


California's 2009 Green Economy Survey Early Results and Next Steps



CWA Meeting of the Minds
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Steve Saxton
Bonnie Graybill

Labor Market Information Division

Understanding the Green Economy

What is California LMI Doing/Planning?

- Responding to state and national information needs
 - See our “green web page” at <http://www.labormarketinfo.edd.ca.gov/?pageid=1032>
- Collaborating to expand knowledge
 - with federal/state/local research partners to review existing research and identify information gaps
 - with state and local partners to define workforce needs and support workforce development
 - with control entities and utilities responsible for bringing about climate change
- Surveying California businesses to establish baselines
- Publishing career research to support workforce development

Green Economy Survey Details

- First mailing in May 2009
- Over 50,000 businesses across the California economy; all industries, all sizes, all areas
- 5.2M employment in surveyed firms
- Collecting information on:
 - Number of workers in green or clean product manufacturing and/or services
 - Number of businesses that have adopted green practices
 - Emerging occupations for further study related to skills and workforce needs
- Partnering with Community Colleges, Air Resources Board, California Energy Commission, California Workforce Investment Board, Economic Strategy Panel, Employment Training Panel, and others

Our Working Definition of Green

Green or clean is any activity or service that performs at least one of the following:

- **G**enerating and storing renewable energy
- **R**ecycling existing materials
- **E**nergy efficient product manufacturing, distribution, construction, installation, and maintenance
- **E**ducation, compliance and awareness
- **N**atural and sustainable product manufacturing

For the complete definition see:

<http://www.labormarketinfo.edd.ca.gov/contentpub/GreenDigest/Californias-Draft-Definition-Green-Industries.pdf>

Preliminary Survey Responses

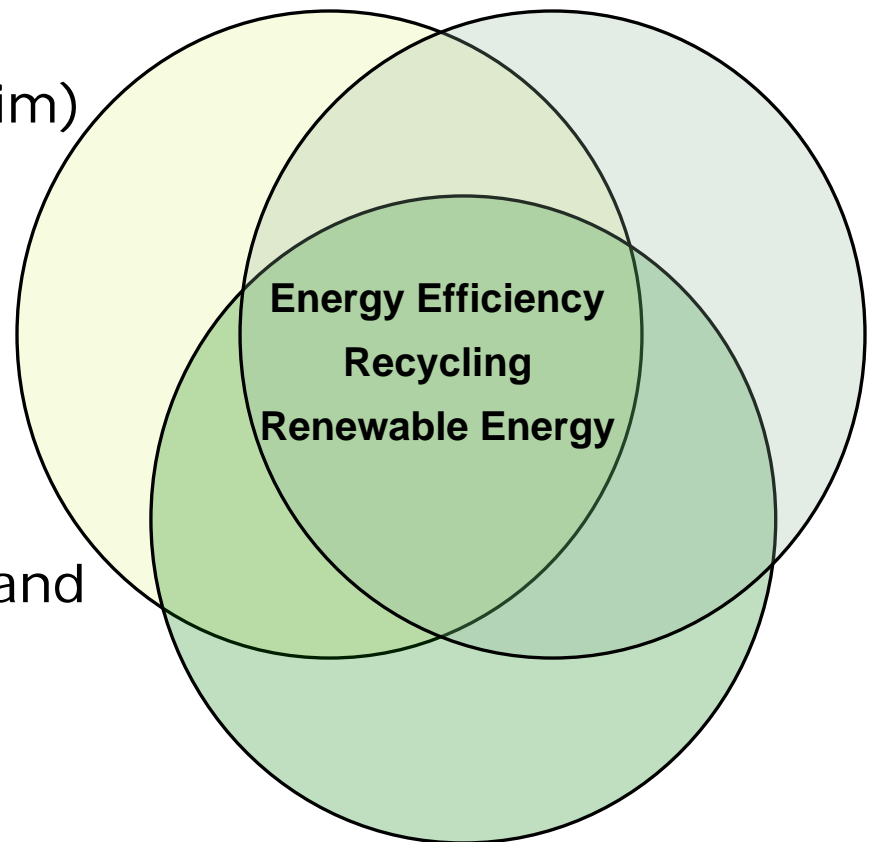
- Over 6,000 employers have responded--13 percent of sample—representing over 85,000 businesses in the economy
- 10 percent of employers report employees working on green activities
- 32 percent of green employees are reported by firms with less than 20 total employees
- About 3.3 percent of all workers are working on green products and services
- 58 percent of employers report using at least one green business practice

Comparison to Other States' Recent Green Workforce Surveys?

