

California Clean Energy Workforce Training Program 2009/10 – American Recovery and Reinvestment Act WIA/SEP and AB 118 funds

Award List and Project Summaries

On October 2, 2009, grants were awarded to 34 organizations under the Governor’s California Clean Energy Workforce Training Program. Project descriptions, award amount, and contact information are listed below. Award decisions are final.

Green Building and Clean Energy Retraining Partnerships

Applicant Name	County	WIA 15 Percent Amount	State Energy Program Amount	Total Award
Contra Costa Community College District	Contra Costa	\$395,235	\$604,765	\$1,000,000
Grossmont-Cuyamaca Community College District	San Diego	\$395,235	\$604,765	\$1,000,000
Humboldt County	Humboldt	\$351,651	\$538,074	\$889,725
Kern Community College District	Kern	\$302,910	\$463,496	\$766,406
Long Beach Community College District	Los Angeles	\$376,732	\$576,454	\$953,186
Los Angeles County	Los Angeles	\$395,235	\$604,765	\$1,000,000
North Orange County Community College District	Orange	\$395,235	\$604,765	\$1,000,000
Northern Rural Training and Employment Consortium	Butte	\$395,235	\$604,765	\$1,000,000
Sacramento Employment Training Agency	Sacramento	\$394,369	\$603,441	\$997,810
Sonoma County	Sonoma	\$395,235	\$604,765	\$1,000,000
Subtotal		\$3,797,072	\$5,810,055	\$9,607,127

Green Building and Clean Energy Pre-Apprenticeship Training Partnerships

Applicant Name	County	WIA 15 Percent Amount	State Energy Program Amount	Total Award
College of the Desert	Riverside	\$322,450	\$493,393	\$815,843
Hartnell College	Monterey	\$395,180	\$604,682	\$999,862
Humboldt County	Humboldt	\$285,573	\$436,967	\$722,540
Imperial Valley College	Imperial	\$173,737	\$265,841	\$439,578
Kern/Inyo/Mono Consortium	Kern	\$126,339	\$193,316	\$319,655
Long Beach Community College District	Los Angeles	\$385,773	\$590,287	\$976,060
Los Angeles City	Los Angeles	\$395,235	\$604,765	\$1,000,000
Los Angeles Trade Technical College	Los Angeles	\$395,235	\$604,765	\$1,000,000
Northern Rural Training and Employment Consortium	Butte	\$395,235	\$604,765	\$1,000,000
Peralta Community College District	Alameda	\$395,235	\$604,765	\$1,000,000
Richmond City	Contra Costa	\$395,235	\$604,765	\$1,000,000
Sacramento Employment Training Agency	Sacramento	\$382,857	\$585,825	\$968,682
San Bernardino Community College District	San Bernardino	\$343,717	\$525,934	\$869,651
San Diego Workforce Partnership	San Diego	\$276,665	\$423,335	\$700,000
San Francisco Department of Economic & Workforce Development	San Francisco	\$394,662	\$603,888	\$998,550
San Luis Obispo County	San Luis Obispo	\$241,115	\$368,940	\$610,055
Solano Community College	Solano	\$165,505	\$253,246	\$418,751
South Bay Workforce Investment Board	Los Angeles	\$209,418	\$320,440	\$529,858
Subtotal		\$5,679,166	\$8,689,919	\$14,369,085

Alternative and Renewable Fuel and Vehicle Technologies Workforce Development and Training Program

Applicant Name	County	WIA 15 Percent Amount	AB 118 Amt	Total Award
Imperial County	Imperial	\$100,000	\$400,000	\$500,000
Long Beach City	Los Angeles	\$100,000	\$400,000	\$500,000
Los Angeles County	Los Angeles	\$100,000	\$400,000	\$500,000
Richmond City	Contra Costa	\$100,000	\$400,000	\$500,000
Sacramento Employment Training Agency	Sacramento	\$100,000	\$400,000	\$500,000
San Francisco Department of Economic & Workforce Development	San Francisco	\$67,500	\$210,000	\$277,500
Subtotal		\$567,500	\$2,210,000	\$2,777,500

Grand Total Award **\$10,043,738** **\$16,709,974** **\$26,753,712**

Contra Costa Community College District

500 Court Street
Martinez, CA 94553

Deborah Blue
(925) 229-1000

Award Amount: \$1,000,000

Summary: The Contra Costa Community College District, in collaboration with the Contra Costa Workforce Development Board and other partners, proposes the Contra Costa Green Building Retraining Partnership (CCGBRP). The CCGBRP targets Contra Costa County and the larger East Bay region of the San Francisco Bay Area. It will focus on retraining unemployed and underemployed workers with construction experience for “green collar” jobs and career pathways in the both the solar and energy efficiency industries. Recent studies indicate that employers in these sectors expect to see growing numbers of job openings in numerous positions, including: solar photovoltaic installer; solar thermal technician; solar installation manager/project foreman; solar designer/engineer; heating, air conditioning, and refrigeration technician; HVAC maintenance/repair trainee; green plumber & pipefitter; residential/ commercial/industrial energy field auditor; home energy rating specialist; building analyst; building performance contractor; building envelope specialist; and weatherization auditor. At the same time, employers indicate great difficulty finding qualified personnel for many of these occupations. Other reports on the “green economy” in our region and nationally indicate that workers with construction experience are the “primary recruiting pool” for green collar Green Building jobs, and call for community colleges to expand their training programs in order to meet the demand to train workers for these positions. The CCGBRP’s training program will be implemented at our community colleges: Contra Costa College in the west county area, Diablo Valley College in central county, and Los Medanos College in east Contra Costa County. Each will augment its existing construction training program by developing and offering new training options that address both the demand for new workforce skill sets in the solar and energy efficiency industries and the retraining needs of workers in the construction industry recently downsized as a result of the real estate slump. Each college will offer training on the State Energy Efficiency Standards and preparation for the Green Building Professional certification as part of a sequential course of study and various training options workers can complete during the grant period. Discrete training paths will focus on Solar Photovoltaic, Solar Thermal Systems, Building Analyst/Envelope Specialist, Heating and Cooling Professional, Water/Energy Auditing, and other specializations. Workers will be trained for the Green Building jobs listed earlier, have opportunities to earn multiple industry-recognized certifications, and will be assisted to obtain employment. Some will be equipped to start or restart their own Green Building businesses. Those who obtain employment as entry-level installers and technicians in solar and energy efficiency jobs can, with experience and in some cases further training, move up to positions as systems designers, project foremen, sales representatives, and management positions, or can start their own companies. The CCGBRP will serve at least 180 participants during the grant period. It will also substantially expand our three colleges’ capacity to provide training for these jobs and career pathways in the future. Other CCGBRP partners include the City of Richmond/RichmondBUILD program, Solar Richmond, West County Business Development Center, Contra Costa County Department of Conservation and Development, and several businesses that will be on our Green Business Council advisory group and provide jobs for training graduates.

Grossmont-Cuyamaca Community College District

900 Rancho San Diego Parkway
El Cajon, CA 92019

Darlene Spoor
(619) 660-4670

Award Amount: \$1,000,000

Summary: California is experiencing unprecedented growth in the green building industry. This growth has subsequently increased the demand for skilled workers. Additionally, the influx of funding through the Energy Efficiency and Conservation Block Grant (EECBG) Program for local cities and the passage of legislation such as Assembly Bill (AB) 1470 and AB811 will further increase this demand. To meet the needs for additional skilled workers, California must focus on retraining its workforce in the areas of clean, affordable energy. Unemployed or underemployed workers with previous construction experience are an ideal target for this effort. This target population can quickly build upon their existing skills with green training provided by community colleges that will prepare them for jobs in the green building industry.

As a leader in “green” economic and workforce development in San Diego County, the second largest county in the state, the Grossmont-Cuyamaca Community College District (GCCCD) is uniquely positioned to lead the effort of creating and implementing workforce training programs that address the need for skilled workers in the green building industry. Green workforce training is nothing new at Cuyamaca College who has been offering certificates and degrees in water/wastewater technology, environmental health and safety, sustainable landscaping and most recently renewable energy for over 20 years. Included in the GCCCD’s efforts will be several partners that will provides unique resources, expertise, and other support to prepare a dynamic green workforce in San Diego County. Partners for this proposal include Palomar College, a network of local One Stop Career Centers, California Center for Sustainable Energy (CCSE), local economic development councils, the County and City of San Diego, San Diego Gas & Electric, numerous non-profit organizations, the San Diego Housing Commission, the Small Business Administration and many others.

This industry sector strategy includes the implementation of two training hubs that are easily accessible to San Diego County residents: Cuyamaca College in the south and Palomar College in the north. Each hub will provide a variety of comprehensive industry-recognized training programs, serving between 200 and 300 students throughout the region, in the following areas: Green Building Professional, Building Analyst Professional, Home Energy Rater, Water Auditor, Solar Photovoltaic Installer and Solar Thermal Installer. This effort will be led by the GCCCD and a dynamic Green Employer Council made up of industry experts that provide oversight and assurance that community college programs reflect relevant training for real world jobs. The Green Employer Council will also provide opportunities for employment for program graduates.

The San Diego Green Building Training Collaborative will continue long after the 18 month funded term of this grant. Cuyamaca and Palomar colleges, as well as our industry sector partners participating in this project, are committed to workforce and economic development and fully support this program. Upon completion of the program, every effort will be made to absorb this

program into the ongoing functions of the college. Once curriculum has been developed, it will be available for implementation at other California community colleges throughout the State, K-12 Pathway programs and universities who require curriculum, project structure or trained instructors. California Clean Energy Workforce Training is here to stay!

Humboldt County
520 E Street
Eureka, CA 95503

Jacqueline Debets
(707) 445-7745

Award Amount: \$889,725

Summary: The Redwood Coast Green Pre-Apprenticeship Program will train 100 out of school youth, underemployed and unemployed, new entrants to the workforce from Humboldt and Del Norte counties for green building careers in two of the fastest growing industries in the Redwood Coast region—the Building & Systems Construction & Maintenance industry and the Management & Innovation Services industry. In a regional cluster study produced by the Humboldt County Workforce Investment Board, called Targets of Opportunity, these industries were two of the six that together grew new jobs 37% in the fifteen year period of the study. The Building & Systems Construction & Maintenance industry grew jobs 33% and the Management & Innovation Services industry grew new jobs 125% in that period. While the national recession has slowed job growth, these industries contain our region’s green industry sectors and are projected to open new jobs in the next two years, and indicate a strong demand for green skilled workforce. Del Norte and Humboldt counties are collaborating to build a practical and achievable re-training program with 15 partners across a large, rural area within the region: College of the Redwoods; Eureka Adult School; The Job Market (Humboldt County one-stop operator); Workforce Center—Del Norte; City of Arcata; Yurok Indian Housing Authority; Humboldt Bay Municipal Water District; DANCO Builders; Redwood Coast Energy Authority; Redwood Community Action Agency; A-Step program for Indian youth employment; Maple Service, Inc; Greenway Partners, Inc.; Plan It Green; and the Carpenter’s Union Local 751. Training will be offered in a series of classes: (1) Environmental Training, Introduction to Green Building, (2) Energy Fundamentals, (3) Retrofits & Energy Efficiency, Water Efficient, (4) Building And Retrofits, (5) Solar Hot Water Installation and Design Principles, (6) Solar Electricity Installation and Design Principles, (7) OSHA safety. Additional training for basic and soft skills will prepare new entrants into the workforce to be successful Participants will enter and complete training in cohorts (or “flights”) of their peers to encourage team work and networking. All flights will include union orientation to understand the opportunities, benefits and operations of union apprenticeship programs. As each flight completes their training, participants will be placed in work experience training, and then supported through the process of permanent hiring or union apprenticeships. Participants will learn about these opportunities through union apprenticeship coordinators for carpentry, electricians, laborers, operating engineers and plumbers unions. Graduating participants will be prepared for entry-level work as wastewater technicians, energy efficiency building technicians, rough carpentry workers, HVAC installers assistants, green plumbing assistances, solar installation assistants, and general maintenance and repair workers. Our Green Employer Council, lead by Plan It Green, actively supports this training grant, many of who will provide work experience training for graduates.

