

GREEN JOBS IN TENNESSEE

by Murat Arik

EXECUTIVE SUMMARY

Although no clear definition exists, the term *green jobs* has been widely used to describe jobs in businesses that are particularly related to renewable energy, energy efficiency, or environmental sustainability. Both federal and state governments have invested significantly in efforts to define and measure the extent of the green economy in the United States. As part of these initiatives, the Business and Economic Research Center at Middle Tennessee State University has partnered with the Tennessee Department of Labor and Workforce Development to estimate the economic impact of six ground-breaking green investments in Tennessee: Hemlock Semiconductor, Wacker Chemie AG, Volkswagen, Nissan Leaf and Storage Battery Manufacturing, Tennessee Solar Institute and West Tennessee Solar Farm, and eTec Battery Charging Stations.

The purpose of this study is to estimate the economic impact of the investments on Tennessee's economy. This study addresses the following major research questions.

- Where can the six major green investments be classified within the national and local green activity frameworks?
- How many green jobs will be created with these investments?
- What are the major occupations associated with these green investments?

This study used multi-region IMPLAN models to estimate the economic impact of these investments.

Key Findings

Construction Phase

- By 2014, total green investments by these six major companies will total more than \$5.5 billion. The number of direct green jobs generated in 2011 was 5,674, with a total economic impact of 9,369 jobs across Tennessee.
- Total number of green construction jobs (direct + indirect + induced) was 6,893.



The Economic Impact of Selected Green Investments

Download the complete study:

<http://frank.mtsu.edu/~berc/pdfs/greenjobs.pdf>

Operation Phase

- At full employment, these companies are expected to employ directly 4,572 people by 2014.
- The total number of permanent jobs is 16,559,
 - 10,143 of which are green jobs.
- These investments are likely to generate increased demand for the following occupational categories and occupations.

■ Green Increased Demand Occupations

- Team assemblers
- First-line supervisors
- Electrical and electronic equipment assemblers
- Laborers

■ Green Enhanced Skills Occupations

- Machinists
- Inspectors and testers
- Maintenance and repair workers

■ Green New and Emerging Occupations

- Engineers
- Solar energy installation managers
- Logistics engineers and analysts
- Energy brokers

- The green manufacturing jobs created with these investments represent nearly 1.5 percent of the state's total manufacturing jobs, which may stop the downward trend in the manufacturing sector.

Complete Study

Download the complete study at <http://frank.mtsu.edu/~berc/pdfs/greenjobs.pdf>. ■

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