

Coherence between ARRA & Skills Development in USA

William Mass
Director, Center for Industrial Competitiveness
Graduate Faculty, Regional Economic and Social Development
University of Massachusetts Lowell

Skills for Green Jobs
Technical Validation Workshop
International Labour Organization/CEDEFOP
May 17, 2010, Geneva, Switzerland



American Recovery and Reinvestment Act

Stimulus package "...an insurance package against catastrophic failure."

Lawrence Summers, Director, National Economic Council, memo to President-Elect Obama, December 16, 2008, economic and budgetary planning meeting.

ARRA complexity and ambition: addresses, to a degree, the largely U.S. created global financial crisis, historic state budget squeezes, federal bailouts, renewed fears of energy security and world environmental catastrophe related to recent and significant increases in the cost of fuel and global warming, and pathway out of poverty for workers facing barriers to employment.



ARRA \$787 Billion: Direct Federal Outlay & Tax Expenditure

- \$288 Billion (or 37%) of the funds are being paid out in the form of tax benefits,
- \$224 Billion (or 28%) of the act is being spent on various entitlement outlays
- \$275 Billion (or 35%) of funds are being paid out in tens of thousands of contracts, grants, and loans to a variety of organizations and businesses.



ARRA Energy and Green Jobs Programs

\$80-100 Billion for Green Initiatives
(\$20 B from 2008 Energy Improvement and Extension Act)

Most significant funding

- \$18.7 Billion for Energy Efficiency, Renewable Energy Industry, Transportation, and Energy Research
- \$13-17 Billion Renewable Energy, Energy Efficiency, Housing Retrofits-incentives and tax credits
- \$4.5 Billion Greening of Federal Buildings
- \$400 Million Green Workforce Training (Up to \$10 billion for other economy-wide workforce investments)



ARRA Workforce Development \$400M

1. State Energy Sector Partnership and Training Grants—\$190 Million (34 Grants)

- *Education, training, supportive services for skill attainment/career path development in emerging green industries for low-income, low-skilled workers.
- *Support and development for statewide partnerships that integrate green industry focus into state workforce development plans.

2. Pathways out of Poverty—\$150 Million (38 Grants)

- * Awards are targeted for national nonprofits and local nonprofits, community, faith-based, education and training, public workforce investment system
- 3. Energy Training Partnership Grants—\$100 Million (25 Grants)
 - *\$28 Million of these funds will target dislocated auto workers
 - *Grant recipients will partner with labor organizations, and WIB.

4. Green Capacity Building Grants—\$5.8 Million (62)

*Grant recipients prioritized that offer training opportunities to women, farm workers, American Indians, and at-risk youth in green industries.

5. State Labor Market Information Improvement—\$48.8 Million (30 Grants)

*Support labor market information gathering and green job banks. Directed at state agencies, many forming into consortiums and producing research at the regional, multi-state, or national level.



USA Workforce Development System

Important Institutional Partners

Community College System
Diverse and Entrepreneurial

Private Training Programs

Many State Licensed, Weak Standards Enforcement

Trade Associations, National Organizations Certification Standard Setting -diverse, competing standards



Green Job Measurement Challenges: State Laboratories of Democracy vs. Common Basis for Comparison

Workforce Information Council Green Jobs Study Group

O'NET Green Jobs – Occupational Classification

Green Increased Demand Green Enhanced Skills Green New & Emerging

Job: unit of observation but based on economic activity but latter is firm, industry, sector, region contingent



Classification Theory: Practical Limitations

Federal Structure: National, State, Local

Public-Private Partnerships and Competing Systems

Jobs within Occupational Categories ->

Related Like family members:

Each member may resemble at least one other.

No member may resemble all others in the family.

Occupations change in place & time

So the occupation category is often a hybrid of

Green Enhanced Skills

Green New & Emerging



Energy Auditor and Related Higher Skilled Occupations

Education	Title	Salary
Associates	Residential/Commercial Energy Field Auditor	\$24,000
Bachelor's	Industrial Energy Field Auditor	\$48,500
Master's (Science)	Renewable Energy Consultant	\$80,500
Bachelor's (Architect)	Green Building & Retrofit (Res/Com/Ind)	\$90,620



Raquel Pinderhughes and Pathbreaking Model: Oakland Green Jobs Corp Program

- 1) Local work force training system, particularly but not solely focused on community college programs,
- 2) Job opportunities identified by local business associations including current hiring and employment trends
- 3) Environmental Literacy as foundational to systems thinking that builds the capacity for community empowerment to sustain an integrated program of community and workforce development.

Multidisciplinary approach to infrastructural sectors of water, waste, transportation and energy as well as locally focused industries related to building, food and agriculture.

"The curriculum, entitled ROOTS of Success, is designed to teach environmental literacy while enhancing academic literacy and job readiness skills...." /



Measures Linked to Policy Goals: Unavoidable Bias – Make Standards Explicit

Analogy to High Tech Job Measurement

Product/Industry based – associated economic activity

R&D Standard: % of Sales

Technology Expert Assessment by product

Scientists, Engineers, Technicians: % of labor force

ICT bias – did not measure medical technicians

High tech (2x National Average of 5% work force)

Higher tech (3x-5x)

Highest tech (5x and higher %)