Kern Community College District

2100 Chester Avenue
Bakerfield, CA 93301

John Means
(661) 336-5036

Award Amount: \$766,406

Summary: The Kern Community College District, the Kern, Inyo, Mono and Tulare WIBs, industry, labor and project partners propose to train 350 utility workers including 160 wind and 80 solar (pv/thermal) operations and maintenance technicians to address current workforce shortages and to address increased demand to support the growth of renewable energy in the Kern, Inyo, Mono and Tulare county region. These shortages are the result of the confluence of the current economic recession, retiring senior workforce members, delays in the entry of younger workers and compounded by governmental RPS standards and exploding capital investment in renewable energy generation as well as transmission and distribution infrastructure.

The project area is ripe for workforce development investment given that it is host to significant renewable generation resources, acknowledged by the presence of five Competitive Renewable Energy Zones (CREZs) and expected to account for nearly half of the electricity needed to reach the 33% x California RPS standard. Furthermore, although the Tehachapi/Owens/Mojave (CREZ) areas have relatively low density rural population; urban population centers served by the Kern and West Kern Community College Districts.

In response, the Kern Community College District, along with it's partners, has developed a training program for unemployed and underemployed workers, with a focus on those with construction experience and prepares them for entry-level occupations as a utility worker, wind and solar operations and maintenance technicians. The training program provides a solid foundation in renewable energy principles, utility technology fundamentals and technical knowledge required in the utility-scale renewable energy fields. The proposed training program includes classroom and hands-on training that provides program participants with job skills in wind and solar generation, and electricity transmission and distribution. Program graduates are equipped with the skills to be successful in apprenticeship programs in related fields or to progress in data analysis or management level positions.

Long Beach Community College District

4901 E. Carson Street
Long Beach, CA 90808

Gail Schwandner
(562) 938-3023

Award Amount: \$953,186

Summary: According to the U.S. Green Building Council, buildings in the United States account for 36% of total energy use and 30% of greenhouse gas emissions. Given the rising cost of pollution-related health hazards and given current water and energy shortages, conservation and efficiency have become a vital part of the emerging green sector. While the City of Long Beach has been hit disproportionately hard by the economic downturn with an unemployment rate of 13.7% last July 2009, greening of the city economy holds the promise of fostering a robust and vibrant economy that simultaneously remedy the water and energy shortages and provide the local workforce with higher-wages, good benefits, and a more rewarding occupation.

In recent years, both the City and Port of Long Beach have adopted sustainability and green initiatives as part of their strategic plans. As two of the largest employers in the Region, their strategic plans directly affect the technical needs of the workforce. The City of Long Beach has made sustainability a primary strategic goal, recognizing the urgency and importance of transforming Long Beach. The City of Long Beach's Office of Sustainability was created to facilitate the process of developing and implementing model sustainability programs for the City of Long Beach. Similarly, the Port of Long Beach in 2005 adopted the Green Port Policy by employing the best available technology to avoid or reduce negative environmental impacts of Port operations. In view of the region's current efforts, the targeted industries through this proposal are: (1) Design and Construction of New Buildings, (2) Deep Building Retrofit, and (3) Retro-Commissioning of Existing Buildings.

Partnering with the City of Long Beach, the Port of Long Beach, Pacific Gateway Workforce Investment Board, Southern California Edison, McCarthy Construction Co., Siemens USA and local small businesses has facilitated Long Beach City College's deep understanding of the region's green building and water/energy efficiency industry dynamics as well as the employers' specific workforce needs. This Green Building and Water/Energy Efficiency Workforce Training Partnership strategy has identified the training program leading to four career pathways in green building and water/energy efficiency to address the regional workforce needs of employers as well as career advancement needs of workers.

The Program will target unemployed or underemployed workers with a focus on workers with construction experience. The intent is to build upon the individuals existing construction skills and provide new skill development to retool them for employment in the green building and water/energy efficiency industries. The proposed project will target three distinct yet complimentary segments of the regional population. These population segments include the (1) unemployed, and recently dislocated workers with transferable skills, (2) recently returned veteran's population, and (3) incumbent worker segment of the population.

The LBCC Green Building and Water/Energy Efficiency Re-Training Program encompasses technical training modules in (1) Green Building Overview, (2) Title 24 Overview, (3) Certified Green Building Professional, (4) LEED® Green Associate, (5) Home

Energy Rating System, (6) Home and Building Performance Analyst, (7) Certified Hot Water Installer, and (8) Building Information Modeling. Imbedded with field trainings, all technical modules are supplied by industry-certifying organization. Doing so enables participants to gain cutting-edge training directly from industry, easily transition through the industry exam intake and certification, and prepare participants for the following occupations: (1) Building Performance or Retrofitting Specialists, (2) Building or Home Energy Raters, (3) Water/ Energy Auditor, and (4) Project Managers/ Coordinators/ Specialists for Construction or Design Work.

These modules were chosen because they provide a foundation for career pathways into higher-skill specializations within the industry. Certification provides participants with value-added benefits to guarantee the quality of expertise and elevate job quality across the industry. Participants are offered an opportunity to build strong career ladders into jobs with family-sustaining wages for currently unemployed and underemployed workers, thus bolstering the region's economic welfare and social stability as well as addressing the emerging workforce need of employers.

Los Angeles County
3175 West Sixth Street, Room 300
Los Angeles, CA 90020

Josie Marquez
(213) 738-3175

Award Amount: \$1,000,000

Summary: The Los Angeles County Workforce Investment Board (WIB) and its regional partners will serve 150 incumbent and underemployed/unemployed workers throughout the Los Angeles target region. It will provide a series of short-term training events and wrap-around services towards the green-building career pathways - leveraging local, state and Federal resources. The primary partners will be the Los Angeles Community College District (LACCD) and its nine-college infrastructure, the City of Los Angeles Workforce Investment Board, local and regional employers (such as Energy Crews Company, IMANI Energy, Inc., Sunshine Solar Energy Inc., SolarCity, INTI Energy Solutions, CA Conservation Corp (Operations and Facilities Division), and Go Green Solar).

The target group will include incumbent workers and underemployed/unemployed workers that are interested in the focused industry. Although not required, this project will also serve special needs populations that include veterans, individuals lacking a GED, and applicants living below 50% the area medium income. All participants will be offered short-term training activities that include the following:

- Code Training
- Principles of Green Construction
- LEED Certification Preparation
- Green Plumbing Principles and Certification Workshop
- Principles of Weatherization and Envelope Sealing
- Home Energy Audits and Rating systems
- Building Performance Institute Certification Training for Envelope Professional, Building Analyst Professional and Building Performance Contractor
- Solar/PV Installation

The purpose of the project is to prepare participants for emerging careers in the green-building sector and enhance their career mobility towards emerging fields. It is supported by regional employers, the local LA City and County One-Stop Center system, and sector-based associations such as the Green-WEST Alliance. Upon successful completion of the project's array of services, participants can be poised for successful careers such as Green Plumbing Contractors, Green Construction Managers/LEED Certified, Building Analyst, HVAC Contractor, Solar PV Installer, Energy Efficiency Auditor / Energy Efficiency Installation, and Solar Thermal Installation.

North Orange County Community College District

1830 W. Romneya Drive
Anaheim, CA 92801

Perla Fickenscher
(714) 808-4620

Award Amount: \$1,000,000

Summary: The Green Building Training Program for So Cal will deliver a comprehensive training set of 8 courses:

1. Certified Green Building Professional
2. Title 24 CA Energy Efficiency Standards
3. Building Analyst Professional
4. Envelope Professional
5. Home Energy Rater
6. Building Performance Contractor
7. Water/Energy Auditor
8. Accredited Green Plumber

Before taking any of these courses, trainees will be assessed based on basic skills. Those whose skill level is below the accepted level will be advised to take a free Boot Camp to develop their Math and English skills.

The target population is the unemployed and underemployed population of LA and Orange County and from the underserved areas of Southern California. Other target populations include US Veterans organization and local correction centers. We expect to interview over 200 prospective trainees, train 150-180 of these, and have 150 graduates from all or part of our program.

Future employers include construction companies who are doing projects in green building, plumbing industry, energy management firms involved in energy efficiency, the City of Anaheim Public Utilities Green Building Program, and job placement firms. Jobs could include construction projects in new green building or retrofit of old buildings, green jobs or projects with private businesses which plan to reduce carbon footprints, and other projects related to green technology.

A job developer will work with all project partners to assist trainees in finding employment. Students will also have the benefit of a case manager who will assist in job placement and retention. In addition, we have a Green Business Council which will consist of potential employers and can advise us on the employment climate.

Trainers will provide assistance to trainees who will apply for certification from certifying agencies such as Build it Green, the Building Performance Institute, and Green Plumbers USA. Others will receive certification for each class taken from the North Orange County Community College District.

**Northern Rural Training and Employment Consortium
525 Wall Street
Chico, CA 95928**

Charles Brown
(530) 892-9600

Award Amount: \$1,000,000

Summary: Targeted Region: The eleven (11) rural counties in Northern California, which include Butte, Del Norte, Lassen, Modoc, Nevada, Plumas, Shasta, Sierra, Siskiyou, Tehama and Trinity served by NoRTEC-WIB and North Far North Regional Consortium (NFNRC) of CA Community Colleges.

Targeted Industries: Energy Efficiency - Construction, Certified Green Building Professional, Home Energy Rater, Solar PV, Solar Thermal, Environmental Control Technology.

Primary Partners: NoRTEC-WIB, 11 County One-Stops, NFNRC (5 Community Colleges), Green Employer Council, Utilities,

Target Population: Dislocated construction workers, unemployed, underemployed and special needs groups, such as, veterans, language or education barriers, criminal convictions, et al.