Green as a percent of total employment

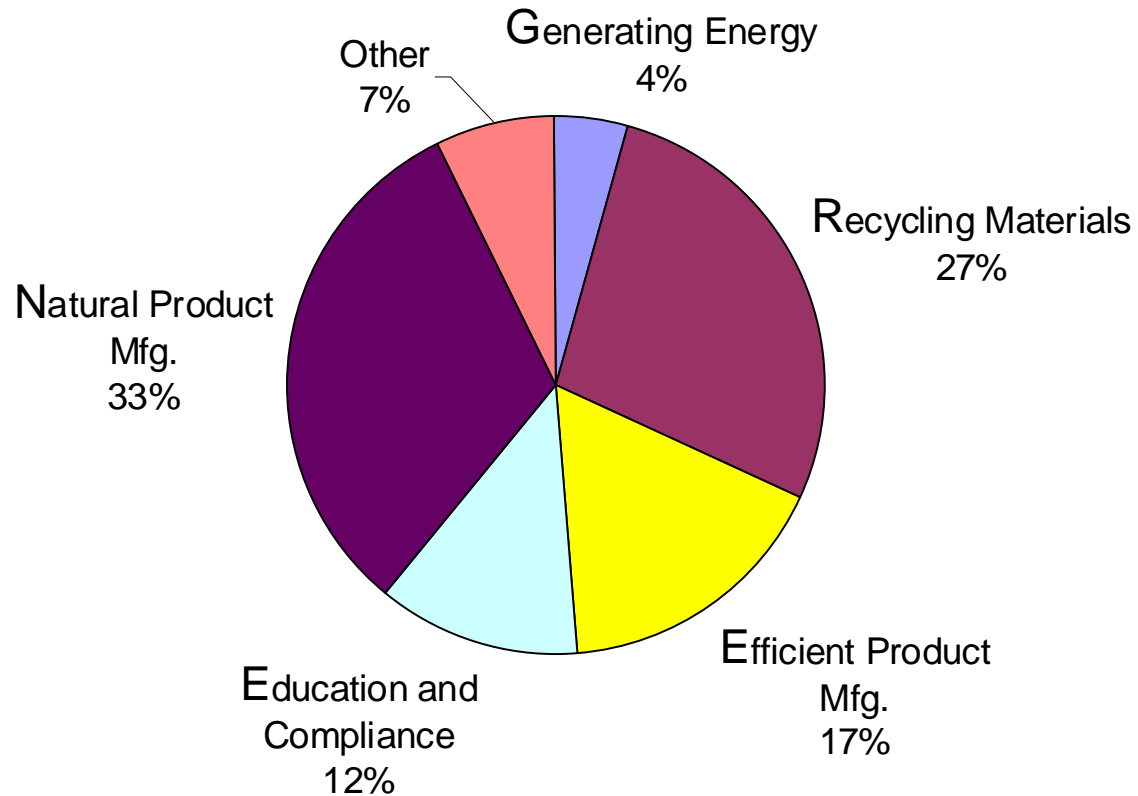
California	3.3 % (Prelim)
Washington	1.6 %
Oregon	3.0 %
Michigan	3.0 %

- Caveat...Definitions vary somewhat between states...
- Renewable energy, recycling, and energy efficiency are in each states definition



Green Workers Reported

Total Reported Green Employment by Category



Preliminary data as of August 24, 2009

Generating and storing renewable energy

- Top industries

- Utilities
- Professional and Technical Services
- Machinery Manufacturing

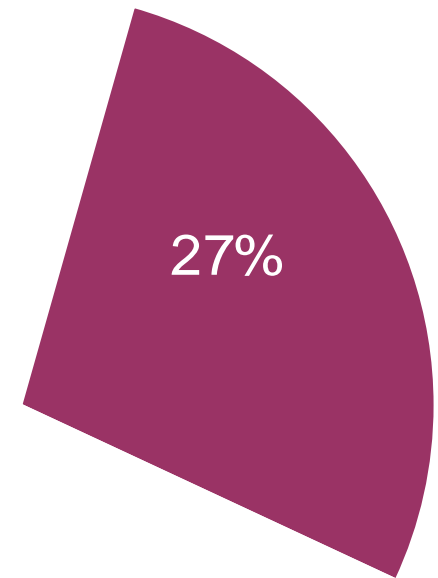
- Top occupations

- Architects, Except Landscape
- Alternative Energy Engineers
- Electrical Engineers
- Remediation Technology Engineers
- Building Performance or Retro-Fitting Specialists
- Heating and Air Conditioning Technicians and Installers
- Sustainable Farmers and Farm Workers
- Carpenters
- Mechanical Engineers
- Environmental Engineers



Recycling existing materials

- Top industries
 - Merchant Wholesalers, Durable Goods
 - Waste Management and Remediation
 - Fabricated Metal Product Manufacturing
 - Professional and Technical Services
- Top occupations
 - Recycling Center Operators
 - Assemblers
 - Hazardous Materials Removal Workers
 - Heating and Air Conditioning Technicians and Installers
 - Sustainable Farmers and Farm Workers
 - Soil and Plant Scientists
 - Wastewater Technicians and Operators
 - Construction Managers
 - Industrial Production Managers



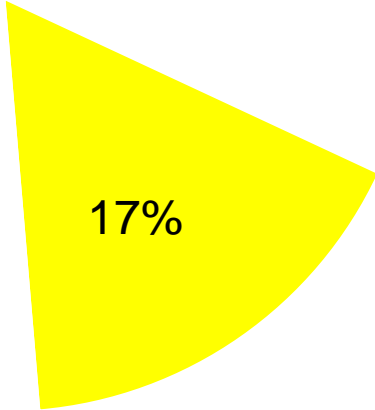
Energy efficient product manufacturing

■ Top industries

- Specialty Trade Contractors
- Computer and Electronic Product Manufacturing
- Construction of Buildings
- Professional and Technical Services

