

Greener Pathways
EPA's Clean Energy Environment Tech
Forum, February 24, 2009

Laura Dresser
Center on Wisconsin Strategy

Center on Wisconsin Strategy (COWS)

- ▶ Research center at UW Madison
- ▶ “Think-and-do tank” for high-road economic development
- ▶ Good jobs and clean energy



Green Jobs & Green Skills



- ▶ With The Workforce Alliance and the Apollo Alliance
- ▶ Family-supporting jobs
- ▶ Middle-skill jobs
- ▶ Existing jobs – with greener skill sets
- ▶ cows.org



Green Investment – Potential Jobs

GREEN INVESTMENTS AND JOBS	
STRATEGIES FOR GREEN ECONOMIC INVESTMENT	REPRESENTATIVE JOBS
Building Retrofitting	Electricians, Heating/Air Conditioning Installers, Carpenters, Construction Equipment Operators, Roofers, Insulation Workers, Carpenter Helpers, Industrial Truck Drivers, Construction Managers, Building Inspectors
Mass Transit/Freight Rail	Civil Engineers, Rail Track Layers, Electricians, Welders, Metal Fabricators, Engine Assemblers, Bus Drivers, Dispatchers, Locomotive Engineers, Railroad Conductors
Smart Grid	Computer Software Engineers, Electrical Engineers, Electrical Equipment Assemblers, Electrical Equipment Technicians, Machinists, Team Assemblers, Construction Laborers, Operating Engineers, Electrical Power Line Installers and Repairers
Wind Power	Environmental Engineers, Iron and Steel Workers, Millwrights, Sheet Metal Workers, Machinists, Electrical Equipment Assemblers, Construction Equipment Operators, Industrial Truck Drivers, Industrial Production Managers, First-Line Production Supervisors
Solar Power	Electrical Engineers, Electricians, Industrial Machinery Mechanics, Welders, Metal Fabricators, Electrical Equipment Assemblers, Construction Equipment Operators, Installation Helpers, Laborers, Construction Managers
Advanced Biofuels	Chemical Engineers, Chemists, Chemical Equipment Operators, Chemical Technicians, Mixing and Blending Machine Operators, Agricultural Workers, Industrial Truck Drivers, Farm Product Purchasers, Agricultural and Forestry Supervisors, Agricultural Inspectors

Source: PERI & CAP



Energy Efficiency Jobs

Occupation	Training	25H	25A	MH	MA
Construction laborers*	Moderate-term on-the-job training	10.24	21,310	12.82	26,670
Sheet metal workers*	Long-term on-the-job training	10.48	21,800	13.57	28,230
Insulation workers, floor, ceiling, and wall*	Moderate-term on-the-job training	11.37	23,660	18.45	38,370
Cement masons and concrete finishers*	Moderate-term on-the-job training	12.66	26,340	16.24	33,780
<i>Heating, air conditioning, and refrigeration mechanics and installers*</i>	Long-term on-the-job training	12.75	26,530	15.32	31,860
<i>Hazardous materials removal workers*</i>	Moderate-term on-the-job training	12.88	26,780	16.52	34,370
Carpenters*	Long-term on-the-job training	13.58	28,250	17.39	36,180
Plumbers, pipefitters, and steamfitters*	Long-term on-the-job training	13.84	28,780	18.38	38,240
Electricians*	Long-term on-the-job training	14.76	30,700	18.10	37,650
Boilermakers*	Long-term on-the-job training	19.09	39,710	24.42	50,800

Source: COWS/BLS

Get Smarter About Green Jobs

Target, define, measure

Target, Measure, Define



1. Define Green Jobs more precisely to focus state/regional efforts
2. Use data to refine, target, and drive initiatives
3. Measure and Improve your efforts



Build green partnerships

To sustain good jobs

#4 Employ energy standards as green job creation tools

- ▶ PTC, RPS, EERS, &c. are critical policy levers
- ▶ Not just market-building mechanisms, but demand-drivers for green jobs
- ▶ Yet by themselves, not enough to create sustainable, high-road jobs



#5 Promote green industry clusters



- ▶ Invest in clusters, not individual firms
- ▶ Generate “virtuous circles” of innovation and growth
- ▶ Lay the ground for green-collar job training partnerships



#6 Save existing jobs and create new ones

- ▶ Not all green jobs are new ones, per se
- ▶ Economic development policies shouldn't forget conversion: jobs are often easier to save than to create
- ▶ States need to help industries retool for the clean energy economy



#7 Link green economic and workforce development



- ▶ Explicitly link worker training and job creation
- ▶ Do not train workers for jobs that do not yet exist
- ▶ A green pathway has a job at the end of the road