Number of Participants: 117 total participants served, 70% attain certificate/degree, 74% placed, and 83% retained in employment.

Proposed training activities and description of the career pathways:

The foundation of the training provided will be the Core Curriculum: Introductory Craft Skills, from the National Center for Construction Education and Research. Core Construction Curriculum components include: Basic Safety, Construction Math, Hand Tools, Power Tools, Construction Drawings, Basic Rigging, Basic Communication Skills, Basic Employability Skills, and Materials Handling. This course will also be an articulated Tech Prep/ROP course. The entire Clean Energy Workforce Training Program at Butte College will be part of an articulated, sequenced pathway from the ROP/High School to Butte College to California State University, Chico. Other colleges in the region will be able to adopt these courses for articulation, programs of study and career pathways. Courses for required certifications:

1. Certified Green Building Professional
2. Home Energy Rater System (HERs)
3. California Energy Efficiency Standards and Codes
4. Solar Photovoltaic Design and Installation

5. Solar Thermal Installation
6. Environmental Control Technology

Occupations: Eight occupations have been identified with wage ranging from \$11 to \$64/hour. Energy Efficiency Managers, Construction Project Mgrs, Bldg Retrofit Spec, HVAC Mechanics/Tech/Installers, Energy Auditors/Home Energy Raters, Bldg Operators/Eng Compliance Analyst, and Bldg controls systems Tech

Sacramento Employment and Training Agency

925 Del Paso Boulevard
Sacramento, CA 95815

Robin Purdy
(916) 263-3860

Award Amount: \$997,810

Summary: The Sacramento Employment and Training Agency will enroll 200 job seekers with previous construction experience and an interest in green construction retraining in the Sacramento Green Building Retraining Initiative (SGBR). SETA will target unemployed and underemployed workers residing in the Sacramento Metropolitan region which includes El Dorado, Placer, Yolo, and Sacramento Counties. The goal of the SGBR is to enhance the skill-set of the talent pool and increase access to green building construction employment opportunities, thereby increasing the number of knowledgeable, skilled and stable employees in the green building and energy efficiency construction workforce.

The initiative will focus on the energy and water efficiency sector with upgrade skills training in several green career clusters including: solar power, green construction, energy efficiency, green plumbing, water efficiency and sustainability. The skills training will result in Industry-Identified Certificates including Certified Green Building Professional, Certified Photovoltaic Installer, Accredited Green Plumber, Certified Energy Auditor, HERS II raters and HERS II analyst.

The Green Capital Alliance, will act as the Green Employer Council for the initiative and provide oversight and ensure that programs reflect relevant training for real world jobs. Other partners include the Los Rios Community College District, American River College, the Sacramento Sierra Building and Construction Trades Council, Beutler Corporation, Sacramento Municipal Utilities District, Community Resource Project, Green Plumbers USA. The catalytic effect of retraining the available pool of construction workers in new technologies by developing an approach that is sustaining and can be duplicated throughout the state is transformative and persistent in nature.

Sonoma County

2227 Capricorn Way, Suite 207
Santa Rosa, CA 95407

Karen Fies
(707) 565-8501

Award Amount: \$1,000,000

Summary: NBEC proposes the Green Regional Education & Employment in the Northbay (GREEN) program in order to address the critical regional need and emerging opportunities to develop a green building workforce. GREEN utilizes a well-articulated sector strategy that unites the skills and capacities of four Local Workforce Investment Boards (LWIBs) in the counties of Marin, Napa, Solano, and Sonoma. In each county, community colleges, employers, labor, and community and business development organizations have joined forces with the LWIBs to create a robust regional effort that addresses the challenges of the green building industry, creates significant workforce capacity, and reinforces the statewide leadership these counties have shown by engaging workers and industry in creating new, clean energy futures closely aligned with local and statewide policies.

The impact of the recession has been particularly devastating in the targeted region with unemployment among construction workers currently estimated at 25%. At the same time, innovative policy efforts implementing AB 811 public financing programs for energy efficient homes and businesses are driving significant demand for workers in green building and energy efficiency projects. The result is a major opportunity to build regional capacity that provides unemployed and underemployed construction workers with new career pathways in the green building industry.

In addition to the LWIBs in each county, local community colleges and specialized training partners will provide workers with a sequenced array of green building training opportunities that build both general and specific skills most-in-demand by employers. A minimum of 300 workers from the targeted population of unemployed and underemployed construction workers will participate in training programs that link directly to occupations employers have identified as being most urgently needed. Workers will have the opportunity to move progressively from entry-level green building and energy efficiency certifications to more specialized training building long-term career pathways. NBEC estimates that these participants will earn over 400 industry-identified certificates. A total of 800 additional workers will receive information and referrals provided through seminars and other services available at participating One Stops.

Each participating LWIB will build significant capacity to continue supporting green building workforce development by employing a Green Navigator who will ensure close linkages between the LWIB, emerging green training opportunities, and the needs of the green building employers. The Green Navigators will be supported by state-of-the-art database systems that will project emerging workforce needs and link these to workers and relevant certification-based training programs. The net result will be the placement of over 220 workers in green building career pathways over the 18-month project period and the development of robust, long-term capacity to sustainably serve the growing regional needs of the green building industry.

College of the Desert
43-500 Monterey Avenue
Palm Desert, CA 92260

Larry McLaughlin
(760) 773-2595

Award Amount: \$815,843

Summary: The goal of the Desert Region Renewable Energy Training Program is to provide a clearly defined training pathway along with effective support services to inspire and enable eligible participants to become part of the state's renewable energy workforce. As the region's utility-scale solar energy industry begins to grow, companies will be searching for employees who understand the technology and possess the essential skills to work in system construction, maintenance, and operation. This program will reach out to new workforce entrants, unemployed, and underemployed workers with little or no construction experience to make the emerging renewable energy industry a source of employment opportunity. The program strategy consists of five basic elements:

1. Outreach and recruitment will be performed by partner organizations that have experience, credibility, and contacts in the community.
2. Eligibility and tracking will be provided by a Local Workforce Investment Board that is highly experienced serving this population.
3. Participants in need of basic skill improvement will be guided by a college advisor specifically trained in this program, population, and methods to maximize success.
4. Participants will be provided with knowledge and skills needed to gain employment in utility-scale solar power generation, plant construction, system maintenance, and operation.
5. Participants completing training will be assisted with placement into employment and/or an apprenticeship.

Classroom and hands-on training will be conducted to provide participants with a solid foundation in renewable energy principles, technology fundamentals, and utility-scale solar power generation. Participants will also be prepared for work in three trades that are prevalent in utility-scale solar plant construction: electrical/utility, pipefitting, and welding. This training will be at the pre-apprenticeship level. The program will prepare participants to obtain two industry recognized credentials, the North American Board of certified Energy Practitioners (NABCEP) Entry Level Certificate of Knowledge and the NABCEP Solar Thermal Installer Certification. To ensure success among those participants that may lack the requisite knowledge or skills coming into the program, a variety of basic skills courses will be available. A college advisor will work with participants in need of basic skills training prior to the renewable energy courses. Case management and employment placement services will also be provided by the program's Local Workforce Investment Board.

The Desert Region Renewable Energy Training Partnership was formed to address the need for appropriately skilled technicians in the utility-scale solar energy industry as this industry begins to grow in the region of east Riverside and south San Bernardino Counties. This area has been designated by the federal government as a priority for "fast-track" development of utility-scale solar energy. Funding of the training proposed by the partnership will be placing training resources where the industry needs them most and allow the growth of this industry to create employment opportunities for area residents.

Hartnell College
411 Central Avenue
Salinas, CA 93901

Mike Thomas
(831) 770-7082

Award Amount: \$999,862

Summary: The Monterey Bay Green Building/Pre-Apprenticeship Training Program will serve the Monterey Bay region - Monterey and Santa Cruz Counties. The region was selected because it combines and leverages infrastructure and resources that will support green industry growth, particularly in construction and solar energy. The project will serve a large population of unemployed, disadvantaged individuals from communities with high rates of poverty and low educational attainment (California Labor Market Information, 2008; U.S. Census American Community Survey, 2005). The project's targeted region and design are based on a comprehensive needs assessment and environmental scan as well as the results from the Hartnell College Survey of Commercial Construction Information Needs and Training of Local Interest (October 2007).

The project will provide comprehensive training and support that will enable participants to rapidly acquire the skills needed to secure full-time career track employment in the green building industry and/or succeed in additional postsecondary education programs. It will include: assessment; case management support; basic and soft skills development (see #2 below); general courses in green construction, solar energy, and water use; specialty courses in four career pathways - Electrician (Solar/PV), Green Plumbing (Solar/Thermal), Building Inspection or Greywater Design Installation & Maintenance; industry internships and apprenticeships; and job placement support.

The groups targeted by this project include unemployed and underemployed workers, new workforce entrants (high school graduates, equivalency completers), and special needs populations. Special needs population sub-groups especially targeted by this project will include: low income residents, at-risk youth, underrepresented groups (particularly women and Latinos), out-school-youth and residents (lacking a diploma or GED), and limited English proficient and English as a second language residents. The target groups were identified through an extensive needs assessment process.

Hartnell College, the lead applicant, has formed partnerships with Cabrillo College, the Monterey County Workforce Investment Board, and the Santa Cruz County Workforce Investment Board. All required partners have been involved in the design of this project and are committed to membership on the project advisory board; implementing outreach and recruitment; delivering assessment services; providing instructional delivery (as appropriate for each partner); and supporting project management and evaluation. Each partner has agreed to formally provide specific services and matching support for this project.

The project will result in enrolling 140 targeted participants and will meet all required performance goals, including achieving: an 80% training completion rate; 71% certificate/degree completion rate; and an 81% employment retention rate.

