

# Green Jobs Growing Michigan's Economy

Despite the economic recession of the late 2000s, which confronted Americans with unemployment, stagnant wages, and rising fuel costs, there was one sector that outshone the rest: the **clean economy**. Michigan is poised to gain from investing in green.

## The clean economy is growing and outpaced the rest of the economy during the recession.

The clean economy grew faster than the rest of the economy during the height of the recession, "expanding at a rate of 8.3 percent." Additionally, the clean economy added "more than half a million jobs between 2003 and 2010."<sup>1</sup>

## Michigan's clean economy employs over 76,000 workers making up almost 2 percent of Michigan's total workforce.<sup>2</sup>

A recent figure from the U.S. Bureau of Labor Statistics puts the number of green jobs in Michigan at 79,771.<sup>3</sup>

## Jobs in the clean economy are good and accessible jobs.

Over 48 percent of Michigan's jobs in the clean economy were held by workers with a high school diploma or less, with an average annual wage of \$40,558, higher than the average annual wage for all jobs in the state.<sup>4</sup>

## Renewable Electricity Standards (RES) support a strong, growing manufacturing industry

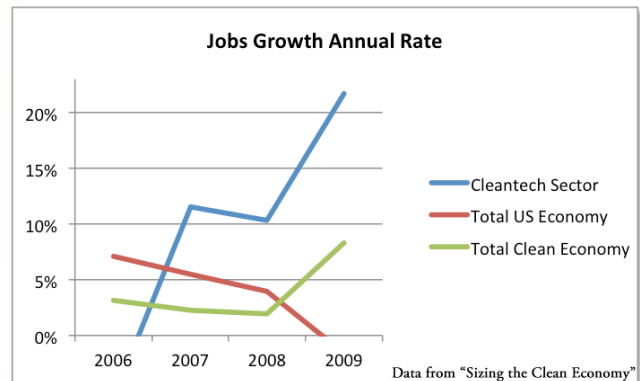
More than 34,000 green jobs in Michigan would be created or sustained from a baseline 25% RES adopted by 2025. That would amount to 24,350 new jobs in the wind energy sector, 6,644 in the solar energy sector, 1,502 in the geothermal energy sector, and 2,281 in the biomass sector.<sup>5</sup>

## Michigan has extensive clean energy policies in place.

These policies include financial incentives, renewable portfolio standards, energy efficiency resource standards, and regional cap-and-trade programs.<sup>6</sup>

## The recycling industry in Michigan is creating thousands of good, green jobs.

"Michigan has an estimated 2,242 establishments in the recycling and reuse industry with receipts of



\$11.6 billion, a payroll of about \$2.06 billion, and employment of 61,700."<sup>7</sup> Nationally, achieving a recycling rate of 75 percent would create and sustain nearly 1.5 million jobs by 2030.<sup>8</sup>

## Investments in public transportation, including intercity high-speed rail, will create over 25,900 green jobs in Michigan over the next six years

These jobs would be created as part of a \$40 billion national investment that would support middle class jobs, "with wages mainly in the middle of the wage distribution."<sup>9</sup>

### Michigan's clean economy in numbers:

Clean economy jobs (2010): 76,941  
Exports per job (2009): \$26,589  
Average annual wage (2009): \$40,558

### Largest clean economy jobs segments in Michigan

- Green Consumer Products
- Waste Management
- Mass Transit

Source: "Sizing the Clean Economy"

## Spotlight: Increased Fuel Efficiency Standards Save and Create Jobs, Protect the Environment

### Fuel economy standards are on the rise, with the support of industry, labor, and government.

On July 29, 2011, President Obama announced a new 54.5 miles-per-gallon fuel efficiency standard for cars and light-duty trucks by model year 2025. Thirteen major automakers and the United Auto Workers (UAW) supported this announcement.<sup>10</sup>

### By 2020, more fuel efficient cars in the U.S. market “could provide a net gain of over 190,000 new jobs.”

“Greater fuel economy means greater labor content per vehicle and higher employment...” The right policies will ensure these jobs are created and sustained in the U.S.<sup>11</sup>

### Michigan, Indiana, and Ohio are poised to gain the most jobs through greater fuel efficiency standards.

“Michigan could gain as many as 32,000 jobs as a result of clean technology adoption (compared to 2008). Indiana could gain nearly 8,000, and Ohio could gain nearly 11,000 jobs. The remaining jobs would likely be much more broadly distributed across the United States.”

