask EARN — Office of Disability Employment Policy

http://www.askearn.org/

Offers helpful employment resources for job seekers as well as a free consulting service for employers seeking to hire individuals with disabilities.

CareerOneStop

http://www.careeronestop.org

Useful advice on identifying job opportunities and presenting individual skills and experience through effective résumés and interviews.

U.S. Department of Education Disability General Resources Document

http://www2.ed.gov/about/offices/list/osers/products/employmentguide/disabilityemployment101-resources.pdf

Provides links to the nation's leading government agencies and private organizations that are dedicated to assisting individuals with disabilities find meaningful employment opportunities.



WHAT STEPS SHOULD BE TAKEN TO REQUEST REASONABLE ACCOMMODATION AT WORK, IN TRAINING, OR IN SCHOOL?

Job seekers with disabilities should take full advantage of the laws guaranteeing them the right to request reasonable accommodation on the job. Reasonable accommodation may also be requested in other settings such as One-Stop Career Centers, schools, and training centers.

Requesting reasonable accommodation is a simple process. As explained in the Federal government's *Guide* for People with Disabilities Seeking Employment (listed in resources below):

- You simply must let your employer know that you need an adjustment or change because of your disability.
- You do not need to complete any special forms or use technical language to do this. For example, if you use a wheelchair and it does not fit under your desk at work, you should tell your supervisor. This is a request for a reasonable accommodation.
- A doctor's note requesting time off due to a disability or stating that you can work with certain restrictions is also a request for a reasonable accommodation.
- Once you have made a request for a reasonable accommodation, the employer should discuss available options with you.
- If you have a disability that is not obvious, the employer may request documentation from you demonstrating that you have a disability and explaining why you need a reasonable accommodation.
- You and the employer should work together to determine an appropriate accommodation.

Although this information is taken from a Federal government publication, these guidelines apply to other public- and private-sector employers as well. Each employer, however, may have its own particular steps for **processing** requests for reasonable accommodation.

KFY LINKS.

Job Accommodation Network (JAN) — Office of Disability Employment Policy

http://askjan.org/indiv/index.htm#on and http://askjan.org/topics/accommo.htm

Provides job seekers with information on their legal right to reasonable accommodation of a disability within a workplace. Maintains a large archive of practical solutions from businesses nationwide that give employers inexpensive ways to accommodate a wide range of disabilities in a variety of work settings. Allows visitors to search for accommodation information in multiple ways.

Guide for People with Disabilities Seeking Employment

http://www.ada.gov/workta.htm

A valuable overview of job accommodation rights under the Americans with Disabilities Act (ADA).

Disability.gov

http://www.disability.gov/employment/workplace accommodations %26 supports

Provides links to resources on a variety of accommodation topics.

Office of Disability Employment Policy/U.S. Department of Labor

http://www.dol.gov/odep/pubs/ek97/process.htm

Provides a useful overview of work accommodation issues, with special attention to the obligations of employers.

USEFUL EMPLOYMENT SEARCH ENGINES

Disability Employment Search Engines

GettingHired.com - http://www.gettinghired.com/

 $Career\ Opportunities\ for\ Students\ with\ Disabilities- \underline{http://www.cosdonline.org/}$

AbilityLinks.org - http://www.abilitylinks.org/home.aspx?&PageID=506

AbilityJobs - http://www.jobaccess.org/index.htm

Green Job Search Engines

http://www.greenenergyjobsonline.com/

http://www.greenjobsearch.org/

http://www.sustainablebusiness.com/index.cfm/go/greendreamjobs.main

HOW DO I FIND OUT WHAT SPECIFIC JOB SKILLS ARE REQUIRED?

escriptions of skill requirements for green jobs are available online. O*Net is one of the best-known Internet resources, but additional web resources are constantly being added.

Not every job seeker will need to master advanced skills to find green job opportunities, but they must have a solid foundation of basic skills within their chosen industry. Many employers also have a special interest in job seekers who can go **beyond** basic skills and demonstrate a solid understanding of green work practices, equipment, and government standards aimed at reducing the environmental impact of business operations.

Job seekers requiring higher levels of training may supplement their current skill set with a nationally recognized **credential** for selected jobs within the **renewable energy** or **energy efficiency** sectors. For example, experienced architects and contractors often turn to the Green Building Certification Institute, which works with local trainers and educators nationwide to award the well-known Leadership in Environmental and Energy Design (LEED) Accredited Professionals credential.

The following links help guide job seekers to selected green credentials and skill requirements increasingly in demand within key industry sectors.

KEY LINKS:

Center on Wisconsin Strategy Report on Green Jobs Certifications

http://www.cows.org/pdf/rp-greenerskills.pdf

A useful 2010 consumer guide that helps job seekers and employers identify quality certification programs in the green training field.

Center for Energy Workforce Development/Get Into Energy

http://www.getintoenergy.com/

Coalition of energy sector employers that describes specific skill needs through its Get Into Energy Web site.

Energy Industry Competency Model: Generation, Transmission, and Distribution

http://www.cewd.org/documents/energymodel.pdf

A detailed description of the critical skills needed for certain green jobs involving alternative fuel sources, from the Center for Energy Workforce Development.

