



Wisconsin's Green Jobs Report 2010

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What Is A Green Job?

- **Defined more by industry than occupation**, these jobs reside primarily in the sectors that make up the green economy.
- For the purposes of this report, green jobs are jobs related to energy efficiency (including green building), renewable energy (including transportation fuels), alternative transportation (including electric cars and mass transit), water use, and recycling and waste minimization.



Washington's Interest

- President Barack Obama helped popularize the use of the term “Green Jobs” by vowing to create five million “green jobs” during his first term in office
- Hired, and later removed, Van Jones from the position of Green Jobs Czar.



Green Jobs in Wisconsin

- In 2009, the Pew Charitable Trust estimated that there were 15,100 green jobs in Wisconsin and almost 1300 businesses that offered green jobs.
- Wisconsin was exceptionally strong in the Energy Efficiency sector, ranking 6th in the nation, and providing 2800 jobs.



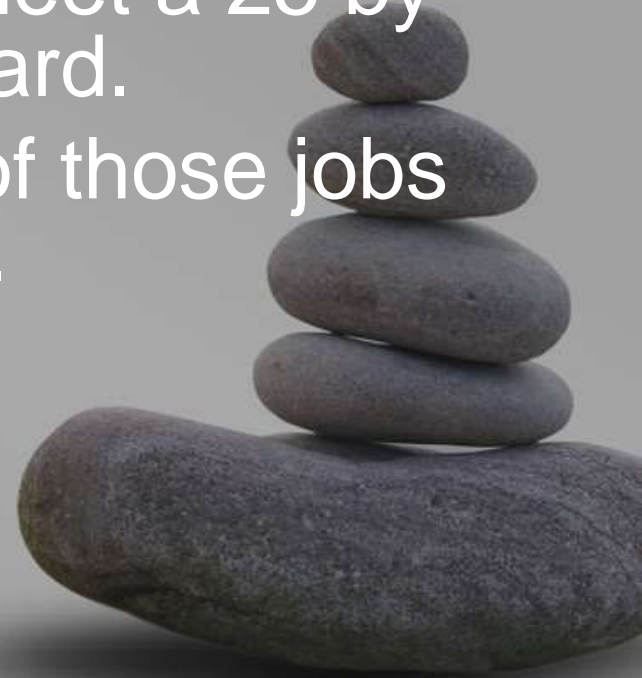
Green related jobs (occupations)

- The State of Washington identified the following occupations as “green-related”:
 - Electrician
 - HVAC mechanics
 - Mechanical Engineers
 - Civil Engineers
 - Garbage men
 - Environmental Scientists
 - Builders
 - Carpenters
 - Plumbers
 - Architects
 - Roofers



Jobs in Renewable Energy

- The Renewable Energy Policy Project estimated that 35,000 new green jobs would be created in WI to meet a 25 by 25 renewable energy standard.
- They estimate that 25,000 of those jobs would be in the wind sector.



Educational Requirements and Training

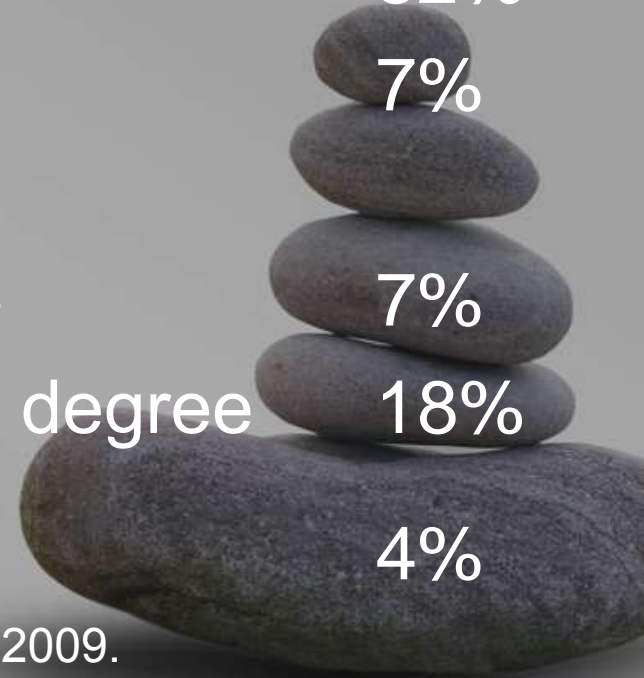
- The state's technical college system and the Wisconsin Regional Training Partnership are national leaders in developing training programs for green jobs.
- Most experts agree that most green jobs will require some college, but not a four-year degree.