Humboldt County
520 E Street
Eureka, CA 95503

Jacqueline Debets
(707) 445-7745

Award Amount: \$ 722,540

Summary: The Redwood Coast Green Pre-Apprenticeship Program will train 100 out of school youth, underemployed and unemployed, new entrants to the workforce from Humboldt and Del Norte counties for green building careers in two of the fastest growing industries in the Redwood Coast region—the Building & Systems Construction & Maintenance industry and the Management & Innovation Services industry. In a regional cluster study produced by the Humboldt County Workforce Investment Board, called Targets of Opportunity, these industries were two of the six that together grew new jobs 37% in the fifteen year period of the study. The Building & Systems Construction & Maintenance industry grew jobs 33% and the Management & Innovation Services industry grew new jobs 125% in that period. While the national recession has slowed job growth, these industries contain our region’s green industry sectors and are projected to open new jobs in the next two years, and indicate a strong demand for green skilled workforce. Del Norte and Humboldt counties are collaborating to build a practical and achievable re-training program with 15 partners across a large, rural area within the region: College of the Redwoods; Eureka Adult School; The Job Market (Humboldt County one-stop operator); Workforce Center—Del Norte; City of Arcata; Yurok Indian Housing Authority; Humboldt Bay Municipal Water District; DANCO Builders; Redwood Coast Energy Authority; Redwood Community Action Agency; A-Step program for Indian youth employment; Maple Service, Inc; Greenway Partners, Inc.; Plan It Green; and the Carpenter’s Union Local 751. Training will be offered in a series of classes: (1)Environmental Training, Introduction to Green Building, (2) Energy Fundamentals, (3) Retrofits & Energy Efficiency, Water Efficient, (4) Building And Retrofits, (5) Solar Hot Water Installation and Design Principles, (6) Solar Electricity Installation and Design Principles, (7) OSHA safety. Additional training for basic and soft skills will prepare new entrants into the workforce to be successful Participants will enter and complete training in cohorts (or “flights”) of their peers to encourage team work and networking. All flights will include union orientation to understand the opportunities, benefits and operations of union apprenticeship programs. As each flight completes their training, participants will be placed in work experience training, and then supported through the process of permanent hiring or union apprenticeships. Participants will learn about these opportunities through union apprenticeship coordinators for carpentry, electricians, laborers, operating engineers and plumbers unions. Graduating participants will be prepared for entry-level work as wastewater technicians, energy efficiency building technicians, rough carpentry workers, HVAC installers assistants, green plumbing assistances, solar installation assistants, and general maintenance and repair workers. Our Green Employer Council, lead by Plan It Green, actively supports this training grant, many of who will provide work experience training for graduates.

Imperial Valley College

380 East Aten Road
Imperial, CA 92251

Gonzalo Huerta
(760) 355-6419

Award Amount: \$439,578

Summary: Imperial Valley College (IVC) is pleased to submit the grant solicitation under the California GREEN Energy Workforce Training Program. Building Green Retrofitted Energy Efficient Neighborhoods (B-GREEN) Grant proposal depicts a pathway out of poverty for Imperial County residents who are unemployed, under employed and come from disadvantaged backgrounds. This proposal will open the doors of hope and success for Imperial County residents by providing a Green Technology Certificate, concurrently with Basic Skills training and Workforce Skills training. Completion of this training will enable participants to become self- sufficient and overcome the challenges that impoverish this community. Imperial Valley College and Imperial County Workforce Development Board unite to battle against poverty and the barriers that Imperial County residents face.

IVC is a two-year accredited institution by the Western Association of Schools and Colleges (WASC). IVC serves all of Imperial County which is located on the southeast corner of California and is bordered to the east by the State of Arizona; to the west by San Diego County; and to the south by the country of Mexico. The population in Imperial County is 176,158. The PUMA for Imperial County is 21%. The population is heavily Hispanic (78%) and is concentrated on three major cities of Imperial County (Brawley, Calexico, and El Centro). Imperial County has recently been notorious by major national news media (NY Times, LA Times, CNN) as the best representation of the national economic crisis including the highest unemployment rate in the nation 30.2%, this compares with an unadjusted unemployment rate of 12.1 % for California and 9.7% for the nation during the same period (Employment Development Department, 2009).

The B-GREEN Grant proposal will prepare students to take advantage of emerging opportunities in the energy efficiency industry with a focus on energy efficient construction and deconstruction, as well as energy efficiency assessments. The curriculum includes: Environmental Literacy, Introduction to Green Building, Energy Fundamentals, Retrofits and Energy Efficiency, Water Efficient Building and Retrofits, Solar Hot Water Installation and Design Principles, Solar Electricity installations and case and Design Principles and Workforce Entry assistance and case management. The training was developed in coordination with Imperial County Workforce Development Board. The B-GREEN proposal will train 25 participants to work in the following green energy occupations: Building and Performance Retrofitting Specialist, Resource Conservation or Energy Efficiency Technician, Energy Auditors or Home Energy Raters and Energy Regulation

Recruitment for this program will include youth and adults 18 years and older that are unemployed, underemployed or new workforce entrants. They will have little or no construction experience. Our goal is for at least 30 percent of the total program participants to come from the following special needs populations: At-risk and out of school youth, individuals from households

with an income 50 percent below the county's median income, the chronically unemployed, recipients of public assistance, and limited English skills or English as a second language speakers. However, due to Imperial County's current economic situation and high unemployment rate, almost all participants that enroll in the B-Green training will meet one or more of the criteria for special populations. Awarding this proposal will impact a community with tremendous needs and will make a difference in the lives of the 25 participants who will complete Project B-GREEN.

Kern/Inyo/Mono Consortium

2001 28th Street
Bakersfield, CA 93301

Verna Lewis
(661) 336-6849

Award Amount: \$319,655

Summary: The targeted region of Kern, Inyo, and Mono (KIM) Counties was selected in developing the 2a Green Building industry sector strategy because it is a designated Local Workforce Investment Area (LWIA), and 2) it is a region lacking in workforce services that target energy efficiency and renewable energy industries. Employers' Training Resource (ETR) administers the Workforce Investment Act (WIA) services for Kern, Inyo, and Mono Counties. Primary partners for the proposed program are the Kern Community College District, Sheet Metal Workers International Association Local 105, Bakersfield.

Kern County lies at the southern end of the San Joaquin Valley with the Sierra Nevada mountains to the east where neighboring Inyo and Mono Counties are located. An estimated 990,360 people live in the KIM LWIA, which covers 21,388 square miles. The region, particularly Kern County, is characterized by poverty, high double-digit unemployment and low educational attainment rates compared to statewide data.

The proposed project will target adult residents of the three county area who are 18 years and older; unemployed or underemployed; and have little or no experience in the construction industry. We will focus our recruitment efforts on individuals who are interested in entering registered apprenticeship programs or working in green collar jobs. Thirty percent of project participants will be hard-to-serve.

The targeted industries include those that employ occupations that use transferrable skills found in plumbing, sheet metal work, and electrical systems. Green construction, solar panel installation, and wind energy are the industries our proposal will focus on.

Our proposed Green Building Pre-Apprenticeship program will serve 120 individuals during the grant period. Services provided will include skills assessment, basic skills training, as needed, and vocational ESL, as needed. Soft skills and work readiness training, and job search assistance will be incorporated into the program. On-the-job training and work experience components will also be included.

Upon completion of the training program, the participant will receive a certificate endorsed by the Green Regional Employer Council, indicating completion of the Green Building Pre-Apprenticeship course. Program completers will be qualified to apply for apprenticeships through the Kern County Electrical Joint Apprenticeship & Training Committee, the Kern, Inyo & Mono Counties Plumbing, Pipefitter & Refrigeration/Air Conditioning Mechanic Joint Apprenticeship & Training Committee, and the Kern & Northern Los Angeles Counties Air Conditioning & Sheet Metal Workers Joint Apprenticeship & Training Committee.

Long Beach Community College District

4901 E. Carson Street
Long Beach, CA 90808

Gail Schwandner
(562) 938-3023

Award Amount: \$976,060

Summary: According to the U.S. Green Building Council, buildings in the United States account for 36% of total energy use and 30% of greenhouse gas emissions. Given the rising cost of pollution-related health hazards and given current water and energy shortages, conservation and efficiency have become a vital part of the emerging green sector. While the City of Long Beach has been hit disproportionately hard by the economic downturn with an unemployment rate of 13.7% last July 2009, greening of the city economy holds the promise of fostering a robust and vibrant economy that simultaneously remedy the water and energy shortages and provide the local workforce with higher-wages, good benefits, and a more rewarding occupation.

In Long Beach, buildings and electricity accounts for 59.8% of the City's carbon emission due to the fact that 70% of all buildings in the region are over 30 years old. Although the City is in dire need of retrofitting ageing and inefficient buildings, deep building retrofits can cut energy use by 20 to 40 percent, and they can pay for themselves from the energy they save. The City of Long Beach's 2010 Citywide Strategic Plan identifies "Becoming a Sustainable City" as a primary strategic goal. In view of that, this proposal aim to capture the benefits of water/energy efficiency in our "built environment" to retrofit our existing stock of residential and commercial buildings. Based on the region's current need, the targeted industries through this program are: (1) Deep Building Retrofit, and (2) Retro-Commissioning of Existing Buildings.

Partnering with the City of Long Beach, the Port of Long Beach, Pacific Gateway Workforce Investment Board, Southern California Edison, Siemens USA and local small businesses has facilitated Long Beach City College's deep understanding of the region's water/energy efficiency industry dynamics as well as the employers' specific workforce needs. This Water/Energy Efficiency Training Partnership strategy will provide a comprehensive pre-apprenticeship training to 100 new workforce entrants, unemployed or underemployed workers with little or no construction experience to prepare them for work with a solid grounding in the retrofit, energy and water efficiency fields. The targeted population segments include the (1) low-skilled, unemployed, and recently dislocated workers with transferable skills, (2) recently returned veteran's population, and (3) underrepresented female population.

Integrated with basic and "soft" skills training, the Program infuses environmental literacy training into eight the following modules: (1) Environmental Training, (2) Introduction to Green Building, (3) Energy Fundamentals, (4) Energy Efficiency & Retrofits, (5) Water Efficiency & Retrofits, (6) Solar Hot Water Installation & Design Principles, (7) Solar Electric Installation & Design Principles, and (8) Green Landscaping Design. The proposed training leads to four occupations as (1) Retrofitting Specialists, (2) Resource Conservation Specialists, (3) Energy Regulations Specialists, and (4) Green Landscaping Designers.

These entry-level occupations were chosen because they provide a foundation for career pathways into higher-skill specializations within the industry by obtaining industry-recognized certifications, enroll in industry-recognized apprenticeship programs, and/or start their own business. Participants are offered an opportunity to build strong career ladders into jobs with family-sustaining wages for currently low-income and underemployed workers, thus bolstering the region's economic welfare and social stability as well as addressing the emerging workforce need of employers.

Los Angeles City
1200 W. 7th Street, 6th Floor
Los Angeles, CA 90017

Robert Sainz
(213) 744-7396

Award Amount: \$1,000,000

Summary: The City of Los Angeles Workforce Investment Board proposes to partner with the Los Angeles Community Development Department, the Los Angeles Community College District and a myriad of other partners to develop the Los Angeles Green Building Retrofit Pre-Apprenticeship Academy. The academy will focus its Green Building Retrofit Pre-Apprenticeship training efforts (Green Retrofit) on the Greater Los Angeles area, placing an emphasis on retrofitting both private and public buildings within the City and at Los Angeles Community College District (LACCD) facilities. The focus on the Greater Los Angeles region stems, in part, on the City's legislative initiatives (the Private Sector Green Building Ordinance and the public sector Green Retrofit and Workforce Ordinance) and, in part, on \$50 billion voter approved investment in constructing and retrofitting LACCD facilities.

The City proposes to provide training services to 200 low-income individuals with an emphasis on vulnerable populations, including Disconnected Youth, Ex-offenders, Homeless, and Persons with Disabilities. Los Angeles demographic data indicates that these groups are in the most need of skills, apprenticeship and other training.

