

## Green Jobs and CTE

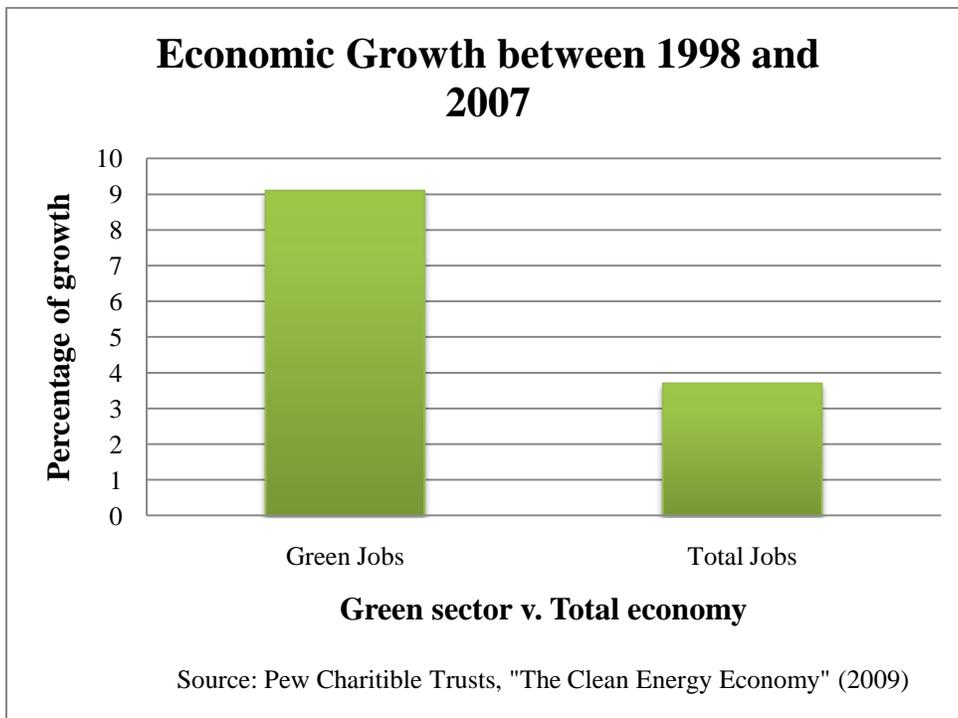
### *What are “green” jobs?*

There is no consensus definition of a “green” job, but definitions used by the education, workforce and sustainability communities share some of the following elements:

- Provide products and services that promote renewable energy resources, reduce pollution and conserve energy and natural resources
- Exist in both skilled trades and professional occupations
- Provide a fair, living wage to the worker and support the local economy

Examples of green jobs include: wind energy technician, recycling director, sustainable agriculture specialist, and energy auditor. Some green jobs are found in new industries, such as wind and solar installation; while others involve the incorporation of green elements into existing industries, such as construction. Jobs in both categories require workers to have technical skills, which may involve getting trained in a new area, or updating their skill set to adjust to the new green elements of their existing trade.

Green jobs may also provide an important avenue to economic security for individuals during a period of record unemployment. The Pew Charitable Trusts found that jobs in the clean energy economy have grown at a faster rate than U.S. jobs overall. CTE programs that prepare people for green jobs are more important now than ever so that there is an available pool of skilled workers to fill these new jobs.



## ***Green jobs and CTE***

Many green jobs are also considered middle skill jobs – jobs that require more than a high school diploma, but less than a four-year degree. Both high school and postsecondary CTE programs prepare individuals to work in our ever-expanding green economy.

### ***High Schools***

- The knowledge and skills gained in high school can lead students to continue their education in green programs at the postsecondary level, or to begin work immediately after graduation. For example, at Aiken University High School in Ohio, students who take courses in the environmental sciences program may earn transferable credits to Cincinnati State University through a Tech Prep articulation agreement.
- Some high schools incorporate green training into their CTE curriculum by adding new fields of study in green technologies, or by updating existing courses to include green elements. For instance, Lenawee Tech Center in Michigan has installed a residential wind turbine and a solar unit that are being used by their existing Careers in Electrical Engineering program.
- Career academies are another way for high school students to get academic and technical training in green fields. Career academies have integrated themes such as sustainability or renewable energy into their curricula, and prepare students for careers and college. For example, the Green Energy Technology Academy at Laguna Creek High School in California has developed a renewable energy curriculum that teaches students about solar energy, wind turbines, biodiesel, hydroelectricity, and hydrogen fuel cells.

“So who will do the hard and noble work of actually building the green economy? The answer: millions of ordinary people, many of whom do not have good jobs right now. According to the National Renewable Energy Lab, the major barriers to a more rapid adoption of renewable energy and energy efficiency are not financial, legal, technical, or ideological. One big problem is simply that green employers can’t find enough trained, green-collar workers to do all the jobs.”

– Van Jones, *The Green Collar Economy*

### ***Community Colleges***

- Community colleges prepare students for green jobs through programs in a variety of disciplines that provide students with the skills necessary to work in green industries. Some students who enroll in these programs continue their high school studies in renewable energy and sustainability through dual enrollment and Tech Prep articulation agreements, allowing them to earn college credits while in high school.
- These programs can result in associate degrees, certifications and credentials. Some examples of certifications include the Energy Management Certification, Building Operators Certification, Bonneville Power Administration Residential Auditor Certification, and National Sustainable Building Advisor Program offered at Lane Community College in Eugene, Oregon.
- Customized training programs offered by community colleges can be used by businesses that are interested in greening their workforce. For example, Oakland Community College in Michigan has offered courses to home building companies to show them how to make their homes more energy efficient and how to incorporate solar techniques. College programs are also a valuable resource for individual workers, including those recently laid off, who need access to training.

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