

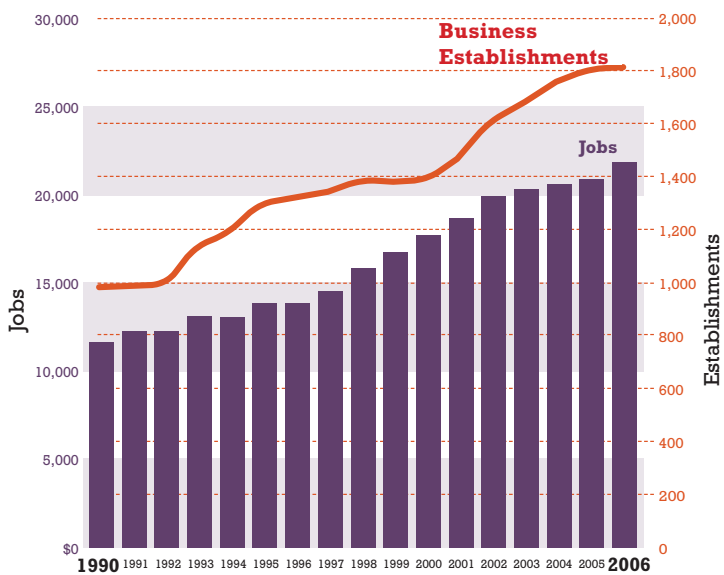
# GROWING THE GREEN ECONOMY

## The Potential

High energy prices plus the state mandate for climate action are pushing innovation, spurring investment and creating jobs

*California Assembly Bill 32 (AB32) will bring a \$74 billion GDP increase and generate 89,000 additional jobs by 2020*

Source: Roland-Holst, U.C. Berkeley, 2006



**Green Establishments and Jobs in California**  
Source: Nth Power, 2006

**GREEN ESTABLISHMENTS & JOBS.** Since 1990, green businesses and jobs have risen year upon year. The passage of AB 32 in 2006 is expected to accelerate the already steady growth in California.






**RENEWABLE ENERGY in the VALLEY: 25% and BEYOND.** The San Joaquin Valley Clean Energy Organization (SJVCEO), in collaboration with the 25 x '25 Initiative, is aiming to generate upwards of 25% of the valley's supply from renewables by 2025. The associated projects will stimulate regional investment and job growth.

SJVCEO estimates that projects across the Valley can provide 23 gigawatts (GW) in capacity per year, far exceeding the 25% renewables target of 5 GW and providing electricity for more than 12.5 million homes.



### Renewable Energy Potentials in the Valley

Source: SJVCEO, 2008

-  Solar power plants **12.5 GW**
-  Biomass waste energy **4.1 GW**
-  Wind farms **2.7 GW**
-  Solar for new housing **1 GW**
-  Forest power **0.5 GW**

## What is Green Tech?

**A WIDE RANGE OF FIELDS.** Energy generation and efficiency are leading the way in job growth, yet green or "clean" technology encompasses a much broader range of fields and job types.

- |                      |                                   |
|----------------------|-----------------------------------|
| Energy generation    | Air & Environment                 |
| Energy efficiency    | Materials                         |
| Energy storage       | Advanced Manufacturing/Industrial |
| Transportation       | Agriculture                       |
| Water and Wastewater | Recycling and Waste               |

Source: Cleantech Network™, LLC, 2007



Source: Aalborg University



Source: www.naturalpowerwales.com

**ENERGY INNOVATION IN FRESNO.** Fresno is on the cusp of a major shift in power generation, from small-scale systems serving homes, to district-scale distributed systems, to large utility-scale projects. With support from the San Joaquin Valley Clean Energy Organization, PG&E, and others, new technologies are actively being explored.

**GREEN JOBS.** Growth in green industries and services are producing high-quality jobs at all levels, from knowledge-based jobs to green collar jobs (blue collar jobs in green industries).

The renewable energy and energy efficiency sectors can offer good employment and pathways for career development. Median salaries for insulation workers and energy audit specialists, two careers not requiring college degrees, are \$30,200 and \$39,500.

Source: U.S. Bureau of Labor Statistics, 2007

## Green Tech and SEGA

Development in the SEGA can promote growth in an array of green industries



Source: buildinggreen.com

**GREEN BUILDING.** New standards for environmentally sustainable building will call for workforce development in construction, design, building management, maintenance, and repair.



Source: Central Valley Business Incubator

**CONTINUED GROWTH OF THE WATER TECHNOLOGY INDUSTRY.** The focus on sustainable, efficient infrastructure in the SEGA provides the opportunity to explore and apply new technologies.



Source: flickr.com/jimthatcher

**ENERGY GENERATION.** On-site renewable energy systems will require engineering, installation, management, and operation services.



Source: PG&E

**SOLAR ENERGY POTENTIAL.** Solar systems, from rooftop photovoltaics to district-scale installations, could play a major role in satisfying energy needs in the SEGA.



## ECONOMIC OPPORTUNITY

SPECIFIC PLAN ALTERNATIVE SCENARIOS WORKSHOP JUNE 10, 2008