Modeled after the Los Angeles Construction Talent Transfer Pre-Apprenticeship program, the Green Building Pre-Apprentice Academy will offer the target population career focused short-term training programs that integrate industry awareness and skill attainment, academic and basic skills remediation and supportive wrap-around services. The Academy's goal is to train low-income participants for entry-level positions, including those as registered apprentices.

The City's Green Building ordinances Private Sector Green Building Ordinance, Green Retrofit and Workforce Ordinance etc.) and the States' legislative initiatives (e.g. AB 32, SB 1 etc.), in combination will create employment opportunities in the Green Building and Construction Retrofit field and necessitate the development of a pipeline for hard-to-serve Los Angeles residents that qualify for those jobs.

Los Angeles Trade Technical College
400 West Washington Boulevard
Los Angeles, CA 90015

Leticia Barajas
(213) 763-7071

Award Amount: \$1,000,000

Summary: The Los Angeles Trade Technical College Clean Energy Pre-Apprenticeship (CEPA) Program will serve the Greater Los Angeles Region. A collaborative partnership which includes Los Angeles Trade Technical College (the project lead), Los Angeles Community College District, the LA County Workforce Investment Board, the Los Angeles City Workforce Investment Board and a myriad of public and private employers will administer the program. CEPA will provide training for program participants that leads toward a solid foundation in renewable energy principles, utility technology, including distribution fundamentals and installation of utility-scale solar energy. The program shall include classroom and hands-on training that provides new workforce entrants, and unemployed or underemployed workers with knowledge and job skills in a variety of broad-based renewable energy fields, with a specific focus on solar/pv installation and electrical distribution.

LATTC will serve 150 people through the CEPA training program. The target population for CEPA will be low income adults, who are currently unemployed or underemployed who live in the Greater Los Angeles area. Individuals for this program do not need any prior experience in the energy or construction fields. Since the program will address some basics skills deficits, they will not necessarily need a GED or high school diploma. Special efforts will be made to outreach to groups who are at-risk and have the most challenges in finding employment including emancipated foster youth (ages 18 – 21), previously incarcerated individuals, returning veterans, and other at risk populations. An innovative aspect of the program is the active effort we will put forth to recruit women into the energy and electrical distribution fields.

LATTC, LACCD, and The Los Angeles County and Los Angeles City WIB, through its WorkSource Centers and One Stop Centers, will recruit, screen and orient the trainees. Intake and orientation at the WorkSource/One-Stop Centers will include an initial assessment of skill levels, aptitudes, abilities and support services needs. Clients in need of wrap around services will be referred to community based organizations affiliated with LATTC and the WIBs to address their needs.

The LATTC CEPA will focus on a broad spectrum of clean energy principles and careers, as well as basic skills and work readiness skills that are need in the energy and utility fields. We have chosen to focus more in-depth training on the solar/pv and electrical distribution careers. All of the training was developed with input from public or investor owned utility companies, as well as other employers. All trainees who enroll in CEPA will complete modules in Clean Energy Career Exploration, Work Readiness, Contextualized Basic Skills, and Sustainability and Clean Energy Concepts. They will then choose one of two career pathways for more intensive training - Solar/PV installation and Maintenance or Electrical Distribution/Line worker Training. Cohorts of 35 to 40 individuals will begin every 12 to 14 weeks during the grant period. Training will consist of classroom, and hands-on training in a lab/shop environment. The intent of CEPA is to provide short-term industry-recognized training for entry-level energy professionals and is designed as a “portal” for individuals in low income areas to enter apprenticeship programs or employment.

Northern Rural Training and Employment Consortium

525 Wall Street
Chico, CA 95928

Charles Brown
(530) 892-9600

Award Amount: \$1,000,000

Summary: Targeted Region: The eleven (11) rural counties in Northern California, which include Butte, Del Norte, Lassen, Modoc, Nevada, Plumas, Shasta, Sierra, Siskiyou, Tehama and Trinity served by NoRTEC-WIB and North Far North Regional Consortium (NFNRC) of CA Community Colleges.

Targeted Industries: Energy Efficiency - Construction, Certified Green Building Professional, Home Energy Rater, Solar PV, Solar Thermal, Environmental Control Technology.

Primary Partners: NoRTEC-WIB, 11 County One-Stops, NFNRC (5 Community Colleges), Green Employer Council, Utilities, Builders Exchange, Local 39, ROP, Community Action Agency

Target Population: Dislocated construction workers, unemployed, underemployed, new entrants and special needs groups, such as, veterans, language or education barriers, criminal convictions, et al.

Number of Participants: 117 total participants served, 70% attain certificate/degree, 74% placed, and 83% retained in employment.

Proposed training activities and description of the career pathways:

The foundation of the training provided will be the Core Curriculum: Introductory Craft Skills, from the National Center for Construction Education and Research. Core Construction Curriculum components include: Basic Safety, Construction Math, Hand Tools, Power Tools, Construction Drawings, Basic Rigging, Basic Communication Skills, Basic Employability Skills, and Materials Handling. This course will also be an articulated Tech Prep/ROP course. The entire Clean Energy Workforce Training Program at Butte College will be part of an articulated, sequenced pathway from the ROP/High School to Butte College to California State University, Chico. Other colleges in the region will be able to adopt these courses for articulation, programs of study and career pathways. Courses for required certifications (see Green Bldg, Pre-Apprenticeship Chart, page 10):

1. Core Construction Skills
2. Environmental Training
3. Introduction to Green Building
4. Energy Fundamentals
5. Retrofits & Energy Efficiency
6. Water Efficient Building & Retrofits
7. Solar Hot Water Installation & Design Principles
8. Solar Electricity Installation & Design Principles

Additional training, Introductory Craft Skills, soft skills application.

On-line Green Building Apprenticeship and field lab work provided for remote rural areas.

Occupations: Four occupations, identified as the most difficult to find application have been identified with wages ranging from \$11 to \$34/hour.

Bldg Retrofit Spec, HVAC Mechanics/Tech/Installers,

Energy Auditors/Home Energy Raters, and Bldg Operators/Building Engineers

Peralta Community College District

333 East 8th Street
Oakland, CA 94606

Peter Crabtree
(510) 464-3218

Award Amount: \$1,000,000

Summary: Laney College is applying for the Clean Energy Workforce Training grant in collaboration with the Oakland WIB, Cypress Mandela Training Center, the Regional Technical Training Center, the Spanish Speaking Citizen's Foundation, Civicorps Schools, Allen Temple Job Training, urban university, Greywater Action, Grid Alternatives and Growth Sector. This team of training and support organizations will offer a robust green building pre-apprenticeship program as an expansion of the existing Oakland Green Jobs Corp. The program will serve the East Bay region, including Alameda and Contra Costa Counties.

This expanded Oakland Green Jobs Corp will train 120 new students in energy efficiency, water conservation and renewable energy. Half of the students will be trained at Laney College and half will be trained at Cypress Mandela Training Center with Laney curriculum and instructors. The students at Laney will take a 6 month, 18.5 credit course in environmental literacy, energy auditing, energy efficiency retrofitting, weatherization and green building. The students at Cypress will take a 16 week pre-apprenticeship course as well as environmental literacy and construction rehabilitation classes.

A detailed review of recent job forecast data and information from the members of our Green Employers Council and local government partners indicates that the most pressing workforce need in the East Bay will be energy efficiency retrofitting. 14,000 new jobs are expected in the next three years. Students will receive in-depth training in energy auditing and retrofitting as well as the general construction rehabilitation skills that accompany energy efficiency upgrades. In addition to significant training in energy efficiency, students will receive basic training in water conservation techniques, such as greywater systems, and renewable energy, including solar. With this comprehensive training program graduates will be eligible for entry level positions in renewables, water and energy efficiency. Job opportunities include:

- * Energy Auditor - \$42,000 starting salary
- * Energy Efficiency Retrofitting - \$50,000 starting
- * Weatherization Specialist - \$15-18/hour starting
- * Solar Installer - \$32,000 starting

The Oakland Green Jobs Corp serves primarily low-income students of color from all over the East Bay. Our target population includes veterans, low-income, public assistance, unemployed, displaced workers, women, at risk youth and students speaking English as a second language. We will recruit these students through community partnerships with Cypress Mandela, the RTTC, the Spanish Speaking Citizen's Council, Civicorps and Allen Temple Job Training. Our goal is to support motivated students in moving from shrinking industries to the growing green sector and to assist those with barriers to employment in preparing for and thriving in a green career.

Richmond City
330 25th Street
Richmond, CA 94804

Sal Vaca
(510) 307-8006

Award Amount: \$1,000,000

Summary: The Richmond BUILD Green Careers Academy (RBGCA) expands upon a highly successful model that is already in place to prepare a skilled and trained workforce in the green building industry, with a focus on emphasis on energy and water efficiency and solar energy installation training. The project brings together employer, workforce investment board, community college, labor, energy efficiency/solar installation training and environmental literacy partners to identify the most effective ways to deliver the training needed to meet worker demand in the energy/water efficiency and solar energy industries and build capacity to meet future need. The RBGCA is made up of a broad range of partners, some of which include: the Richmond and Alameda County WIBs, Contra Costa Community College, Solar Richmond, Rising Sun Energy Center, Ma'at Environmental Academy, Literacy for Every Adult Program, UC Berkeley Lawrence Hall of Science, Green Energy Hispanic Education, Rubicon Programs, the City of Berkeley, Carpenter's Local 152, the Chevron Corporation, Sun Light and Power, and Solar City.

The RBGCA will serve a total of 190 participants, including 170 from the city of Richmond and 20 from the city of Berkeley. Residents of the city of Richmond face tremendous employment challenges during the current recession, with unemployment rate for the City of 17.6% in July of 2009, more that 80 percent above the national average for the same period. The project will enroll a minimum of 25% of participants from special needs populations, including individuals who lack a GED or high school diploma; those with limited English skills; at risk youth, including emancipated foster care youth; those who reside in transitional housing or who are homeless; individuals with prior criminal convictions or adjudication; veterans; and those who are low-income or on public assistance. Placement of participants in employment will focus on the counties of Contra Costa and Alameda, where the majority of RBGCA employer partners are located.

The project curriculum will make use of the nationally recognized Richmond BUILD training model, which provides participants with pre-apprenticeship construction skills training that incorporates training in energy efficiency, environmental literacy, solar technology and solar installation as a component of a larger construction training program. Participants will also receive training in soft skills, and basic skills instruction in math and reading will be available for those who require it. The program has already achieved success in gaining employment for participants in the energy efficiency and solar industries once their training is complete.

Graduates of the RBGCA will be prepared for entry into a number of different green building and clean energy occupations, such as the following: Solar Thermal Installer or Technician, Solar Photovoltaic Installer or Technician, Plumber Apprentice, Carpenter Apprentice, Building Performance or Retrofitting Specialist, Energy Auditor or Home Energy Rater, Energy Conservation or Energy Efficiency Manager and HVAC Technician. The project will work closely with the Green Employer Council, other local industry partners and local union apprenticeship programs, to ensure access to employment in the green building and clean energy industries for all program graduates.