#8 Construct green industry partnerships

- ▶ Create or expand regional partnerships
- ▶ Support green industry development through infrastructure & market analysis
- ▶ Align workforce supply & workforce demand



#9 Integrate green jobs initiatives into existing workforce systems



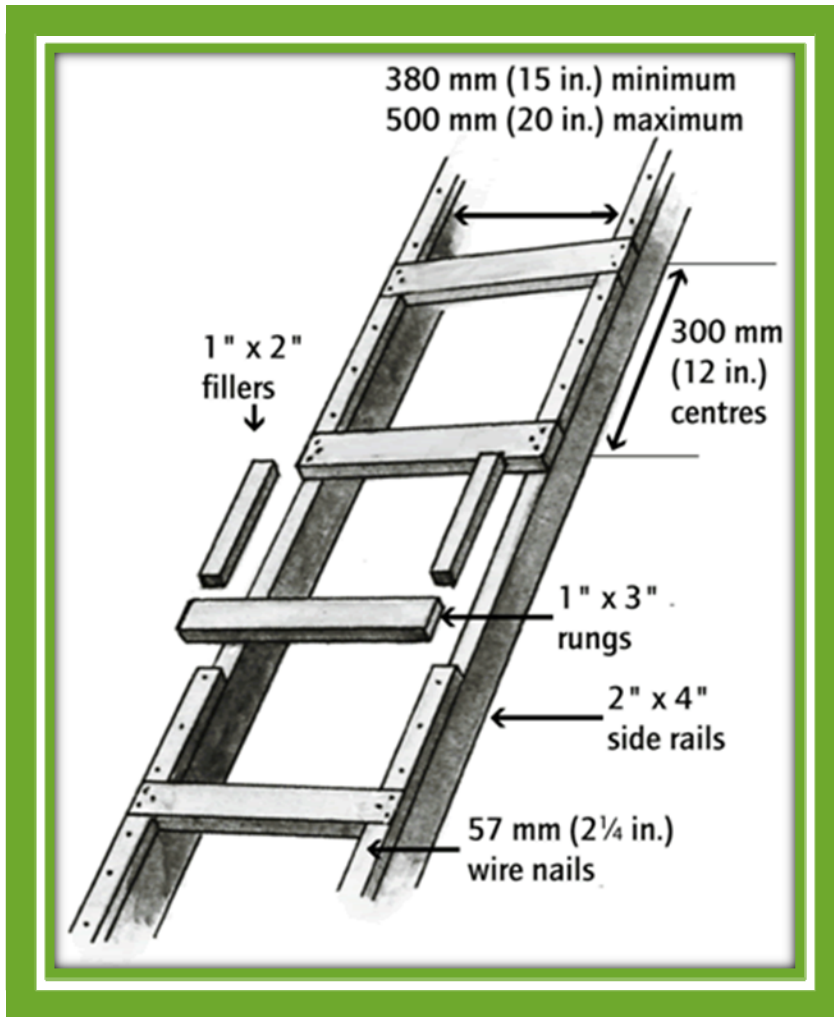
- ▶ Boutique programs bring fragmentation
- ▶ Align green efforts with federal, state, and local employment and training programs
- ▶ Leverage resources at community & tech colleges, WIBs, CBOs, and economic development agencies



Make sure green jobs pay off

For workers and communities

Opportunities for Workers and Community



10. Maximize Community Benefits by Requiring Them
11. Build Green Career Pathways
12. Build Pathways Out of Poverty

Good jobs, best practices

Green Policy and Partnerships in Washington State

A Broad Coalition of Stakeholders . . .

- ▶ In late 2007 the Washington State Apollo Alliance, Climate Solutions, Solid Ground, and The Workforce Alliance led an effort to develop a proposal that would link a green-collar jobs training initiative and greenhouse gas reduction strategies in a single piece of legislation.
- ▶ They engaged a broad range of stakeholders, including the Washington State Labor Council, the SWTECB, the Washington Workforce Association, and the State Board for Community and Technical Colleges, to help craft the green jobs component of the proposal.



Catalyzed Critical Policy Innovation

- ▶ Governor Christine Gregoire introduced the proposal in January 2008; the legislature approved it in March.
- ▶ The legislation aims to build the infrastructure to support an ambitious green goal: reduce global warming pollution and create 25,000 jobs by 2020.
- ▶ Specific workforce development strategies to put workers on pathways to high-wage, clean energy careers:
 - Labor Market Analysis
 - Green Industry Skill Panels
 - Green-Collar Job Training Fund



Green Research



- ▶ Commissioned by state legislature
- ▶ Produced by WSU Extension Energy Program
- ▶ In partnership with state workforce agencies, labor, environment, and educational organizations

Green-Collar Training Partnerships

Washington State: Industry Skill Panels