Environmental Defense Fund's Green Jobs Handbook (focused on California)

http://www.edf.org/article.cfm?contentid=8466&s_src=ggad&s_subsrc=cagreenjobs&gclid=CMTD8PStlaMCFeh_25QodwUhIwA

Although this 2008-2009 job seekers' guide focused on California, it contains numerous green job descriptions that illustrate the specific skill requirements for a variety of occupations.



HOW DO I LOCATE GREEN JOB TRAINING AND EDUCATION IN MY COMMUNITY?

Training programs for green jobs differ significantly in quality, cost, and effectiveness, and vary widely from state to state. Providers range from public and private schools and colleges, to unions and private technical trainers. The links below can help you find the specific green job training available in your area.

Certain occupations require only short- or medium-term training, while others require more advanced long-term education. The U.S. Bureau of Labor Statistics Web site publishes a useful summary of the projected growth of jobs requiring short-, medium-, and long-term training between 2008 and 2018 (http://www.bls.gov/opub/oog/2009/winter/art2fullp6.htm).

Once the decision is made to earn a specific degree or credential, a job seeker should examine available training programs with an eye toward its course requirements and costs, job placement rates, and accreditations from government and industry. Look closely for evidence that the training provider can identify clear career paths and demonstrate strong partnerships with local employers.

Individuals with disabilities should take special care to ask any potential school or training program if it has specific experience addressing the special needs of trainees with disabilities.

KEY LINKS:

General Resources

U.S. Department of Labor — Disability Employment and Training Resources

http://www.doleta.gov/disability/etr.cfm

Lists valuable sources of job training, including a state-by-state guide of specific training programs and providers.

The Arc

http://www.thearc.org/page.aspx?pid=2464

A directory of useful employment and education links for those transitioning to work, including young people with disabilities.

Workforce Investment Act (WIA) Eligible Provider Search

http://www.careeronestop.org/wiaprovidersearch.asp

Links to state workforce sites with approved training providers for all sectors.

Laborer's International Union of North America (LIUNA) Training and Education Fund

http://www.liunatraining.org/

Training in various construction and weatherization skills offered at 70 affiliated centers.

Green Job Training and Education

U.S. Department of Labor — Green Jobs Page

http://www.dol.gov/dol/green

Posts the Department's latest news on green job training grants, education programs, and regulations.

U.S. Green Building Council

https://www.usgbc.org/DisplayPage.aspx?CategoryID=127

Provides LEED credential training and lists approved providers.

CareerOneStop — Green Careers Resource

http://www.careeronestop.org/GreenCareers/GreenCareers.aspx

Visitors can search for green jobs training programs and explore data on green jobs' labor market demand, wages, certifications, and educational requirements.

Community Colleges and the Green Economy — National Council for Workforce Education

http://www.aed.org/Publications/upload/GoingGreen.pdf

Describes the specific ways that community colleges nationwide are training students and adults in green job technical skills.

Goodwill Industries International

http://www.goodwill.org

Has operated green jobs training in the past for people with disabilities.

Home Energy Magazine 2010 Training Guide

http://homeenergy.org/HETG/index.php

Offers searchable list of training providers and their programs, including Building Performance Institute certifications, weatherization assistance program training, and RESNET (Residential Energy Services Network) training.

U.S. Department of Energy's Energy Education and Workforce Development Web Page

http://wwwl.eere.energy.gov/education/index.html

Provides various clean energy job resources, including training providers.

Advanced Technology Environmental and Energy Center (ATEEC)

http://www.ateec.org/learning/credit/

Updated, online listing of energy education and workforce development programs.

U.S. Employment & Training Administration — Green Jobs Community of Practice

https://greenjobs.workforce3one.org/

The interactive Green Jobs Community of Practice (CoP) provides technical assistance to green job grantees, workforce professionals at the State and Workforce Investment Board levels, and green job thought leaders through webinars, discussion boards, blogs and other online resources.

"Roots of Success" Environmental Literacy Curriculum

http://bss.sfsu.edu/raquelrp/

Professor Raquel Rivera Pinderhughes of the Department of Urban Studies and Planning at San Francisco State University has developed a new nine module version of her environmental literacy curriculum, a helpful foundation for work in green jobs.

CONCLUSION

The green job economy is a work in progress. The skills and technology that are relevant today may be made obsolete by new developments tomorrow. For workers and job seekers with disabilities, the challenge will be to stay informed about the ever-changing workforce needs of the green economy. The resources in this guide can help them keep pace with the many changes still ahead.

ACKNOWLEDGEMENTS/DISCLAIMER

The NTAR Leadership Center at the John J. Heldrich Center for Workforce Development at Rutgers, The State University of New Jersey, gratefully acknowledges the support of the **Office of Disability Employment Policy/U.S. Department of Labor** in the preparation of *Green Jobs: A Resource Guide for Individuals with Disabilities*.

This guide was published by the NTAR Leadership Center, funded by a grant/contract from the U.S. Department of Labor, Office of Disability Employment Policy (Number OD-16563-07-75-4-34). The opinions expressed herein do not necessarily reflect the position of policy of the U.S. Department of Labor. Nor does the mention of trade names, commercial products, or organizations imply the endorsement of the U.S. Department of Labor.