Sacramento Employment and Training Agency

925 Del Paso Boulevard
Sacramento, CA 95815

Robin Purdy
(916) 263-3860

Award Amount: \$968,682

Summary: The Sacramento Region Green Building Pre-Apprenticeship Training Partnership will provide services targeting Sacramento, Yolo, El Dorado, and Placer counties. The partnership will focus on providing pre-apprenticeship training programs to prepare a trained workforce for the energy efficiency, infrastructure and commercial green building construction, and the building retrofit sectors. Primary partners for this initiative include: Sacramento Employment and Training Agency/Sacramento Works, Inc., Golden Sierra Job Training Agency, Los Rios Community College District, American River College, Cosumnes River College, Sacramento Municipal Utility District, Community Resource Project, Sacramento Area Electrical Training Center (NECA-IBEW Local 340), Buetler Corporation, and Valley Vision-Green Capital Alliance.

The Partnership will serve a total of 230 participants from the target population of adults 18 years or older, unemployed, underemployed, and new workforce entrants with a focus on special populations including veterans, individuals with household incomes below 50 percent of the area median income and those recipients of public assistance. The Partnership is proposing four separate programs to prepare participants with little or no prior construction experience for registered apprenticeship programs and jobs in the building retrofit field. Green Jobs/Energy Career Exploration Workshops, an overview of the careers and opportunities available to participants interested in training in the Green Building Industry, will be offered to create a pathway to Pre-Apprenticeship Training programs at American River College and Cosumnes River College. American River College Green Building Pre-Apprenticeship Training will prepare students for employment in commercial, industrial, and infrastructure apprenticeships in the Green Building industry. Cosumnes River College Green Building Pre-Apprenticeship Training will provide a Construction Pre-Apprenticeship Certificate program for individuals with no prior construction experience to be trained as Weatherization Technicians and Home Energy Auditors in the residential Green Building industry. Sacramento Area Electrical Training Center (NECA-IBEW Local 340) Pre-Apprenticeship Construction Training (PACT), a short-term, intensive pre-apprenticeship program will be offered in the evenings to provide an opportunity for unemployed workers to explore careers as electricians, plumbers, sheet metal workers, and laborers in green construction. The Green Building Pre-Apprenticeship Training program will be a partner with the Sacramento Municipal Utility District's (SMUD) Energy and Technology Center (E&TC) to provide short-term training classes and certifications that will lead to a Certified Green Building Professional (CGBP) training certificate.

The energy efficiency sector has great potential to be a positive economic driver in the Greater Sacramento Region at a time when the economy is in desperate need of job creation. Investments in energy efficiency programs will create jobs for thousands of people performing energy audits, retrofitting homes and buildings, installing advanced HVAC systems, and managing energy resources. Energy efficiency jobs pay well and provide opportunities for advancement, increasing skills and high wages. Most

energy efficiency jobs are middle-skill jobs requiring more education than high school, but less than a four-year degree—and are well within reach for lower-skilled and low-income workers, as long as effective training programs and appropriate supports are accessible. The Sacramento Region Green Building Pre-Apprenticeship Training Partnership will ensure that the necessary pre-apprenticeship programs are available to job seekers in the region to prepare them for this emerging industry sector.

San Bernardino Community College District

114 South Del Rosa Drive
San Bernardino, CA 92408

Kevin Fleming
(909) 382-4037

Award Amount: \$869,651

Summary: In San Bernardino County, 25% of residents live below the poverty line, the unemployment rate is 13.9%, the construction industry has declined 18.6%, only 15.9% of the population has a Bachelor's degree or higher, foreclosures are up 397.8%, and over 136,198 old homes in the county require weatherization and retrofit services. Fortunately, the demand for a green workforce is high with over 1,330 identified Inland Empire firms currently, or potentially, employing energy efficiency workers locally.

A strong network of partners is collaborating in this proposal focusing on the green building industry. San Bernardino County, the county Regional Occupational Program, and Uncommon Good will provide outreach, recruitment, and assessment. Chaffey College and San Bernardino Community College District will provide curriculum and training. The Inland Empire chapter of the United States Green Building Council, representing 236 local companies in the green building and energy efficiency industry, will provide training, internships, apprenticeships, and employment opportunities.

The target population will consist of WIA eligible clients including CalWORKs, re-entry, unemployed, underemployed, low income, female, and older youth (18 years and older) whom will mirror the demographics of the local community. Thirty percent of participants will be from special populations including the impoverished (household incomes below the median), chronically unemployed, underrepresented, and residents without a GED or high school diploma.

This project will recruit, train, and place 200 residents into green building apprenticeships or employment, by providing 400 hours of customized training in environmental literacy, green building, energy fundamentals, retrofits and energy efficiency, water efficiency, solar installation and design, basic skills, and workplace readiness.

This training program will prepare San Bernardino County residents for four career pathways/occupations: 1) Building Performance Retrofitting Specialists, 2) Energy Auditors or Home Energy Raters, 3) Resource Conservation or Energy Efficiency Managers, and 4) Solar PV/Thermal Installers. Center of Excellence research indicates these key occupations have a 3-year projected growth totaling over 1,470 additional jobs within the region.

San Diego Workforce Partnership

3910 University Avenue, Suite 400
San Diego, CA 92105

Mark Nanzer
(619) 228-2956

Award Amount: \$700,000

Summary: The San Diego Green Building Apprenticeship Readiness Partnership (Green Building Partnership) will prepare individuals for jobs in the green building and energy efficiency industry sector in San Diego County. San Diego County is a relatively self-contained labor market, as it is bordered by a military base to the north, the Pacific Ocean to the west, Mexico to the south, and mountains and desert to the east. San Diego has an estimated 1,120 firms employing an estimated 11,627 individuals in the energy efficiency industry. Because of the San Diego region's relative insularity, and the presence here of a burgeoning "green industry, the county is a perfect location to create a green building pre-apprenticeship program.

The Green Building Partnership will prepare individuals for jobs in five occupations: HVAC mechanics, technicians, or installers; building performance or retrofitting specialists; building controls systems technicians; energy auditors or home energy raters; and solar photovoltaic (PV) installers. Companies employing individuals in all of these occupations already are experiencing difficulty finding qualified workers. On top of this, it is estimated that there will be a need for an additional 1,224 individuals over the next three years to meet the demand for workers in the first four occupations, and an additional 287 in the next one year to meet the demand for solar PV installers.

The lead project partners are the San Diego Workforce Partnership, responsible for project, grant, fiscal, and performance management, and the San Diego and Imperial Counties Regional Community College Consortium, responsible for curriculum development and delivery. The Associated General Contractors of San Diego and Riverside Counties will help develop the curriculum and provide apprenticeship and employment opportunities, and other unions will provide apprenticeship and employment opportunities. Employers will serve on a Green Employer Council, which will provide input on the curriculum and provide internship and employment opportunities. Community partners will provide recruitment, case management, and support services.

The project will target veterans, out-of-school youth, and un- and under-employed adults. Classes and hands-on experience will be provided in basic construction principles, environmental literacy, introduction to green building, energy fundamentals, retrofits and energy efficiency, water efficient building and retrofits, solar hot water installation and design principles, and solar electricity installation and design principles. In addition, to these classes, there will be an employer-developed "Work Ready" component that includes instruction in employer expectations; pre-employment requirements; and work maturity, punctuality, attitude, and retention skills; along with needed basic skills.

Students who demonstrate additional deficiencies in work readiness or basic skills will have access to remediation and additional preparation. Participants will be provided with necessary support services, and upon completion of the program, will be placed in further education, apprenticeship, or employment, as appropriate.

The project will serve 160 individuals, of whom 80% will complete training, 70% will attain a recognized certificate or degree, and 73% will be placed in employment. Of those employed, 81 % will retain employment for at least six months.

San Francisco Department of Economic and Workforce Development

50 Van Ness Avenue
San Francisco, CA 94102

Guillermo Rodriguez
(415) 581-2311

Award Amount: \$998,550

Summary: The Office of Economic and Workforce Development (OEWD) and its primary partners, City College of San Francisco and Synergy Companies, will enroll and train 150 WIA eligible men and women in the Green Building Pre-Apprenticeship Training Partnerships Program. The program's population will consist of a diverse mix of San Francisco residents, 100% of whom will be drawn from Clean Energy Workforce Training Program special populations. At least 25% of the participants will be women and the group will reflect San Francisco's ethnic diversity. OEWD will operate 3, 18 week (630 hour) training cycles with 50 participants in each cycle over the course of 18 months. The program is built on OEWD's successful CityBuild Academy pre-apprenticeship program. For each cycle, OEWD, City College of San Francisco, the No. Calif. Carpenters Regional Council and the No. Calif. Laborers Joint Apprentice Committee will partner to deliver a combination of classroom and hands on training in basic construction skills, general and job site safety training, introductory labor studies, math, workforce entry skills, and introductory electrical, plumbing and HVAC skills. The training will also include a Green Building phase consisting of environmental literacy, introduction to green building, energy fundamentals, retrofits and energy efficiency, water efficient buildings and retrofit, solar hot water installation and design principles, and solar electrical installation and design principles. Finally, all participants will complete a certified 40-hour Health and Safety Training for Hazardous Waste course taught by a local training provider.

The OEVD program targets San Francisco County specifically and the San Francisco Bay Area region generally because the area contains a critical mix of local government, business, education, and community leadership in policy development, programmatic initiatives, and educational offerings that have stimulated the demand for green business approaches. The region is home to a large number of green businesses and the local energy efficiency (EE) industry sector is projected to grow over the next several years. Moreover, local ordinances, investment in infrastructure projects and ARRA funding for local building projects have combined to create a market and demand for construction workers trained in green building practices. The OEWD program targets entry level jobs in two growth EE subsectors --energy retrofitting of existing homes and retro-commissioning of existing buildings and facilities --because these positions pay sustainable wages, are accessible to individuals with limited education, and require short-term training for placement. Much of the entry- level work in these two categories is performed by apprentices. The positions with the greatest growth potential include: carpenter, laborer, sheet metal worker, and roofer apprentices as well as weatherization specialist/building performance specialist, energy auditor, home energy raters, solar thermal installer and solar PV installers.

OEWD will refer its program graduates to local apprenticeship programs and place them with local contractors. The training and certifications participants receive during their training will! make them quite marketable to contractors. Additionally, OEWD's

position as the compliance and implementation vehicle for San Francisco's First Source Hiring Program offers the program unique advantage in leveraging jobs from local building and energy efficiency contractors to assist them to meet their First Source hiring obligations. OEWD's program goal is to enroll 150 individuals, We expect 128 or 85% to complete the 18-week pre-apprenticeship training, and for 115 or 90% of these graduates to be placed in jobs. After 6 months, we expect 98 or 85% of those placed to still be working, The career pathways for these new workforce entrants will be varied. Some may simply incorporate their green building and EE skills into their chosen craft work as they complete all the requirements for journey status. For others the training will open up new career opportunities in marketing installing energy efficiency measures.

