# Understanding the Green Economy—Many shades of Green—Definitions Abound...

California Workforce Investment Board California Green Collar Jobs Council April 27, 2009

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# What is driving the selection of a definition for the Green Collar Jobs Council?

- Legislative/Congressional direction
  - AB 3018
  - HR 3221
  - ARRA
- Focus?
  - Narrow or broad?
  - Blue collar or all collar?
- Expressed values or value-neutral?
  - Pathways out of poverty
  - "Family sustaining" wage
  - Career paths

## Legislative/Congressional direction

#### California Green Collar Jobs Act— AB 3018

- Stimulate the growth of new markets for green products and services.
   As the green economy grows, it will be accompanied by an increased demand for a highly skilled and well-trained "green collar" workforce.
- Energy Independence and Security Act, includes Green Jobs Act of 2007—HR 3221
  - Identify needed skills, develop training programs and train workers for jobs in a range of industries including energy efficient building, construction, and retrofits, renewable electric power, energy efficient vehicles, biofuels and manufacturing that produces sustainable products and uses sustainable processes and materials.

### Green Focus of the American Recovery and Reinvestment Act

- Smart grid transmission lines
- Renewable Energy
- Energy Efficiency
- Weatherization

### Broad or narrow focus?

- There are "many shades of green"
- Focus on select industries or consider the entire economy?
- Focus on blue collar jobs only or jobs at varying skill levels?
- Express values or just expect that these will be a likely outcome?
  - Pathways out of poverty
  - Expected wage levels
  - Expected skill levels
  - Career paths
- (We think) LMID's working definition is comprehensive and value-neutral

### LMID's Working Definition of the Green Economy

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

- Generating and storing renewable energy
- Recycling existing materials
- Energy efficient product manufacturing, distribution, construction, installation, and maintenance
- Education, compliance and awareness
- Natural and sustainable product manufacturing

### Definitions all share common threads

- Reduce environmental impact
- Remediate environmental damage
- Conserve and reduce energy use
- Conserve and use renewable and sustainable energy and materials
- Develop products that support these themes
- And/or provide related services

### And how will the Green Collar Jobs Council define Green?

- How broadly or narrowly do you want to focus?
- How will you define success?
- (Some examples follow...)

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## Clean Tech and the Green Economy— Economic Strategy Panel/Collaborative Economics

- New technology that spans a broad range of products, services and processes that lower performance costs, reduce or eliminate negative ecological impact, and improve the productive and responsible use of natural resources.
- Capture related business activities that support the wide-spread application of new technologies, such as solar system installations or emissions monitoring.
- Based on the definition of Cleantech established by the Cleantech Group, LLC TM

### California Innovation Index 2009— Next 10

- "Many shades of green"
- Core Green Economy—business activities providing products and services that leverage renewable energy sources, conserve energy and natural resources, reduce pollution, and repurpose waste
- While Cleantech is based on new products and new processes, this analysis encompasses the vast realm of activities related to the application of these new products and services as well as those which are tried and tested
- Based on Cleantech Group LLC TM

### Green Jobs: A Pathway to a Strong Middle Class

The most general trait of green jobs is that they must be jobs that somehow contribute to the improvement of environmental quality. A green job must be a job that is associated with improving the environment, is well-compensated and sustainable, and is available to a diverse workforce.

White House Task Force on the Middle Class- Office of the Vice President of the United States

### Green-Collar Jobs in America's Cities-Building Pathways out of Poverty and Careers in the in the Clean Energy Economy

• Green Collar Jobs are family-sustaining, career track jobs that contribute directly to preserving or enhancing environmental quality. Green-collar jobs range from low-skill, entry-level positions to high-skill, higher-paid jobs that include opportunities for advancement in both skills and wages.

Apollo Alliance and Green for All

Green Collar Jobs — An analysis of the capacity of Green Businesses to Provide High Quality Jobs to Men and Women with Barriers to Employment

Green is any activity or service that sustains the environment. Green collar jobs: blue collar jobs in green businesses, e.g. manual labor jobs in businesses whose products and services directly improve environmental quality.

Raquel Pinderhughes, PhD.

### Some industry examples (LMID's Definition)

- Generating and storing renewable energy —utilities, power generation, power distribution, fuel manufacturing
- Recycling existing materials —water; sewage; paper, plastic, glass re-manufacturing; waste management and remediation
- Energy efficient product manufacturing, distribution, construction, installation, and maintenance— construction; remodeling; heavy and civil engineering; power lines; glazing contractors; roofing; HVAC; computers; semiconductor, control instrument, appliance, storage battery, motor vehicle manufacturing; architecture; landscape architecture
- Education, compliance and awareness—planning, professional services, inspection, environmental consulting, regulation, licensing
- Natural and sustainable product manufacturing sustainable agriculture, non toxic paints, non toxic cleaning materials

### **GREEN INDUSTRY SEGMENTS**

### adapted from Cleantech<sup>TM</sup>

- Energy Generation
- Energy Efficiency
- Transportation
- Green Building
- Energy Storage
- Environmental Consulting
- Water & Wastewater
- Finance/Investment

- Environmental Remediation
- Air & Environment
- Business Services
- Research & Alliances
- Agriculture
- Recycling & Waste
- Materials
- Manufacturing/Industrial

### Focus of the ARRA--Green Industry Examples

- Public and Private Utilities
- Power Generation plants (electric, hydroelectric, other fuels)
- Power Transmission
- Power Distribution
- Construction—residential, commercial, industrial, remodeling
- Power and communication line construction
- Glazing contractors
- Roofing contractors
- Various manufacturing sectors—lighting, appliance, motor and generator, storage batteries, motor vehicle, semiconductors
- Automatic environmental controls