Education requirements for green jobs:

- No minimum education requirement 32%
- Require a high school diploma 32%
- Require some college 7%
- Require an associate or vocational technology degree 7%
- Require a bachelor's or graduate degree 18%
- Require other education 4%

SOURCE: The Greening of Oregon's Workforce, June 2009.



Green Career Paths

- Community colleges are initiating new programs in high-demand fields that include energy auditing, home weatherization, solar fabrication, and wind turbine manufacturing and maintenance.



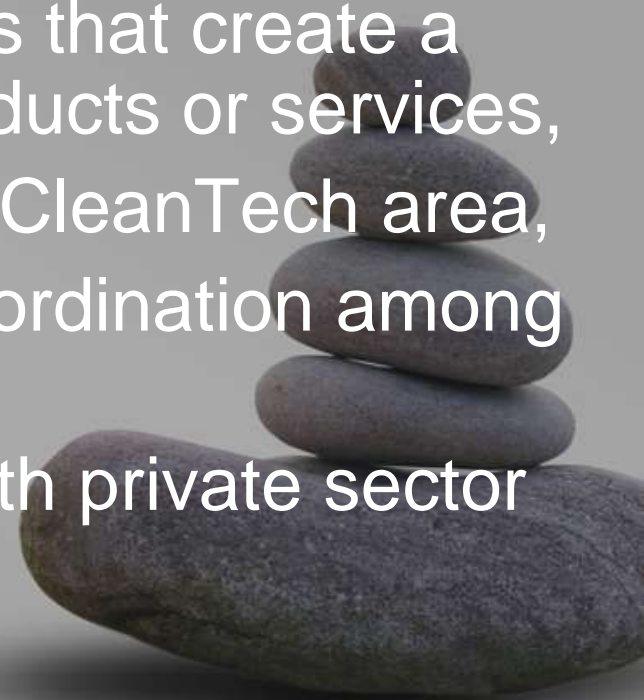
Expanding Green Jobs Opportunities

- Wisconsin has:
 - a tradition of manufacturing excellence,
 - existing infrastructure,
 - a workforce with training and experience in manufacturing technology and
 - a populace that believes in the importance of the middle-class.



Expanding Green Jobs Opportunities

- Minnesota and Iowa are:
 - actively engaged in attracting green jobs,
 - developing policies and rules that create a stable demand for green products or services,
 - supporting innovation in the CleanTech area,
 - developing a platform for coordination among state agencies, and
 - leveraging federal funding with private sector funds .



Where Should Wisconsin Focus?

- Renewable Energy
- Energy Efficiency
- Mass Transit
- Green Building



Where Should Wisconsin Focus?

- The promise of renewable energy and improved efficiencies is already creating new jobs.
- Mass transit is also becoming a subject of conversation as the high speed rail system connecting Madison, Milwaukee, Chicago, and eventually the Twin Cities gains momentum and popularity.
- Finally, Wisconsin is home to two of the greenest buildings in the country (Aldo Leopold Foundation Headquarters and the Holy Wisdom Monastery), and can “build” upon a growing reputation for innovation and excellence in the green building area.