■ Top occupations

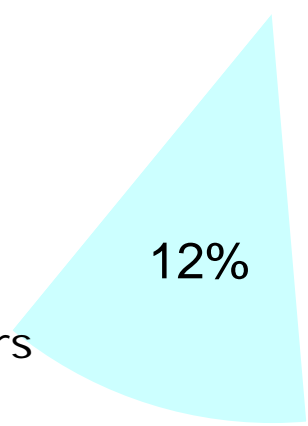
- Assemblers
- Electricians
- Architects, Except Landscape
- Carpenters
- Heating and Air Conditioning Technicians and Installers
- Energy Auditors, Home and Commercial
- Construction Managers
- Building Performance or Retro-Fitting Specialists
- Alternative Energy Engineers
- Alternative Fuel Vehicle Technicians



17%

Education, compliance and awareness

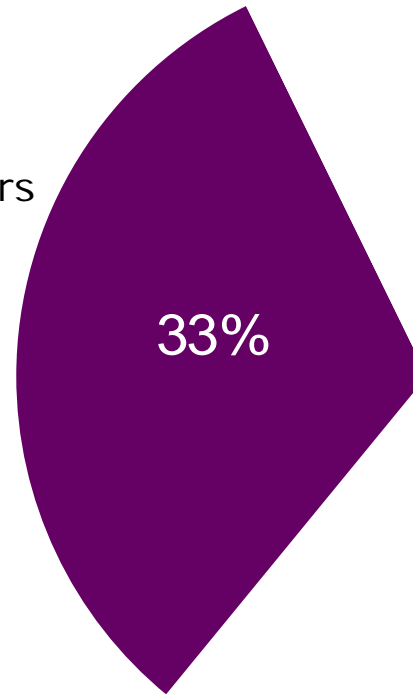
- Top industries
 - Professional and Technical Services
 - Educational Services
 - Membership Associations
 - Specialty Trade Contractors
- Top occupations
 - Assemblers
 - Plumbers, Pipefitters, and Steamfitters
 - Heating and Air Conditioning Technicians and Installers
 - Architects, except landscape
 - Electricians
 - Carpenters
 - Soil and Plant Scientists
 - Sustainable Farmers and farm workers
 - Alternative Energy Engineers



12%

Natural and sustainable product mfg

- Top industries
 - Paper Manufacturing
 - Food Manufacturing
 - Crop Production
 - Nonmetallic Mineral Product Manufacturing
 - Electronic Markets/Agents/Brokers
- Top occupations
 - Sustainable Farmers and Farm Workers
 - Assemblers
 - Recycling Center Operators
 - Biomass Collectors
 - Biological Technicians
 - Industrial Production Managers
 - Carpenters
 - Soil and Plant Scientists
 - Chemical Technicians