### Auto efficiency regulations are good for jobs and Michigan’s environment.

The 54.5 miles-per-gallon standard will cut “more than 6 billion metric tons of greenhouse gas over the life of the program – more than the amount of carbon dioxide emitted by the United States [in 2010].”<sup>13</sup>

### Production of General Motors (GM) Chevy Volt, an electric car that can also run on gasoline, added 2,500 jobs to GM’s Hamtramck, MI production plant in 2011

GM rehired workers who had previously been laid off and added a third production line. The Hamtramck facility is organized by UAW Local 22.<sup>14</sup>

### Sales of GM’S Volt in 2012 have been promising. “Chevy sold 2,289 Volts in March, more than double sales

of 1,023 in February. Volt sales of 3,915 vehicles so far this year are more than triple the 1,210 Volts sold in the first three months of 2011.”<sup>15</sup>

### Success of GM’s Chevy Volt could “equate to more than 40,000 jobs related to plants associated with the assembly of the vehicle.”

In Brownstown Township, MI alone, General Motors is investing more than \$43 million dollars “to manufacture the battery packs for the Volt and other extended-range vehicles,” creating about 120 jobs.<sup>16</sup> This investment was, in part, made possible by Michigan’s “first-in-the-nation battery tax credits.” The tax credits initiative “was a key factory” in Michigan projects receiving U.S. Department of Energy advanced battery grants.<sup>17</sup>

### Clean transportation technologies support jobs in other sectors.

In January 2011, the Wall Street Journal reported that Dow Chemical was building an 800,000-square-foot plant in Michigan “to design and make batteries for hybrid and electric vehicles...” Dow cites estimates that every new job inside a chemical plant creates five jobs at suppliers and other related firms.<sup>18</sup>

1. “Sizing the Clean Economy,” The Brookings Institution, 2011.
2. “Sizing the Clean Economy: The Clean Economy in the State of Michigan,” The Brookings Institution, 2011.
3. Economic News Release: Green Goods and Services (GGS) employment by state, 2010 annual averages,” U.S. Bureau of Labor Statistics, March 22, 2012
4. “Sizing the Clean Economy: The Clean Economy in the State of Michigan.”
5. Renewable Energy Policy Project estimates from “Building the Clean Energy Assembly Line,” BlueGreen Alliance, 2009.
6. “The Clean Energy Economy: Michigan Fact Sheet,” The Pew Charitable Trusts, June 2009.
7. “Expanding Recycling in Michigan,” Public Sector Consultants Inc., 2006.
8. “More Jobs, Less Pollution: Growing the Recycling Economy in the U.S.,” Tellus Institute, 2011.
9. “Impact of Alternate Public Transit and Rail Investment Scenarios on the Labor Market,” October 15, 2010.
10. “President Obama Announces Historic 54.5 mpg Fuel Efficiency Standard,” White House Press Release, July 29, 2011).
11. “Driving Growth: How Clean Cars and Climate Policy Can Create Jobs,” Natural Resources Defense Council, United Auto Workers, and Center for American Progress, March 2010.
12. Ibid.
13. “President Obama Announces Historic 54.5 mpg Fuel Efficiency Standard,” White House Press Release.
14. General Motors Detroit-Hamtramck plant to run 3 shifts for 1st time in 26-year history,” Detroit Free Press, May 26, 2011.
15. “Debate Continues, But Volt Retains its Buzz,” The Bridge (MI), April 10, 2012.
16. “Brownstown Twp: First Volt battery pack rolls off the line,” The News-Herald, January 11, 2010.
17. “Granholm, Cherry Hail 12 Michigan Projects Awarded Federal Advanced Battery Grants,” Press Release, Pure Michigan, August 5, 2009.
18. “U.S. Factories Buck Decline,” Wall Street Journal, January 19, 2011.



The BlueGreen Alliance is a national, strategic partnership between labor unions and environmental organizations dedicated to expanding the number and quality of jobs in the green economy.

[www.bluegreenalliance.org](http://www.bluegreenalliance.org)

On Twitter @bgalliance and Facebook at [www.Facebook.com/BlueGreenAlliance](http://www.Facebook.com/BlueGreenAlliance)