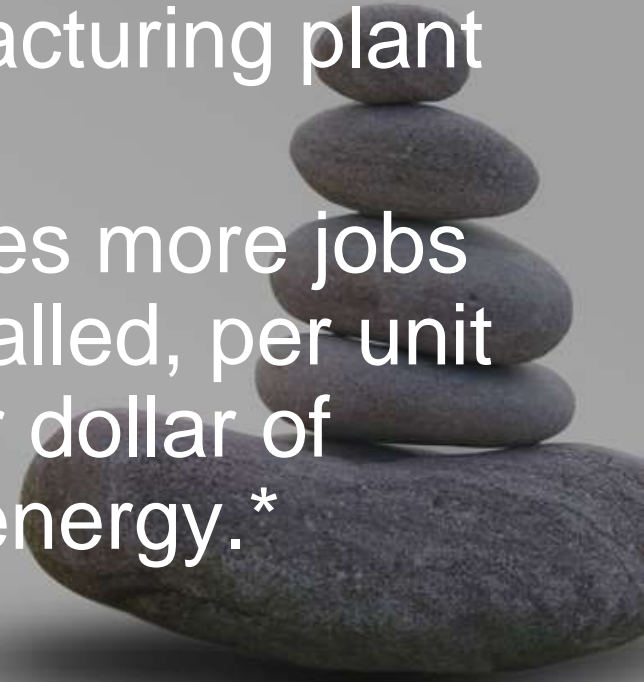
Milwaukee's Energy Efficiency Program

- Milwaukee Energy Efficiency, or ME2, lets owners install energy efficiency improvements with no money upfront. Ultimately, this project creates “loans” that owners repay out of their energy savings.
- Weatherization and building retrofits currently provide the greatest number of green jobs.
- For every million dollars invested in energy efficiency retrofits, eight to eleven green jobs are generated.



Renewable Energy

- Includes wind, solar, biomass and water.
- Iowa is already a leader in wind, but recent decision by Ingeteam to site its first North American manufacturing plant in Milwaukee is great news.
- Renewable energy generates more jobs per megawatt of power installed, per unit of energy produced and per dollar of investment than fossil fuel energy.*



Mass Transit

- According to a Fall, 2010 report from WISPIRG, the new high speed rail network connecting Chicago and Minneapolis (running through Milwaukee and Madison) will create 13,000 jobs in Wisconsin.
- Talgo, a Spanish train manufacturer, recently announced plans to site its first North American manufacturing plant in Milwaukee.



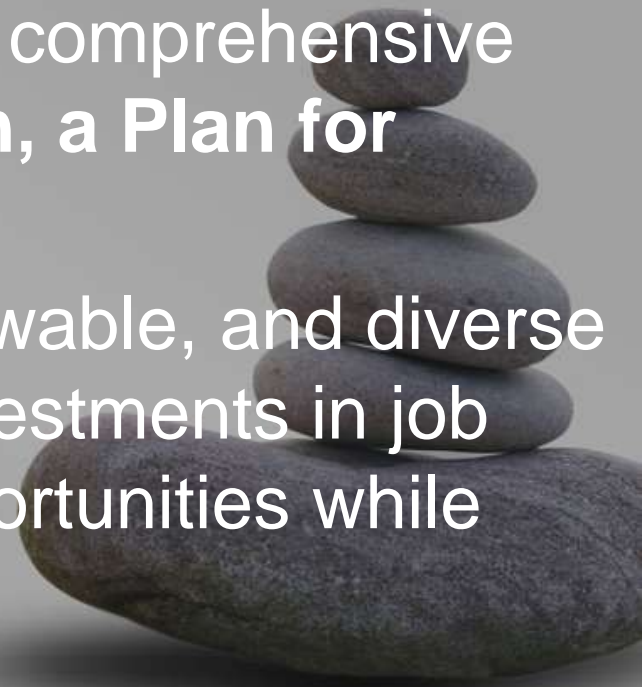
Green Building

- The construction sector has been hit disproportionately hard by the current recession.
- However, there is still building being done, and a large share of the new building is either being done to Leadership in Energy and Environmental Design (LEED) standards or Energy Star standards.