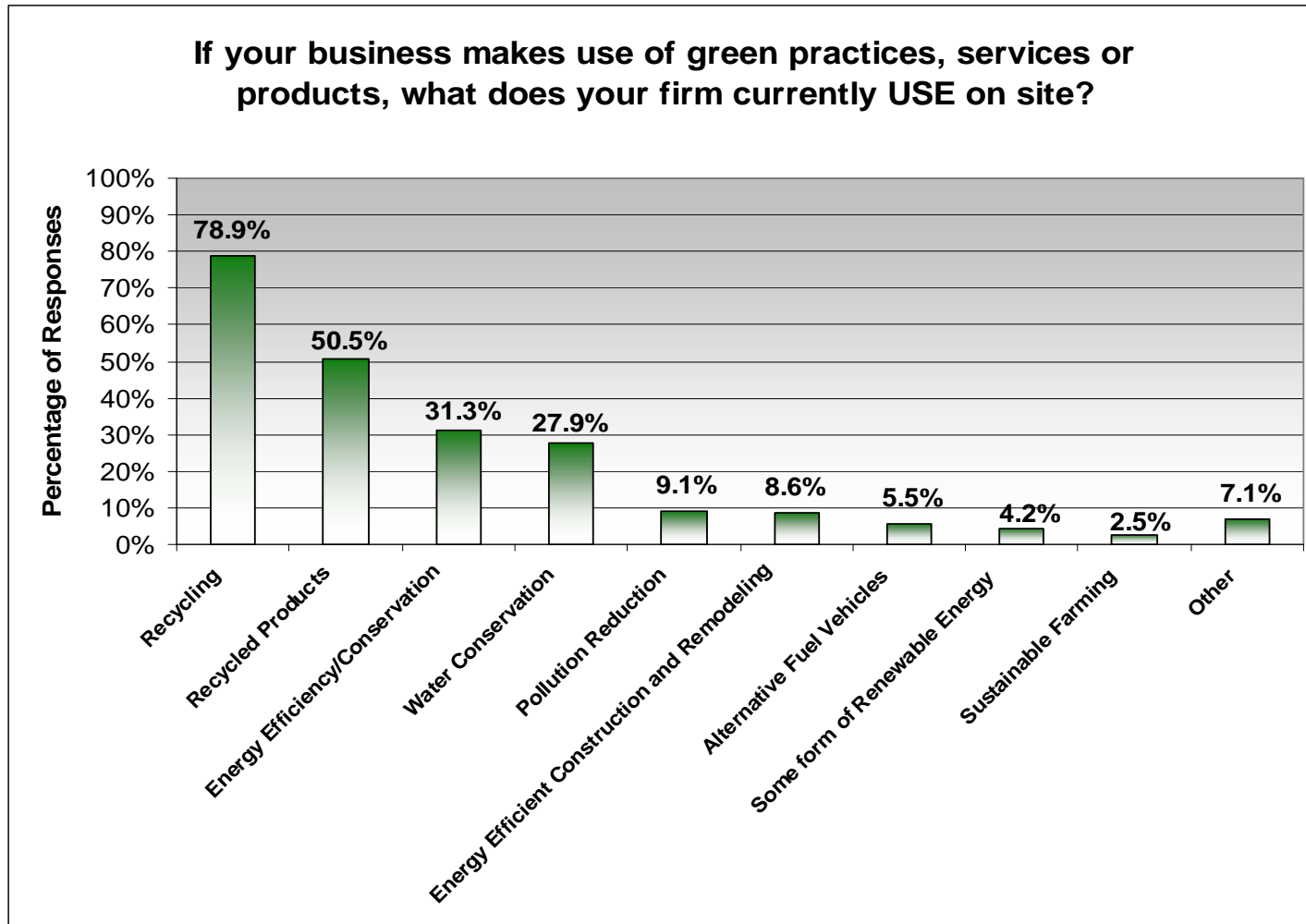


Preparation of Current Green Workers—OJT!



