

# No Worker Left Behind, Year Two: The Green Jobs Initiative



## What is the Green Jobs Initiative?

In year two of No Worker Left Behind (NWLB), Governor Granholm launched the Green Jobs Initiative, a \$6 million investment designed to:

- ❖ Increase the number of green industries and businesses in Michigan.
- ❖ Develop green education and training programs, spurring the growth of Michigan's green economy.
- ❖ Invest in worker education and training to prepare our workers for green jobs.
- ❖ Support urban renewal by creating green jobs and training opportunities for a diverse mix of people.

## What jobs are considered green jobs?

As a starting point, the Michigan Department of Energy, Labor & Economic Growth (DELEG) defines "green jobs" as jobs created in three emerging sectors of Michigan's economy. These green sectors include:

- ❖ **Alternative Energy Production and Efficiency**, which includes targeting jobs in wind energy; bio-fuels and bio-materials; solar and energy storage; energy efficiency; and advanced technology vehicles.
- ❖ **Green Building Construction and Retrofitting**, which includes jobs in energy efficient building, construction, deconstruction and retrofits; energy efficiency assessment serving the residential, commercial, or industrial sectors; materials recycling and reuse; architecture and design; land use/site analysis; building materials; and construction/rehab.
- ❖ **Agriculture and Natural Resource Conservation**, which includes jobs in food systems (production and distribution); green chemistry; water quality; forest, land, and water management; and Brownfield redevelopment

## How will Michigan design and implement training programs for green jobs?

- ❖ **Convene Green Sector Skills Alliances** -- Michigan will invest \$1.5 million to create Green Sector Skills Alliances -- alliances of business, labor, government and educational leaders who share interest and expertise in a specific green sector of Michigan's economy. In partnership with DELEG, the alliances will bring together the resources and expertise to develop specific training programs for jobs in these green industries.
- ❖ **Build Capacity to Provide Green Jobs Training** -- Michigan will invest \$1.5 million to help community colleges, universities, and training facilities build their capacity to develop and provide training for green jobs.
- ❖ **Invest in Tuition for Green Jobs Training** --Through the No Worker Left Behind Initiative, Michigan will provide \$3 million in tuition support for eligible individuals pursuing approved green jobs training programs at Michigan colleges and universities.

**How will the Green Jobs Initiative promote ongoing communication and learning about Michigan's green economy and training for green jobs?**

As part of the Green Jobs Initiative, DELEG will:

- ❖ **Conduct Ongoing Labor Market Research** -- DELEG will analyze current and projected job growth, skill requirements, wages and benefits in Michigan's green economy. This research, combined with the research and planning of the Green Sector Skills Alliances, will help shape Michigan's investment in education and training programs for green jobs.
- ❖ **Convene a Green Jobs Conference** – May 11, 2009, DELEG will host a green jobs conference, focusing on Michigan's workforce development opportunities through the Green Jobs Initiative. It will bring together approximately 1,000 business, education and training, labor, environmental, community- and faith-based, and policy advocacy partners and stakeholders who are currently working on various facets of nurturing a green economy and talent base in Michigan.
- ❖ **Create an Information Clearinghouse** – The Green Jobs website – [www.michigan.gov/greenjobs](http://www.michigan.gov/greenjobs) -- will be the primary source of information on the Green Jobs Initiative, with content on internships and jobs, education and training opportunities, and collaborative partnerships. Through the website, we will collect information from employers on their current and future training needs. DELEG staff will work with these employers to make sure Green Jobs Initiative training programs meet their needs.

## MICHIGAN GREEN JOBS REPORT 2009 -- HIGHLIGHTS

The May 2009 Michigan Green Jobs Report is the first effort of its kind for Michigan and makes us the second state (after Washington) to release a scientific survey of green jobs. This report covers *private sector* jobs in Michigan's green economy, which we define as being comprised of **five areas**: (1) agriculture and natural resource conservation; (2) clean transportation and fuels; (3) increased energy efficiency; (4) pollution prevention or environmental cleanup; and (5) renewable energy production.

- ✓ Michigan boasts **109,067 private sector green jobs**: 96,767 direct green jobs (people directly involved in generating a firm's green-related products or services) and 12,300 green support jobs (anyone from a janitor to an accountant whose job is created to serve direct green work).
- ✓ Clean transportation and fuels is the largest green economy area in Michigan, comprising just over 40% of green jobs and reflecting Michigan's automotive heritage. If Michigan succeeds in developing alternative fuel, hybrid and electric vehicles, this sector may grow significantly.
- ✓ There is **huge potential for growth** throughout the green economy. Today, green jobs represent just 3% of Michigan's overall private sector employment of 3.2 million.
- ✓ Indeed, from 2005 to 2008, a sample of 358 green related firms added more than 2,500 jobs to Michigan's economy, an **employment expansion rate of 7.7%** -- compared to the total Michigan average of *negative 5.4%*.
- ✓ Among the **renewable energy production** firms in that sample, the growth rate hit 30%. Renewable energy production, which today is the smallest green sector, may be the fastest growing.
- ✓ The green economy appears to be a hotbed of **entrepreneurial activity**. Among our sample of 358 green-related firms, over 70 appeared to be newly created since 2005, accounting for nearly 600 jobs already.
- ✓ **Green jobs tend to pay well**. Thirteen of the top 15 sectors of green employment have weekly wages above the overall private sector weekly average.
- ✓ Green jobs encompass a **wide range of occupations**. Engineering and construction jobs are prominent, but many other jobs of all skill levels are required by the green economy.
- ✓ **Education and training** are key for green employers. In multiple focus groups, employers emphasized the need for basics in math and reading with additional skills to be acquired on-the-job or in school depending on the precise green job in question.

