

California's **GREEN**  
Workforce Coalition



South Bay Workforce Investment  
Board

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# The Green Jobs Context

## Super Trends

- **World Population Growth**
- **Rising Living Standards—More people living carbon intensive Western lifestyles**
- **Increasing World Energy Demands**
- **Continuing Global Environmental Degradation**

# The Green Jobs Context

## Global Warming

- Further disruptions to eco-systems and losses of productive capacity
- Losses of biodiversity
- Severe and unpredictable climate events
- Possible geographic displacements of communities, particularly those near coastal areas

# The Green Jobs Context

## National Security

- Ongoing macro transfers of wealth to other countries - \$700 billion per year (est.)
- Local revenue leakage
- Foreign conflicts and the need to protect U.S. interests overseas and at home

# The Green Jobs Context

## Rising Energy Costs

- **Peak accessible and relatively cheap oil**
- **Growing energy demands – more people requiring more energy – World population expected to grow to approximately 9 billion in the next 30 to 40 years**
- **Current power generation infrastructure unable to meet future energy demand**

# What Do We Know?

**We are:**

- **Moving from high carbon activities to lower carbon solutions**
- **Moving toward greater uses of renewable energy sources including:**
  - **Solar**
  - **Wind**
  - **Geothermal**
  - **Biomass**

# What Do We Know?

**We are:**

- **Integrating sustainable systems, technologies and materials:**
  - **E.g., Wind and Solar generated electricity powering more energy efficient homes and buildings constructed with sustainable materials**

# What Do We Know?

**We are:**

- **Learning to make manufacturing more sustainable**
- **Increasing residential, commercial, and industrial energy efficiency (Green Design & Building, Energy Conservation, Energy Efficiency Retrofits, etc.),**
- **Creating more vibrant ecologies and exuberant cultures that continue to generate a surplus of fertility and vitality through Regenerative Design**

# What Do We Know?

**We are:**

- **Recycling, reusing, repurposing, and reducing the use of existing materials (paper, plastic, e-waste)**
- **Developing more sustainable materials for use in production processes (less toxic, non-toxic, biodegradable, reusable, etc.)**
- **Beginning to conserve natural resources more aggressively and purposively**

# What Do We Know?

**We are:**

- **Moving from centralized to distributed energy generation**
- **Enacting and considering policies and legislation that regulate carbon behavior:**
  - **GHG reduction mandates**
  - **Cap and Trade legislation**
  - **Carbon Taxes**

# What Do We Know?

## We are investing in:

- Research to develop new sources of energy (e.g., fusion)
- Delivery systems for cleaner, renewable energy
- A Smart (electrical) Grid to maximize the power available to us and Demand-Side technologies to help us reduce the amount we use

## A **Green** Workforce

Two or more engaged in the useful and environmentally sustainable transformation of space, energy, effort, information, ideas, materials, or knowledge, resulting in value.

# Guiding Principles for Green Jobs

- **Products/Services**: What is made or provided contributes to the reduction or elimination of greenhouse gases and/or other agents of environmental degradation.
- **Processes**: How a product or service is made or provided is environmentally sustainable.
- **Purpose**: Work functions and outcomes are intended to be environmentally respectful and lead to value.

# South Bay Workforce Investment Board

- **Directory of Occupational Education for Sustainability**
- **Emerald Rating System for Sustainability in Occupational Education**
- **Technical Assistance Workshop Dates:**
  - **May 7<sup>th</sup>, 2009**                      **10:00 a.m. to 12:00 noon**
  - **May 14<sup>th</sup>, 2009**                     **10:00 a.m. to 12:00 noon**
  - **May 20<sup>th</sup>, 2009**                     **1:30 p.m. to 3:30 p.m.**

THANK YOU

## South Bay Workforce Investment Board Local Definition of a Green Job

A **Green Job** consists of a group of tasks related by similarity of functions. When performed by an employee in an exchange for pay, a **Green Job** consists of duties, responsibilities, and tasks that are: 1) defined and specific; and 2) can be accomplished, quantified, measured, and rated.<sup>1</sup> In this job: 1) what is made or provided by the incumbent contributes to the reduction or elimination of greenhouse gases and/or other agents of environmental degradation; 2) how a product or service is made or provided by the incumbent is environmentally sustainable; and 3) the incumbent's work functions and outcomes are intended to be environmentally respectful and lead to value.

# What is Sustainability?

Sustainability is defined by the U.S. Environmental Protection Agency as

“Meeting the needs of the present without compromising the ability of future generations to meet their own needs,”<sup>6</sup>

# What is Sustainability?

The term "**sustainable development**" was popularized in 1987 by the World Commission on Environment and Development. It refers to a systematic approach to achieving human development in a way that sustains planetary resources, based on the recognition that human consumption is occurring at a rate that is beyond Earth's capacity to support it. Population growth and the developmental pressures spawned by an unequal distribution of wealth are two major driving forces that are altering the planet in ways that threaten the long-term health of humans and other species on the planet.

# What is Sustainability?

**Sustainable development** is a pattern of resource use that aims to meet human needs while preserving the environment so that these needs can be met not only in the present, but in the indefinite future. The term was used by the Brundtland Commission which coined what has become the most often-quoted definition of sustainable development as development that "meets the needs of the present without compromising the ability of future generations to meet their own needs."<sup>[2]</sup>

# What is Sustainability?

**Sustainable development** ties together concern for the carrying capacity of natural systems with the social challenges facing humanity. As early as the 1970s "sustainability" was employed to describe an economy "in equilibrium with basic ecological support systems"<sup>[3]</sup>. Ecologists have pointed to the "limits of growth"<sup>[4]</sup> and presented the alternative of a "steady state economy"<sup>[5]</sup> in order to address environmental concerns.

The field of **sustainable development** can be conceptually broken into three constituent parts: environmental sustainability, economic sustainability and sociopolitical sustainability.