

Green Jobs Literature Review

– Draft 6-30-09

1. Overview: Green Jobs Development in Oregon

- 1.1. Green Jobs Definition/Scope (Building, Transportation, Manufacturing, Systemic Applications, Energy/Water Resources, Natural Resources)
- 1.2. Background and History
- 1.3. Key Industries and Trends

2. Labor Data

2.1. National:

- 2.1.1. Size of Green Economy, Number of Jobs
- 2.1.2. Green Job Growth Projections
- 2.1.3. Green Job Wages

2.2. State of Oregon:

- 2.2.1. Size of Green Economy, Number of Jobs
- 2.2.2. Green Job Growth Projections
- 2.2.3. Oregon Jobs by Skill Level, Projections
- 2.2.4. Oregon Occupational Trends

3. Community Colleges

- 3.1. Role
- 3.2. Interface with Industry/Partnerships
- 3.3. Interface with Workforce Development (talk about WIA, Career Pathways here)
- 3.4. Existing Training Programs
- 3.5. Program Needs
- 3.6. Example Programs (effective programs, from any state; to use elements as building blocks in designing program expansions in Oregon)

Publication List:

WorkSource Oregon, *The Greening of Oregon's Workforce*, June 2009

Recently released report with detailed data on Oregon green jobs, wages, and training. This report, along with the following report (*Going Green*) are the richest in directly applicable information and are helpful to read in their entirety.

M. Feldbaum, H. States for NWCE, *Going Green, Date?*

Subtitled: The Vital Role of Community Colleges in Building a Sustainable Future and Green Workforce. This report examines the growing role of community colleges in a low-carbon, clean energy economy and provides examples of innovative community college strategies, and offers information on the fastest growing sectors and jobs that provide strategic opportunities for community colleges.

The Pew Charitable Trusts, *The Clean Energy Economy*, June 2009

This report concludes that the clean energy economy, still in its infancy, is emerging as a vital component of America's new economic landscape. Pew counted actual jobs, companies and investments in every state aimed at developing clean, renewable sources of energy, increasing energy efficiency, reducing greenhouse gas emissions that cause global warming, and conserving water and other natural resources. They found that jobs and businesses in the emerging clean energy economy have grown at a faster rate than U.S. jobs overall. And they are poised for even greater growth, driven by increasing consumer demand, capital infusions, and policy reforms by federal and state lawmakers.

Kermit Kaleba, Andrea Mayo, et al for The Workforce Alliance, *Oregon's Forgotten Middle-Skill Jobs*, February 2009

Written for the Skills2Compete campaign. Study of current and projected levels of Oregon jobs by skill level, with recommendations for reducing the gap in middle-skill workers needed. Focus is industry-wide throughout the state, but includes language on green jobs and some national figures on green job skill levels (p. 10).

Worksource Oregon, *Training Oregonians for the Right Jobs*, December 2008

This report introduces the Oregon Employment Department's *Occupational Prioritization for Training* model, to help prioritize training dollars and ensure that Oregon workers have the right skills for the approximately 70,000 new jobs created each year. It targets training resources to occupations likely to have the most growth and replacement openings, and paying the highest wages.

Green For All, *Green Pathways out of Poverty: Workforce Development Initiatives*, March 2009

The emergence of a new green economy presents a once-in-a-generation opportunity to connect low-income people to jobs and careers in what will be a key economic sector just

as it starts to grow. The authors of this document represent a diverse group of training providers working to make this happen by sharing knowledge and best practices in the field. The document is a product of a two-day meeting on identifying best practices and resources that make effective workforce development projects in green jobs, and links to recommended resources.

Environmental Defense Fund, Ella Baker Center for Human Rights, *Green Jobs Guidebook*, September 2008- updated May 2009

This report is specific to California and is geared toward job-seekers. Lists hundreds of green jobs, and their wages and education requirements. Lists training and placement programs, apprenticeship programs, community college programs.