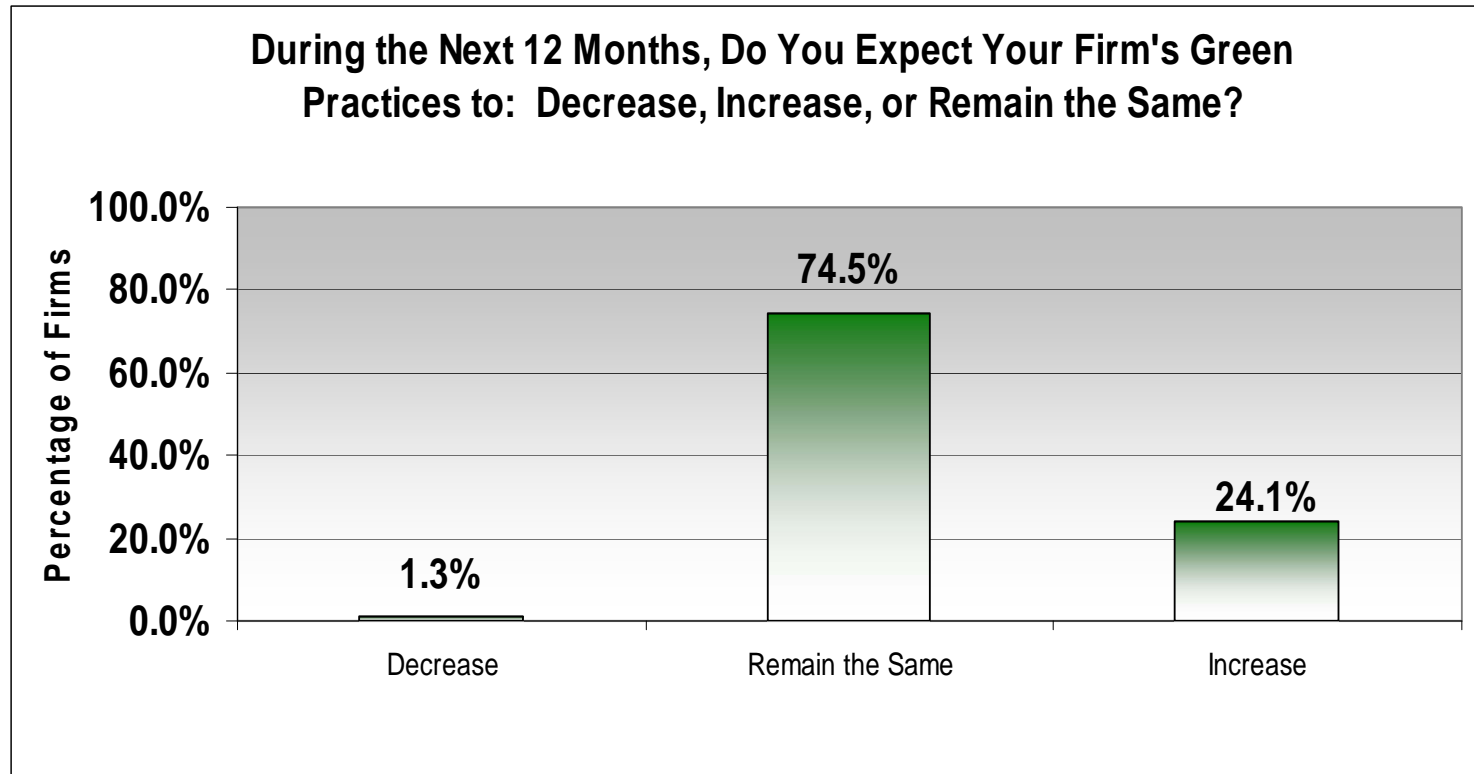
Preliminary data as of August 24, 2009

Sustainable Practices



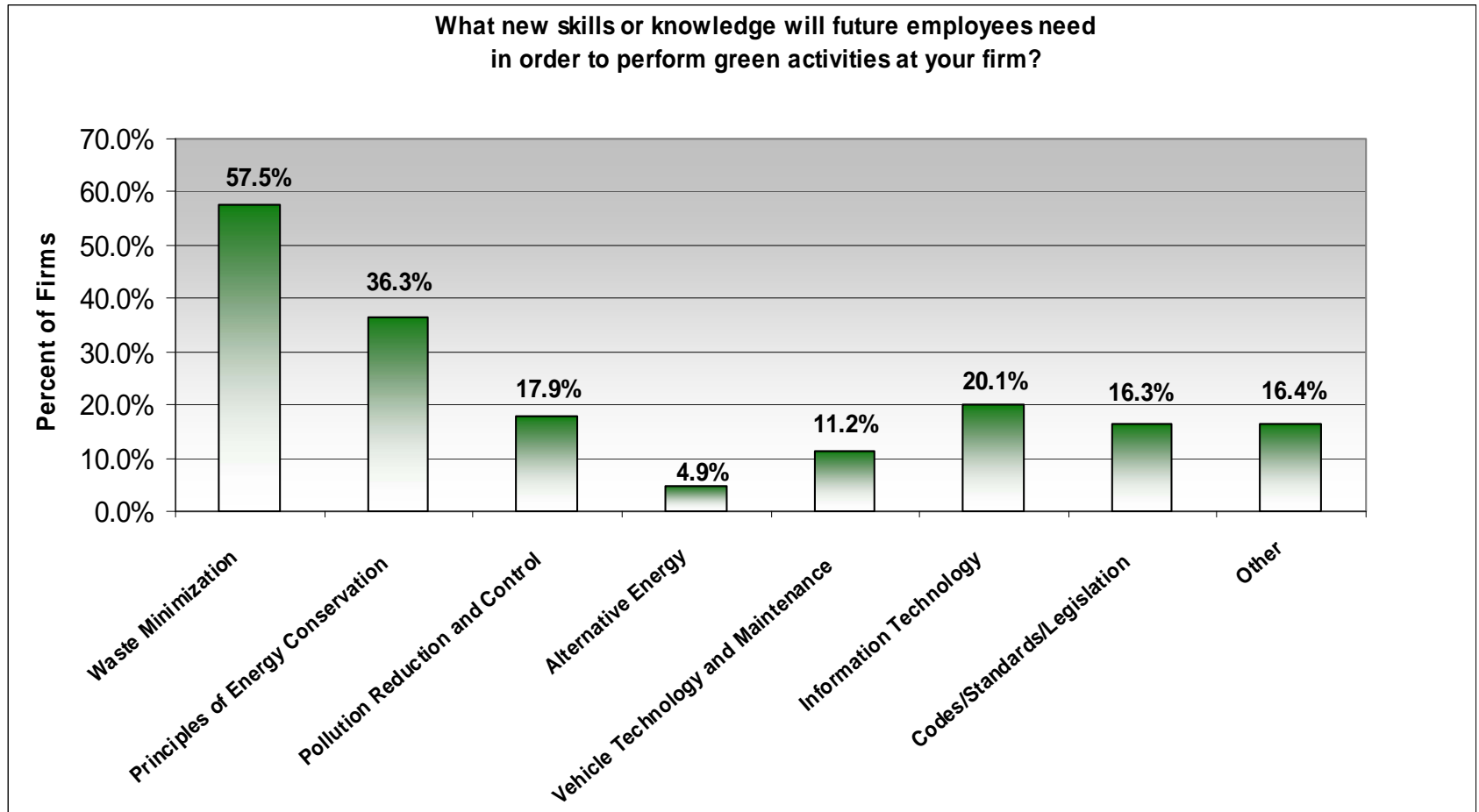
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Sustainable Practices