San Luis Obispo County
4111 Broad Street, Suite A
San Luis Obispo, CA 93401

Joyce Aldrich
(805) 602-2441

Award Amount: \$ 610,055

Summary: The targeted region for this proposal is San Luis Obispo and Santa Barbara Counties. Currently San Luis Obispo and Santa Barbara Counties do not have training in place for new workforce entrants, unemployed or underemployed workers with little or no construction experience to work in the construction industry, energy and water efficiency or renewable energy fields. With new energy retrofit and energy weatherization opportunities, there is a gap between skills of job seekers and needs of employers. This pilot project will provide training opportunities in San Luis Obispo and Santa Barbara Counties that bridges that education gap ensuring job seekers are trained in fields of Energy Weatherization, Retrofit, and Alternative Landscape encompassing Water Efficiency. This program will include classroom and hands-on training in basic construction practices with a solid grounding in green building and energy and water efficiency so individuals are prepared for work in the weatherization and building retrofit construction fields. This program, along with teaching skills to reduce our carbon footprint will be used toward the following objectives:

- *Education
- *Recruitment
- *Job Training
- *Job Placement

Primary partners in this proposal include Santa Barbara Workforce Investment Board, Cuesta Community College, Santa Barbara City College, California Conservation Corps, Community Action Partnership of San Luis Obispo, San Luis Obispo County Department of Planning and Building, Community Action Commission of Santa Barbara, International Brotherhood of Electrical Workers Local #639, Building and Trades Council of Santa Barbara, South Coast Regional Occupational Program, Tradart Foundation and Santa Barbara Contractor's Association.

The program is designed to support at least 200 adults, 18+ with a target population of 25% of the total served representing special population as defined by the SFP guidelines that includes participants who fall within the High School Drop-out and aged out foster youth categories, chronic unemployment, veterans and homeless or in supportive or transitional housing. The program will provide wraparound green job training and learning with a full scale curriculum in green building; energy fundamentals; retrofits and energy efficiency along with work experience in landscape management and construction management development through the Community Colleges; Local Labor and Building and Trades Councils that will provide vocational education to participants. Additionally the second component of the program consists of basic and intermediate hands-on skills training in energy efficient technologies, sustainable landscaping, energy auditing, green construction/deconstruction, and water management. The career pathways through partner employers include construction retrofit, energy/weatherization, and water management.

Solano Community College

4000 Suisun Valley Road
Fairfield, CA 94534

John Urrutia
(707) 864-7179

Award Amount: \$418,751

Summary: Targeted Region = Solano County: Square Miles - 909.4 Square Miles; Population - 426,729 (Jan 2009); 21 of the 58 Counties; Medium Age – 34.8; Average Annual Wage - \$43,383; Total Vehicle Registrations – 329,534. Travis AFB is located in Solano County, and 14,000 people are assigned to the Base – (Wing Performance Report – April 2008).

Targeted Industries – “Green” Construction and “Green” Development (Architectural; Engineering; Contracting; Pre-Design; Design; Construction; Property Management; Operations and Maintenance; Renewable Energy; Water Efficiency; Energy Auditing; and Weatherization)

Primary Partners – WIB of Solano County, County of Solano, Travis AFB, Cities of Fairfield, Vacaville, & Vallejo, Pacific Gas & Electric, Green Employer Council, & Private Business Partners

Target Population – The Primary Target Group is the Travis AFB Veterans and Reservists. There are approximately 3,250 Reservists stationed at Travis and an additional 522 Veterans processed through the Solano Community College Veteran Affairs office annually. Additionally, the current Unemployment Rate for Solano County is 11.5%, or 25,000 people. The total of these groups equals 28,772 possible students.

Number of Participants to be served – Our proposed program will include 3 simultaneous programs. We will host one program on our main campus along with classes located at Travis AFB, our Vacaville Center, and our Vallejo Center. Each of our core programs will be offered to and accommodate 40 students per semester, for a total of 120 students per semester. Our program within the 18-month Grant duration will provide 2 Semesters, for a total of 240 students. In addition, we will offer 5 Specialty Classes per semester for shorter-duration classes that enable larger groups of people (40 people per specialty class) to return to work. The specialty programs will be Weatherization and Energy Upgrades; Energy Auditing; Solar PV, Water Heating, and Space Heating; Rain Water Harvesting; and Entrepreneurial Training. The Specialty Classes will target the Unemployed.

Proposed Training Activities – Training activities will contain: Classroom and hands-on skill training in Environmental Literacy Training, Soft Skill Development, and Further Educational Pursuits. Specifically, the training will include an Introduction to Green Building (LEED GA Credentialing – particularly Sustainable Sites, Energy Conservation, Water Conservation, Resource Conservation, and Indoor Air Quality.) In addition, specific training will consist of Energy Fundamentals; Retrofits & Energy Efficiency; Water Efficient Buildings and Retrofits; Solar Hot Water and Space Heating; Solar – PV; along with the short duration

specialties that are listed above. Supportive classes addressing the basic skills of Math, Reading, and Writing will be available to those students requiring such training through the already existing Basic Skills Program at SCC.

Career Pathways or Occupations for the Graduates – The following are the Career Pathways or Occupations for the Graduates: Field Construction and Marketing skills in: Weatherization; Green Plumbing; HERS Rater; Energy Auditing; PV and Wind Energy; Solar Water and Space Heating; Rain Water Harvesting and Gray Water Reuse; Geo Thermal; Building Operations and Maintenance; LEED GA project participation; Sustainable Project Consulting; and further Education within Sustainable Development including Architectural and Engineering pursuits.

South Bay Workforce Investment Board

11539 Hawthorne, Suite 500
Hawthorne, CA 90250

Jan Vogel
(310) 970-7700

Award Amount: \$529,858

Summary: The Gateways to Green Building Pre-Apprenticeship Program (GGB Program) is a collaborative residential green building apprenticeship preparation program designed to prepare new workforce entrants, the unemployed and underemployed workers for candidacy and entrance into registered apprenticeship programs and/or employment in green building occupations and careers. Our program goals are to: 1) develop entry-level and specialty skills in residential green building for 70 under-employed, unemployed and new workforce entrants in the South Bay Local Workforce Investment Area (SBLWIA) to increase their employability and prepare them for careers in the green building field; 2) prepare participants for registered apprenticeship program candidacy, entrance, and successful participation, and/or other employment in a residential green building occupation; and 3) increase the residential green building workforce of the SBLWIA by developing skills recognized by certifying bodies through the use of classroom and hands-on instruction, community service activities, supportive services, and other state, federal, and local financial resources.

With the South Bay WIB serving as administrative entity, the program will be operated by the Century Center for Economic Opportunity/YouthBuild in Gardena in cooperation with El Camino College and green building training entities including the U.S. Green Building Council Los Angeles Chapter, Build it Green, the California Building Performance Contractor's Association, Richard Heath and Associates, and the Association of Energy Engineers. The 18-month program will cover the following content areas:

- *Environmental Literacy
- *Introduction to Green Building
- *Energy Fundamentals
- *Sustainable Development
- *Retrofits and Energy Efficiency
- *Water Efficient Building and Retrofits
- *Solar Hot Water Installation and Design Principles
- *Solar Electricity Installation and Design Principles
- *Workforce Entry: Math, Reading and Writing, Map and Plan Reading, Verbal Communication, Workforce Skills (including soft skills)
- *Vocational English as a Second Language

In addition to the organizations indicated above, GGB partners include: the IBEW/NECA Joint Apprenticeship Training Committee-Electrical Training Institute, Ironworkers Local 416, GRID Alternatives, the Environmental Services Center of the South Bay Cities Council of Governments, and the South Bay One-Stop Business and Career Centers in Inglewood, Gardena, Carson, and Redondo Beach. Green Employer Council members include: ASF Millworks & Design Inc., Building Doctors, Southern California Edison, DuctTesters, Inc., Healing Spaces by Design, Imani Energy, Inc., The Green Hive, Jasana, Quilite, Solartech Power, Inc., Salas O'Brien, and Pulte Homes.

Imperial County

2695 South Fourth Street, Building D
El Centro, CA 92243

Sam Couchman
(760) 337-5000

Award Amount: \$500,000

Summary: At the southeastern tip of California - bordering Mexico to the South, Arizona to the east, and San Diego to the West - is the Imperial Valley. The Imperial Valley/Imperial County encompasses nine small cities totaling an overall population of 172,000. Historically an agricultural area with high unemployment (30.2% - July, 2009 - EDD LMI info.), low skill jobs, and a predominantly Hispanic population (75%), the Imperial Valley is nonetheless in the process of turning itself into a focal point for bio-fuel production.

Thanks to its longer than average growing season, wide variety of crops, and nearby location to San Diego's bio-technology industry, the Imperial Valley is in a prime location to take advantage of the emerging bio-fuel industry. The bio-fuel industry sector is established and growing in the Imperial County; five of the bio-fuel companies making up this industry (SunEco Energy, Carbon Capture Corporation, Biolight, Pacificland International Development Company, and California Ethanol and Power) have partnered with Letters of Commitment to support this effort with their presence on the Green Employer Council. Of those five companies, three are related to algal bio-fuels - the subset of this industry which has identified the specific jobs being prepared for in this proposal. SunEco Energy has identified 52 jobs to be prepared for connected with their two planned 1000 acre-foot build-outs this coming year and Biolight has committed to hiring three positions in addition to the above 52 job openings.

The target population - as dictated by grant guidelines - is unemployed, underemployed and incumbent workers. Since the bio-fuel industry - while established and growing - has been primarily research oriented in the Imperial County before this year, it is not expected that incumbent workers will be a large part of the population. On the other hand, the unemployment statistics given above indicate there will be plenty of unemployed and under-employed individuals to work with.

To meet the 55 identified job openings associated with the algal bio-fuel industry, 75 participants will be trained in identified job areas. SunEco Energy identified eight job categories that they will be hiring for, three of which involve skills that will be part of the skills practiced through the Biolight internships to take place between the first and second stages of the proposed trainings. The eight identified job categories associated with jobs at SunEco Energy that will be available in the two scheduled build-outs between November 0f 2009 and January of 2011 are: Water Quality Specialists, Water Management, Livestock Feed Processors, Biology/Microscopy/ Lab, Computer Instrument Technicians, Heavy Electrical Technicians, Control Room Operators, Control Room Supervisors. Planned training associated with these positions includes classroom (both at IVROP- the training agency partnering in this proposal - and at the primary business partner facilities), and On-the-Job Training (OJT). Classroom training for technical positions at SunEco which will use Emerson Control Systems equipment will be specific training (through ISA-Instrument Society of America) designed to prepare participants to the point where, after this and limited OJT at SunEco, they will be sent to vendor/Emerson training by the employer, SunEco Energy. Other courses contain different combinations of classroom time and OJT depending on the position being prepared for.