3E Strategies for Sustainable Oregon Workforce Initiative, *An Analysis of Clean Energy Workforce Needs and Programs in Oregon*, March 2008

Conducts a gap analysis study of Oregon clean energy workforce needs; discusses workforce needs, lists the numerous clean energy training programs in Oregon (updated in 2009 report), and outlines a series of recommendations for addressing the gaps.

3E Strategies for Sustainable Oregon Workforce Initiative, *An Inventory of Renewable and Efficient Energy in Oregon*, March 2009

Compilation of a statewide inventory of sustainable energy development efforts, their status, and primary contact information to better assist companies in connecting with communities and workforce development agencies. (For proposals, noteworthy for the updated list of Oregon training programs.)

CLASP (Center for Law and Social Policy), *Using Increased Funding under the Workforce Investment Act to Create Multiple Pathways to Marketable Postsecondary Credentials and Middle-Class Employment*, April 2009

This paper discusses how the Workforce Investment Act (WIA) system can use new funding and flexibility under the American Recovery and Reinvestment Act (ARRA) to implement cutting-edge workforce education and training strategies that can help low-skill adults and out-of-school youth gain the skills and credentials they need to fill the pipeline of skilled workers for jobs important to local economies. It focuses on career pathways as a framework for strengthening employer engagement and linkages among workforce education and training programs; and as a model for improving how training and related services are delivered in the WIA adult, dislocated workers and youth programs.

Seattle Jobs Initiative, *Charting a Path*, May 2009

Over the last decade, career pathways has emerged as a strategy to increase access to postsecondary training and education as well as improve educational attainment for low-income and low-skill adults. While a great deal of general research on career pathways currently exists, the authors focus exclusively on statewide efforts in this report, by

exploring the efforts underway in five states, including Oregon. (Oregon being one of the states with a fully-implemented effort.)

Key Links and Battelle, *Priming Oregon's Talent Pipeline: Oregon Future Workforce Needs Analysis, Date (Draft)?*

Commissioned by the Business and Economic Development Committee of WIB, to analyze Oregon's economic competitiveness and address five key questions: (1) What might be the economic drivers of Oregon's future economy? (2) What workers with which skills will be needed? (3) What capacity does Oregon have now? (4) Where are the major gaps? (5) What should be done?

J. Chinitz, C. Fu, G. Smith, *2008 Job Gap: Tough Times for Northwest Families, December 2008*

Commissioned by Northwest Federation of Community Organizations. This report provides calculations of (1) A living wage for all counties in Idaho, Montana, Oregon, and Washington; (2) The percent of job openings that pay a living wage; (3) The ratio of the number of living wage job openings to the number of people looking for work.

Worksource Oregon, *High-Wage, High-Demand, and High-Skill Occupations, 2007.*

In 2007, the Oregon Employment Dept, in collaboration with OWIB and OR Dept of Education, developed definitions for high-wage, high-skill and high-demand occupations, and provide tables by SOC by region.

Apollo Alliance and Green for All, *Green Collar Jobs in America's Cities, Date?*

A strategic framework for local policymakers to develop a green-collar jobs initiative that responds to the realities of their local economies and communities.

Good Jobs First, *High Road or Low Road, February 2009.*

This report looks at existing jobs in industrial sectors that will play major roles in the greening of our economy: manufacturing, construction, waste management, and freight transportation.

Joel Makower, *State of Green Business 2008, January 2008*

An overview of green business trends and the GreenBiz.com index.

Van Jones, *Green Collar Economy, 2008*

This book lays out an overview of key green collar industry sectors, provides some green jobs case studies and explores the living wage within green industry issue.

Presentations:

State of Oregon DAS, *Jobs for the New Green Economy.*

Web Resources:

With their early emphasis on green collar jobs and clean-tech policies, it's projected that Washington and Oregon could create 41,000 to 63,000 new jobs across five energy sectors by 2025. That's according to a new report, Carbon-Free Prosperity 2025: How the Northwest Can Create Green Jobs, Deliver Energy Security, and Thrive in the Global Clean Tech Marketplace, which points to five technology areas in which the Northwest has a competitive advantage:

Solar photovoltaics manufacturing

Green building design services

Wind power development

Sustainable bioenergy

Smart-grid technologies