Labor Market Research Results

Green Labor Market Intelligence For New York State

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Brief Biography – Frank M. Surdey

• Currently serves as a Managing Economist for the New York State Department of Labor, Office of Workforce Policy and Innovation.

• Statewide responsibility for economic development research, business service strategies, and is the Department’s lead economist on clean energy workforce issues.

• Primary researcher and co-authored the Department’s May 2009 report ‘New York State’s Clean Energy Industry: Labor Market and Workforce Intelligence’.

• Serves on the national Workforce Information Council’s Green Jobs Study Group.
New York State Energy Plan

- Reduce electricity use by 15% below 2015 forecasts (EEPS).

- Increase the proportion of renewable energy generation to 30% of electricity demand by 2015 (RPS).

- Develop a Climate Action Plan to identify strategies, actions and infrastructure needs to reduce GHG emissions by 80% by 2050.

- Accelerate the commercialization of emerging clean energy technologies by New York State – based firms.

- The State will collaborate with and support local governments and local communities to meet these energy policy objectives.
Public Investments in Energy

- Approximately $1.2 billion in RE and EE investments:
  - $500M – Weatherization Assistance Program (WAP).
  - $123M – State Energy Program (SEP) under ARRA funding.
  - $175M – Energy Efficiency and Conservation Block Grant (EECBG).
  - $78M - Workforce Development.
Definition of a ‘Green Job’ in New York State

• Involved in producing goods or delivering services that increase energy efficiency or generate renewable energy.

• Examples:
  – Manufacturing components for wind turbines or solar panels;
  – Energy retrofitting existing homes;
  – Generating electric power from renewable sources;
  – Financing cleantech companies or smart grid infrastructure;
  – Scientific research and development that promotes RE or EE;
  – Providing legal advice on projects that promote RE or EE; and
  – HVAC and performance monitoring/optimization on residential buildings.
State LMI Improvement Grant - $1,112,207

- Quantify/Qualify Jobs in NYS’s Clean Energy Industry:
  - Focus on energy efficiency and renewable energy.
  - Identify emerging skills and training capacity.
  - Assess labor supply/demand and identify skill gaps.
  - Develop a green jobs portal for jobseekers, businesses and education/training organizations.

- Partners:
  - SUNY System Office of Business and Industry Relations.
  - SUNY Albany College of Nanoscale Science and Engineering, Energy and Environmental Technology Applications Center (E2TAC).
  - Advanced Energy Research Technology Center (AERTC) at Stony Brook University.
  - NYC LMI Service at the CUNY Graduate Center.
New England Consortium LMI Grant - $3,999,923

- Consortium of eight New England states – VT (fiscal agent), CT, MA, ME, NH, NJ, NY, RI. NYS DOL’s budget share approx. $400K.

- Other Partners – Georgetown University’s Center on Education and the Workforce; The Conference Board; and Direct Employers Association/NASWA Partnership (Job Central).

- Proposal:
  - Determine current demand (short-term projections).
  - Build a taxonomy of skills and technologies using the Conference Board’s “Help Wanted Online Database” and Burning Glass.
  - Create a green jobs portal, web service tools and national green jobs bank are planned.
Nevada Consortium LMI Grant - $3,753,000

- Consortium of eight states – NV (fiscal agent), CO, FL, IL, NC, NY, TX and UT. NYS DOL’s budget share approx $40K.

- Proposal:
  - Enhance the labor exchange infrastructure and LMI to promote career opportunities within clean energy industries.
  - Determine occupational projections.
  - Develop, test and implement new software to capture clean energy job activity.
“Green jobs are important for New York’s economic future, not only in terms of getting people back to work, but also to help residents and businesses reduce energy usage. This survey will provide information that will help us make sure green businesses have the skilled workers they need to grow.”

-Colleen Gardner, Commissioner of the NYS Department of Labor
Some 20,000 businesses were surveyed.
• On-line survey with paper option.
• All businesses with 25 or more workers were surveyed.
• A sample survey (approx. one quarter) of smaller firms.
• Focus on 6 industry clusters:
  – Construction trades.
  – RE and EE component manufacturers.
  – Professional services/Legal services.
  – Electric power generation, transmission, distribution.
  – Financial services.
  – Building services.
• Some 230 WAP sub-grantees and sub-contractors were surveyed.
Preliminary Survey Results

• In certain industry clusters, many employers reported having one or more workers who produce goods or deliver services that increase energy efficiency or generate renewable energy.

  - Construction Trades – 31%*
  - Professional Services (except Legal) – 30%*
  - Component Manufacturing – 14%*

*As a share of responses within the industry cluster.
Focus Groups/Interviews – Architectural Firms

• “It’s hard to dissect our work and characterize it into ‘green’ products and services. In our economy, everything we do is driven by producing quality and maintaining sustainability. By this standard, every architect is green.”
  – Architect, New York City

• “If a consumer is willing and able to pay for it, there are no shortages of qualified architects, engineers, electricians, and plumbers who are prepared to meet their ‘Green’ needs”.
  – Architect, Hudson Valley
Focus Groups/Interviews - Solar Power

• Backgrounds in electrical, roofing, construction and other structural systems are critical.
  – Technicians can solidly supplement their existing skills with NABCEP training and certifications to become solar installers.

• Electrical and Mechanical Engineers can supplement their degrees with solar engineering training.
  – By adding to a core curriculum, or as a separate minor or concentration, Engineers can get an understanding of how renewable energy design/systems and solar fit together from a structural and electrical perspective.
Focus Groups/Interviews - Recruiting Workers

• Across the engineering, construction, and building services industries, employers say they value hands-on experience, curiosity, and willingness to learn as important characteristics of their most successful recruits.

  – Employers who recruited from internship or co-op programs spoke highly of these recruits and expressed a desire for more such programs.

• Businesses cite the need to incorporate traditional knowledge and skills, which are still valued, with newer technologies (e.g. computer skills and data analysis) that play an important role in the transition to green practices within their industries.
Focus Groups/Interviews - New York City

• Energy efficiency financing still represents a barrier for building owners seeking to retrofit their properties in New York City – particularly in the residential market.
  
  – Most retrofits occur in the commercial sector – specifically Class A office space – and are in response to client demand or a perceived return on investment for building owners.

• There is currently a shortage of information about how long it takes to recoup investment in energy efficiency upgrades.
  
  – Building owners cite the need to show a return within a 5 year time frame or see a clear relationship between the investment and higher retail value.
Preliminary WAP Survey Results

- The majority of businesses hire or recruit workers with credentials from the Building Performance Institute.
- The most commonly used recruitment methods included media ads, local One-Stop Centers, the Internet and networking.
- Only about one in ten cited a need for assistance in recruiting workers.
- Firms projected a workforce increase of 17% from the summer of 2010 to the Spring of 2011.
Thank You!