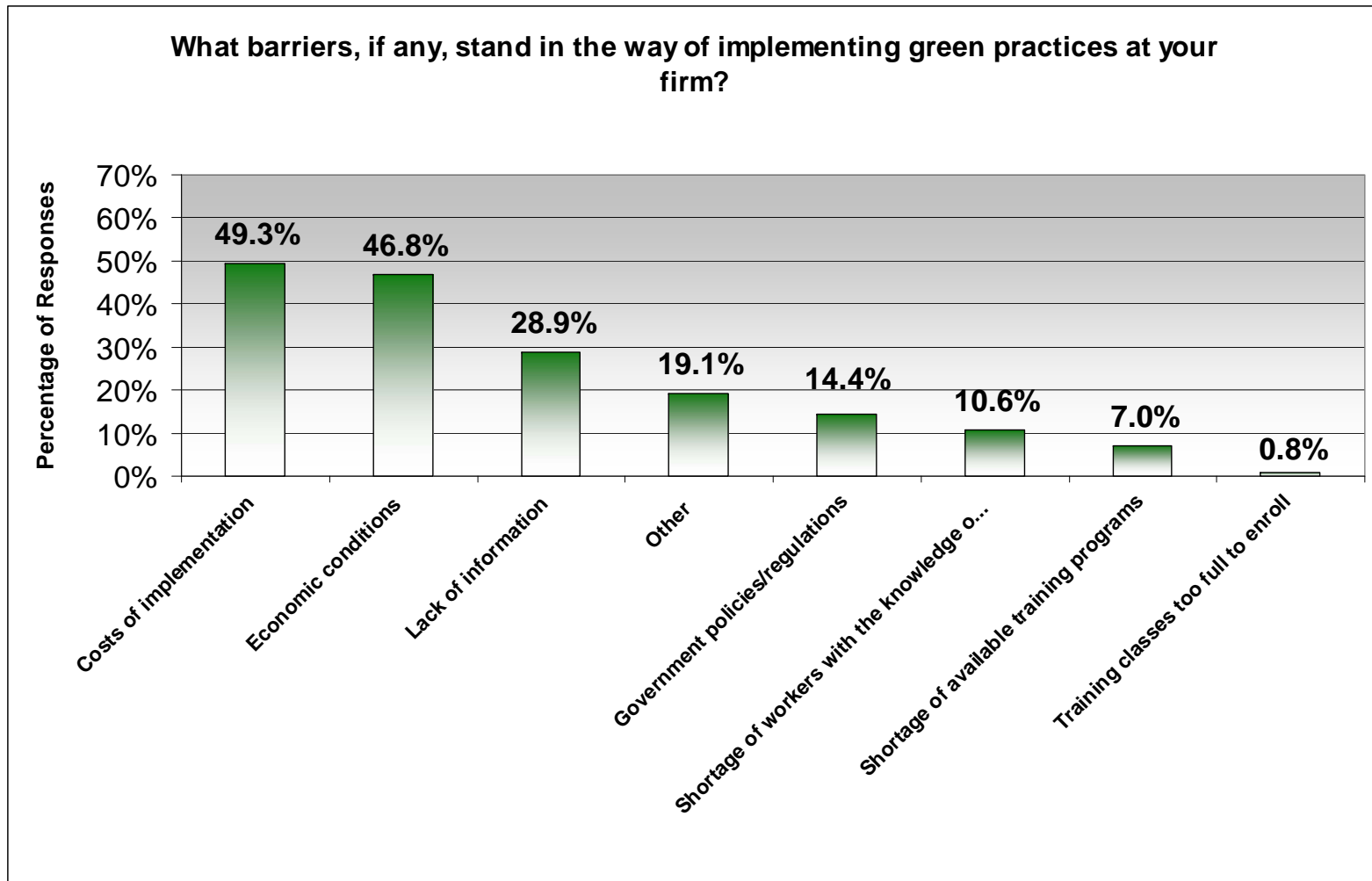
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Sustainable Practices



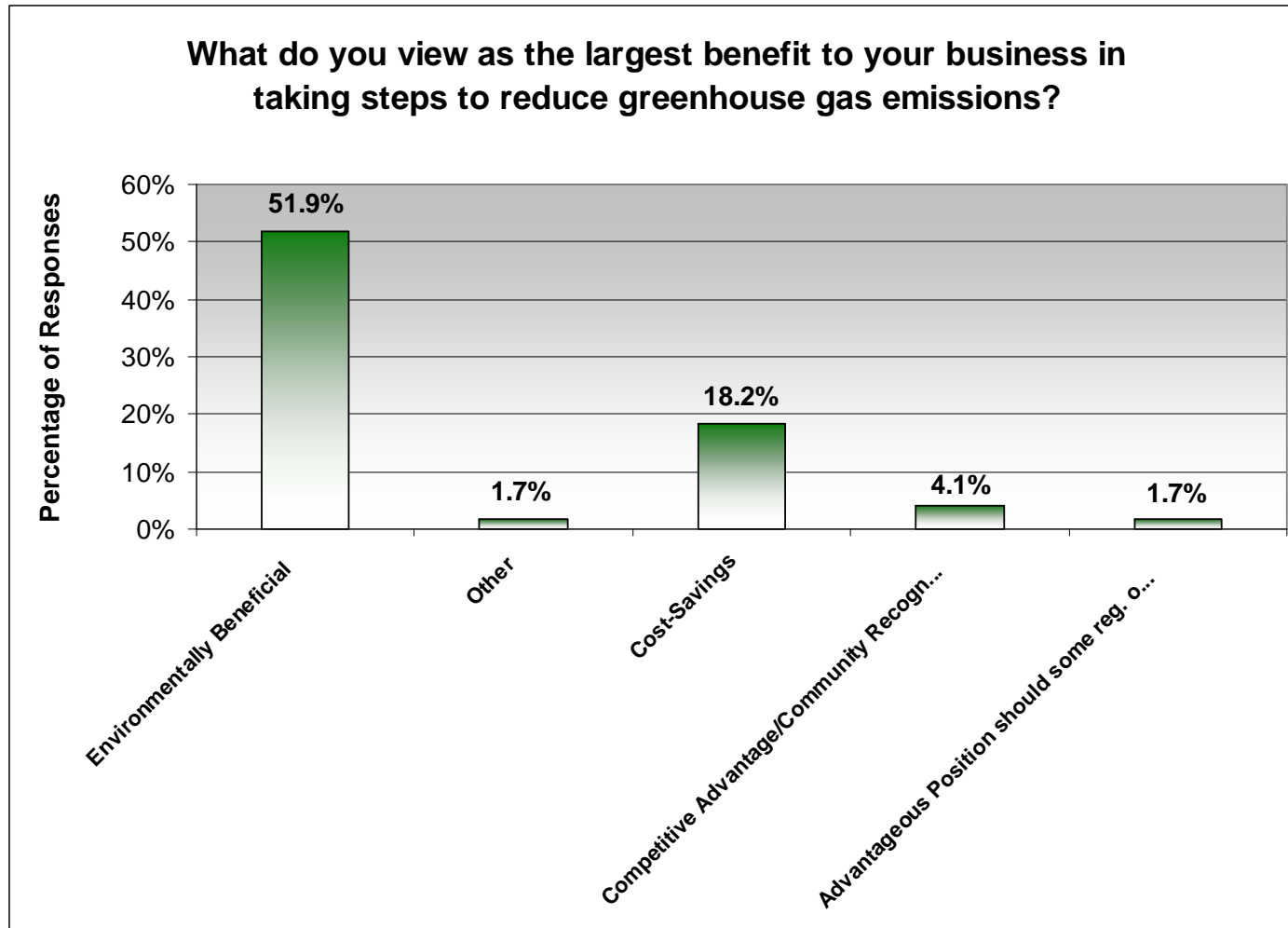
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Sustainable Practices