**Local, state and federal public policy may drive further growth in green jobs.** Laws such as Michigan's new renewable energy standard, the requirement that regulated utilities spend a portion of revenue on energy efficiency measures for their customers, and incentives for advanced battery production, in combination with local and federal initiatives, may accelerate the growth of green jobs in Michigan.

For more information, or to download the full report, visit [www.michigan.gov](http://www.michigan.gov)





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# MICHIGAN ACADEMY FOR GREEN MOBILITY

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## Background:

- In response to the rapid growth in the renewable energy sector, the Department of Energy, Labor & Economic Growth collaborated with automotive manufacturing employers to establish the Michigan Academy for Green Mobility in conjunction with the Governor's Green Jobs Initiative.
- GM, Chrysler, and Ford project a need for roughly 1000 additional engineers over the next 5 years that are trained to work in hybrid vehicle design and manufacturing
- The purpose of the Michigan Academy for Green Mobility is to ensure the automotive industry has the trained workers they need to grow and prosper in the emerging green economy.
- The skill development and training provided through the Academy is in direct response to specific knowledge and skill demands of employers in the automotive manufacturing industry.
- Education and training institutions provide learning opportunities that are short-term, targeted, innovative, flexible, and have a strong focus on hands-on practical experience.

## Academy Objectives:

- Prepare individuals for emerging technologies in vehicle propulsion and vehicle component design, manufacturing, and maintenance through rapid/accelerated training and re-training
- Training targets incumbent engineers, engineering students, incumbent technicians, and technician program students

**Partnership:** Partnerships are critical to make the most efficient use of established curriculums, facilities, laboratories, and equipment to provide the automotive industry with the talent necessary to succeed. Partners include:

- |                      |                                   |                                  |
|----------------------|-----------------------------------|----------------------------------|
| ▪ General Motors     | ▪ Next Energy                     | ▪ U of M Ann Arbor               |
| ▪ Ford Motor Company | ▪ Society of Automotive Engineers | ▪ Macomb Community College       |
| ▪ Chrysler           | ▪ Lawrence Tech                   | ▪ Henry Ford Community College   |
| ▪ Detroit Diesel     | ▪ Wayne State University          | ▪ Engineering Society of Detroit |
| ▪ Eaton Corporation  | ▪ Kettering University            | ▪ MICHauto                       |
| ▪ Delphi             | ▪ University of Detroit Mercy     |                                  |
| ▪ Lear Corporation   | ▪ U of M Dearborn                 |                                  |
| ▪ Ricardo Inc.       |                                   |                                  |
| ▪ Compact Power      |                                   |                                  |

## Education and Training Providers:

- Education and training providers for the Academy for Green Mobility are selected through a competitively based request for proposal (RFP).
- Applicants submit proposals to develop and implement innovative and nontraditional modes of education and training.
- An RFP issued for accelerated education and training in Hybrid Electric Vehicle Battery Engineering is available at [www.michigan.gov/greenjobs](http://www.michigan.gov/greenjobs). Proposals are due by 5:00 p.m. Monday, May 25, 2009.
- The current RFP is designed to train 200 engineers transitioning from traditional vehicle design and manufacturing to hybrid electric vehicle battery applications.

**Funding:** Funding for training is available to qualified students through the NWLB Green Jobs Initiative. The state has dedicated 3 million dollars of WIA Statewide Discretionary Funds for training through the Green Jobs Initiative.



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# MICHIGAN EMERGING MARKETS SKILL ALLIANCE FOR TOOL & DIE

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## Background:

- In response to technological improvements in the tool and die industry, the Department of Energy, Labor & Economic Growth collaborated with employers from the tool and die and related industries to establish the Michigan Emerging Markets Skill Alliance (MEMSA) for Tool and Die in conjunction with the Governor's Green Jobs Initiative.
- The purpose of MEMSA is for new and existing workers to update their skills and adapt to new industry requirements and to grow and prosper in the emerging green economy.
- MEMSA employers project a need to train roughly 400 individuals in 2009.
- The skill development and training provided through MEMSA is in direct response to specific knowledge and skill demands of employers in tool and die and related industries as they diversify into advanced technologies that support Michigan's Green Economy.
- Education and training institutions provide learning and apprenticeship opportunities that are targeted, innovative, flexible, and have a strong focus on hands-on practical experience.

## MEMSA Objective:

- Prepare individuals for careers as tool and die makers, machinists, machine builders, machine repairs, industrial electricians, and mold makers.

## Partnership:

Partnerships are critical to make the most efficient use of established curriculums, facilities, laboratories, and equipment to provide the tool and die and related industries with the talent necessary to succeed.

## Partners include:

- Schmalz Tool & Die
- Automated Manufacturing Solutions
- Epic Machine
- Complete Design
- Murray Engineering, Inc.
- Vision Manufacturing
- Delphi Steering Gear
- Richfield Industries
- Peterson Jig and Fixture
- Matador Tool and Die
- Bobier Metrology Solutions
- Baker College of Flint
- Mott Community College
- Genesee Intermediate School District
- Career Alliance

## Education and Training Providers:

- Education and training providers for MEMSA are determined by a competitively based request for proposal (RFP).
- Applicants submit proposals to develop and implement innovative and nontraditional modes of education and training.

## Funding:

- Funding for training is available to qualified students through the NWLB Green Jobs Initiative.