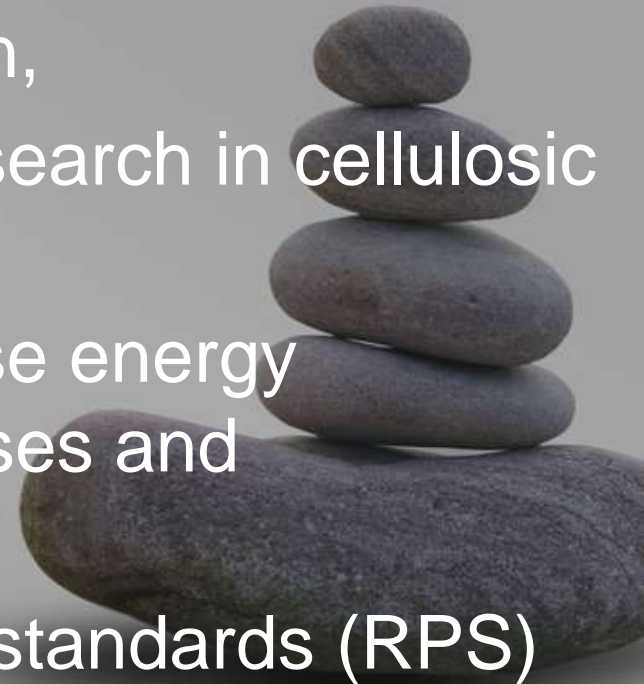
State Leadership

- Since taking office, Governor Doyle set an aggressive agenda to position Wisconsin as a leader in a growing green economy.
- In spring 2008, he introduced a comprehensive plan entitled “**Green Wisconsin, a Plan for Energy Independence.**”
- It promoted an affordable, renewable, and diverse energy supply with targeted investments in job creation and new business opportunities while improving the environment.



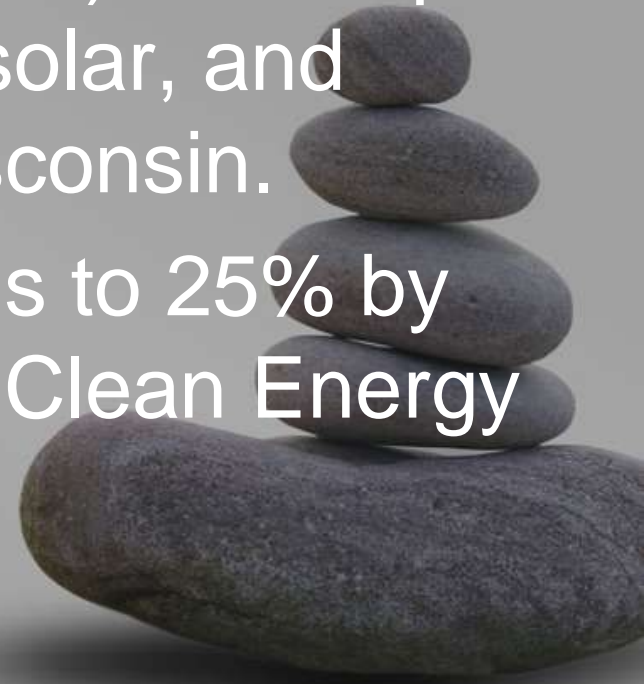
State Leadership

- Wisconsin has:
 - created the energy independent communities program,
 - invested in green job creation,
 - positioned itself to lead in research in cellulosic ethanol and biomass,
 - made great strides to increase energy efficiency in homes, businesses and government buildings, and
 - adopted renewable portfolio standards (RPS)



State Leadership

- The renewable portfolio standard (10% of electricity must be generated from renewable sources by 2015) has helped spur the growth of wind, solar, and biomass industries in Wisconsin.
- A proposal to increase this to 25% by 2025 was included in the Clean Energy Jobs Act.



Conclusion

- Through Wisconsin's focus on energy efficiency, as well as strategic developments with the business community, leadership on green jobs can translate into economic benefit for the state and its workforce.