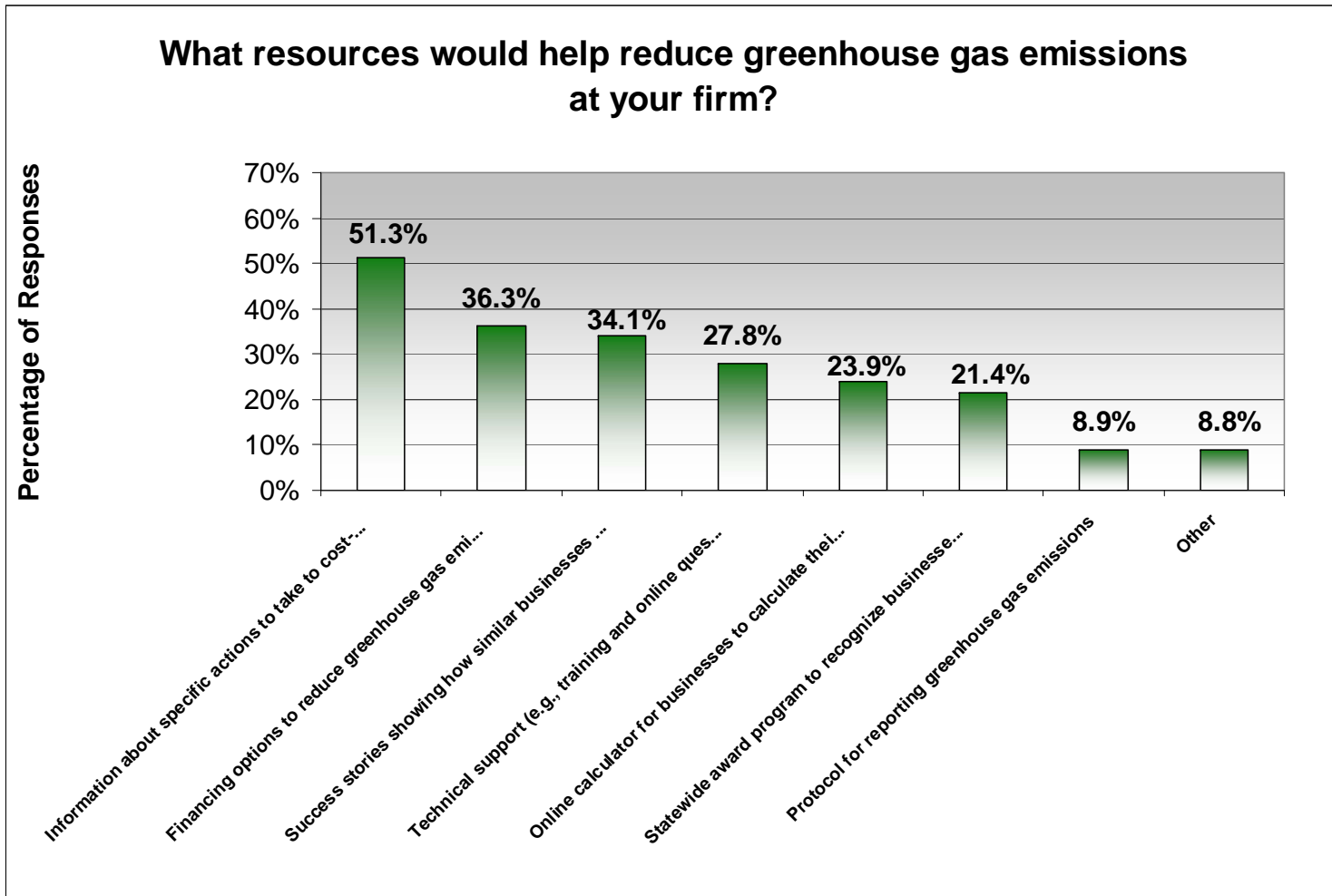
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Sustainable Practices



