

# South Central Provider of Solar Instructor Training



# Participants and Partners to Date



Cedar Valley College  
DALLAS COUNTY COMMUNITY COLLEGE DISTRICT





# Project Overview

- PV Instructor Training
- Solar Thermal Instructor Training
- Regional Director
- ‘Solar Boot Camp’ - Summer Institute for Vocational Tech & YouthBuild Schools
- Online Resources and Idea Exchange Platform
- Solar Lab Kits and Mobile Lab Demonstration

# SPV Instructor Training

- Jan. 11-15, 2010: 40-hour SPV class held at Houston Community College Energy Institute
- Thirteen instructors attended representing 11 educational institutions from six states
- Six attendees completed and passed the NABCEP PV Entry Level Exam
- Knowledge and resource exchange, alpha version of web-based portal in use



# SHC Instructor Training

- Scheduled for Summer 2010 (August)
- First year participants (11 institutions) will send instructors (11-13 instructors)
- 40-hour SHC class to be held at Houston Community College Energy Institute
- Based on NABCEP task analysis and meets ISPO standards



# Other Summer Events

- Summer Institute for Voc. Tech & YouthBuild
  - Both students and teachers to attend, thereby helping teachers learn while observing their students
  - Participants drawn from existing first year partner schools
  - Strategy: strengthen state programs via feeder paths to community colleges
- Teaching strategies include:
  - ‘Solar Boot Camp’ structure:
    - Cross-curricular approaches to teaching solar
    - Solar energy as a context for reading and math
  - Solar energy classes in a standards-based curriculum
  - Helping teachers add solar energy content to existing technical, science and math courses



# Solar Lab Kits

- Post-training, participant schools receive a full Solar Lab Kit (for Summer Semester 2010 use)
- Designed for hands-on laboratory use to improve solar training instruction and knowledge
- SPV
  - Modules and Racking/Mounting Hardware
  - Grid tied, grid tied w/ battery back up, and off grid inverters and balance of system
- SHC
  - Collector
  - Drainback and storage tank
  - Circulator, valves and pipes



# Solar Mobile Unit

- Truck and Trailer Unit
- Equipped with a full Solar Lab Kit (SPV and SHC) as used in campus laboratories
- Provides direct, hands-on, immediate learning about solar technologies and solar jobs
- Supports the critical link between community colleges, voc. tech and YouthBuild schools by providing outreach capability through demonstrations and career fairs
- Supports participant schools by helping to recruit new students
- Supports the South Central Region by increasing collaborative networks within each state and the region
- Will travel throughout region beginning Fall 2010



# Project Plans

- Project Director
  - Position has been posted
  - Interviews within the next two weeks
  - Position filled by May 1
- Online platform for idea exchange and collaboration
  - Beta version due June 2010
  - Full version due Fall 2010



# Regional Outlook

- “Solar power industry is growing at a staggering rate.”
  - *Texas Green Jobs Guidebook* published by the Texas Workforce Commission
- Regional growth will include
  - Residential PV and Thermal
  - Commercial PV
    - Demand is spread throughout the region
  - CSP
    - Creates 10 times as many permanent and construction jobs as a natural gas power plant



# Regional Outlook

- Training and education will match demand
- Provide seamless progress from education and training to employment regardless of the level
- Requires comprehensive coordinated effort among high schools, community/technical colleges, universities and industry advisors