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Sustainable Practices



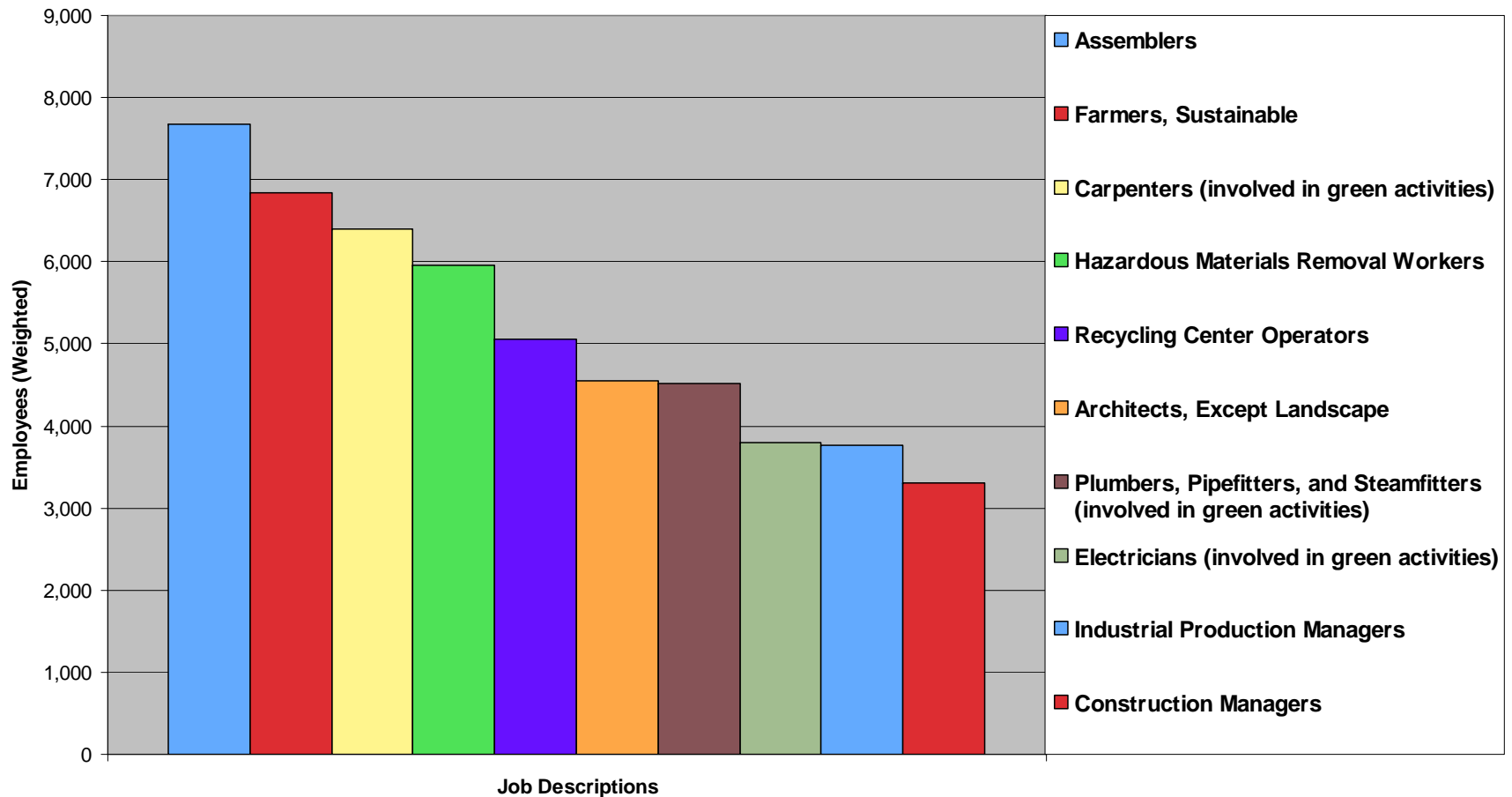
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Preliminary Occupational Findings

- **Survey–report employment in 34 selected occupations** (or write in titles)
- Almost **90%** of workers reported in one or more of the 34 green job categories listed on the survey.
- **Write ins**–included
 - Janitors and Cleaners,
 - Sustainability Assistants,
 - LEED Accredited Professionals,
 - Mobile Heavy Equipment Mechanics (maintaining electric forklifts),
 - Recyclers (reprocessing on site materials)
- Greater detail will be collected in a subsequent occupational skills survey.

Top green jobs—Assemblers, Farmers, Carpenters and more...

Top 10 Green Jobs Reported - Preliminary (Weighted Sample)



Preliminary data as of August 24, 2009

Next Steps

- Complete data collection
- Analyze complete data
- Review findings with key players
- Prepare summary report, with regional distinctions as warranted by the data
- Prepare industry level reports
- Detailed occupational follow-up surveys and analysis
- Report on occupational skills and workforce development needs

Questions? Thank you!

Feel free to get in touch

Steve.Saxton@edd.ca.gov

916.262.2602

Bonnie.Graybill@edd.ca.gov

916.262.2620