Long Beach City
3447 Atlantic Avenue
Long Beach, CA 90807

Bryan S. Rogers
(562) 570-3701

Award Amount: \$500,000

Summary: California's economic recovery, in part, will take place within the burgeoning Clean Technology/Green Economic Sector. This sector is bringing about new job opportunities and expanding the industry in multiple arenas. In the Southern California region one of the major areas experiencing growth is the green transportation heavy trucks and transit. The strict mandates of the South Coast Air Quality Management District's (SCAQMD) addressing Greenhouse Gas emissions and the Clean Air Action Plan adopted by the Ports of Long Beach and Los Angeles are driving major changes in the heavy trucks and transit vehicles that travel through this region. A well trained workforce must understand the differences and safety issues between the old diesel technology and the new LNG/CNG or gasoline-hybrid engine technology.

Through this stacked training approach participants will have multiple options and entry points for employment opportunities within the Green Vehicle Service industry. Initially, clients will be able to obtain employment by completing the required entry level courses; a comprehensive green vehicle quick service training and an industry mandated green vehicle safety course. Upon completion select clients will be introduced to paid internships at green transportation quick service and maintenance facilities. These entry-level courses are the foundational piece of this project in that they ensure that all clients are immediately employable and possess the relevant skill base for the industry. All program graduates then move into one of 3 green specialty tracks that provide for advancement and mobility within the clean transportation industry sector: Gaseous Fuels Training, Electric/Hybrid Vehicle Training, and Clean Diesel Training. These industry focus areas are high growth segments for the region and clients will be well equipped with the requisite skills to apply for positions within the clean transportation industry.

As a proposed tiered training program the ability for this project to support employment, advancement and economic self-sufficiency is significant. Through a stackable credentialing model the proposed project will target four distinct yet complimentary segments of the regional population. These population segments include the (1) low-skilled, unemployed, (2) recently dislocated workers with transferable skills, (3) the recently returned veteran's population, and (4) the incumbent worker segment of the population. The project aims to serve approximately 210 clients over the 18 month project period.

As key conduits for expending federal stimulus dollars to support clean energy job growth, the Workforce Investment Boards recognize a need to support recruitment and clean energy training and education programs for the clean energy industry. The Pacific Gateway Workforce Investment Network and Long Beach Community College District are partnering as sponsors of this proposal because they recognize that the clean energy economy operates at a regional scale—businesses and employees work across jurisdictional boundaries—and thus a complimentary approach strengthens the likelihood of success for both organizations and their service areas. Key employer partners include Long Beach and Orange County Transits and the Port of Long Beach.

Los Angeles County

3175 West Sixth Street, Room 300
Los Angeles, CA 90020

Josie Marquez
(213) 738-3175

Award Amount: \$500,000

Summary: The Los Angeles County Workforce Investment Board (WIB) and its regional partners will serve 150 incumbent and underemployed/unemployed workers throughout the Los Angeles target region. It will provide a series of short-term training events and wrap-around services towards the green-building career pathways - leveraging local, state and Federal resources. The primary partners will be the Los Angeles Community College District (LACCD) and its nine-college infrastructure, the City of Los Angeles Workforce Investment Board, local and regional employers (such as Energy Crews Company, IMANI Energy, Inc., Sunshine Solar Energy Inc., SolarCity, INTI Energy Solutions, CA Conservation Corp (Operations and Facilities Division), and Go Green Solar).

The target group will include incumbent workers and underemployed/unemployed workers that are interested in the focused industry. Although not required, this project will also serve special needs populations that include veterans, individuals lacking a GED, and applicants living below 50% the area medium income. All participants will be offered short-term training activities that include the following:

- Code Training
- Principles of Green Construction
- LEED Certification Preparation
- Green Plumbing Principles and Certification Workshop
- Principles of Weatherization and Envelope Sealing
- Home Energy Audits and Rating systems
- Building Performance Institute Certification Training for Envelope Professional, Building Analyst Professional and Building Performance Contractor
- Solar/PV Installation

The purpose of the project is to prepare participants for emerging careers in the green-building sector and enhance their career mobility towards emerging fields. It is supported by regional employers, the local LA City and County One-Stop Center system, and sector-based associations such as the Green-WEST Alliance. Upon successful completion of the project's array of services, participants can be poised for successful careers such as Green Plumbing Contractors, Green Construction Managers/LEED Certified, Building Analyst, HVAC Contractor, Solar PV Installer, Energy Efficiency Auditor / Energy Efficiency Installation, and Solar Thermal Installation.

Richmond City
330 25th Street
Richmond, CA 94804

Sal Vaca
(510) 307-8006

Award Amount: \$500,000

Summary: The ATLAS Advanced Transportation Initiative (ATLAS ATI) is a regional consortium of Workforce Investment Boards (WIBs); community colleges, community workforce providers, labor, and regional industry employers that will implement career path trainings in green diesel, hybrid technology, and water borne automotive painting systems for underserved populations of dislocated workers and recently detached veterans in the greater East San Francisco Bay Area Interstate 80 and 880 corridor. ATI will serve 125 dislocated individuals over 18 months from three specific groups of dislocated individuals currently unemployed or soon to be unemployed due to environmental policy, shifting strategies in the wars in Iraq and Afghanistan, or economic restructuring.

Independent Owner-Operator (IOO) Truckers: New CARB guidelines in December will force as many as 1500 drivers at the Port of Oakland to replace or retrofit their trucks to continue to service the Port. Of this amount, as many as 500 will be unable to comply and will lose ability to work as drivers.

Recently Detached Veterans: Hundreds of Iraq and Afghanistan veterans are returning to the Bay Area, the highest concentrations in the San Francisco East and South Bay Areas. Of these, the majority are young adult males between 21 and 28 years of age with limited work experience outside of the military and facing a variety of needs to reintegrate smoothly into civilian life.

Dislocated Workers: ATI will target dislocated workers from multiple sources with a special emphasis on workers displaced by the halting of the Chevron refinery expansion in the City of Richmond.

ATLAS ATI will implement clean transportation training pathways including Clean Diesel retrofit, Hybrid Automotive Technology, and Water Borne Automotive painting systems. These trainings will focus on short term intensive training leading to entry level positions making as much as \$20 an hour in dealerships, independent repair facilities, or large transportation providers with in house service capacity for their own fleets. The ATI training model integrates vocational ESL, basic skills instruction, and case management into training to provide full wraparound support for trainees, and it will create a Green Employer Council to facilitate placement after training and input from employers on the design and implementation of these new training elements. The training pathways targeted by ATI will all focus on both short term training and placement and continuing education after placement to help individuals achieve full certification as a Diesel Mechanic, Hybrid Automotive Technician (Toyota T-Tech Certification), or Advanced Automotive Paint technician.

The ATI partnership includes the Richmond WIB (Lead), Alameda County WIB, Oakland Private Industry Council, College of Alameda, Contra Costa College, Swords to Plowshares, and the Workforce Collaborative as primary service delivery partners. Additionally, the project builds upon existing partnerships between the College of Alameda with the Port of Oakland, Teamsters, Machinists Union, Joint Automotive Apprenticeship Council and nearly 30 transportation and repair companies based in the San Francisco East Bay. The structure of these partnerships will ensure the consortium direct access to the targeted populations and provide contextualized case management services by organizations with specific expertise serving transportation industries, veterans, and dislocated workers.

Sacramento Employment and Training Agency

925 Del Paso Boulevard
Sacramento, CA 95815

Robin Purdy
(916) 263-3860

Award Amount: \$500,000

Summary: The Alternative Vehicles and Fuel Workforce Training Program will serve the Sacramento Metropolitan Statistical Area (MSA) including Sacramento, Yolo, El Dorado, and Placer counties; and target the energy and transportation sectors. The Green Capital Alliance (GCA), with the active participation of business, government, economic development organizations, colleges, universities, and utility companies, will serve as the Green Employer Council.

Partners will include, in addition to the GCA, the Sacramento Employment and Training Agency (SETA) and Sacramento Works, Inc., the workforce arm of the regional WIB, which will provide recruitment, assessment, case management, and placement for students enrolled in entry level training; and, American River College (ARC), a Sacramento community college serving 40,000 students, which will provide industry and entry-level training. Employers will include the Operating Engineers Local 3 (OE3), a labor organization representing heavy equipment operators and mechanics; Pacific Gas & Electric Company (PG&E) and Sacramento Municipal Utility District (SMUD), major electric utility companies; and, Sacramento Area Rapid Transit (RT), providing regional bus and light rail service.

Industry Training Target Population and Outcomes:

- The target population for industry training will be technicians identified by their company/organization. In most cases technicians will be paid during training, and their wages will be used as match.
- OE3 – 12 technicians will retrofit off-road construction equipment to achieve particulate and green house reduction.
- PG&E – 48 technicians will service and maintain electric hybrid vehicles (EVs) to manufacturers' specifications. PG&E is transitioning their automotive fleet in 2010 to electric vehicles (EVs).
- RT – 12 technicians will maintain/repair Compressed Natural Gas (CNG) systems on diesel buses.
- SMUD – 24 technicians will service and maintain EVs, hybrids, and alternative fuel vehicles; and, retrofit trucks to achieve particulate and green house gas reduction.
- Training will prepare technicians to work with alternative vehicles, fuel systems, diagnostic tools, and technical software which they will utilize to train other technicians and advance within their occupation.

Entry Level Training Target Population and Outcomes:

- The target population will be unemployed and underemployed workers; with active recruitment of women. LMI data indicates an annual need for 182 auto mechanics and 66 bus and truck mechanics. Technicians with training in alternative vehicles and fuel should be very competitive for employment.
- Alternative Fuel and Vehicles Certificate: 25 students will complete courses in biodiesel; advanced electrical; hybrid technology; alternative fuels and vehicles; and advanced drive train.
- Clean Diesel Certificate: 25 students will complete courses in biodiesel; clean diesel systems; clean diesel rebuild, retrofit, or repower; clean engine repair; clean diesel retrofit; and clean diesel software.

This initiative will contribute to the economic recovery and stability of the region by teaching students, technicians, labor organizations, and employers how to retrofit diesel technology, and how to maintain and repair alternative vehicles. These activities will pump money into the economy through equipment and vehicle sales; improve regional health and economic competitiveness through the reduction of greenhouse gases and particulates; and establish Sacramento as a center for transportation and energy technology.

San Francisco Department of Economic and Workforce Development

50 Van Ness Avenue
San Francisco, CA 94102

Guillermo Rodriguez
(415) 581-2311

Award Amount: \$277,500

Summary: Targeted Region and Sector: The Bay Area EV Training Consortium has designated the San Francisco Bay Area as its targeted region; and the electric vehicle sector as its targeted industry. For the purposes of the Consortium's work, the regional EV industry sector is inclusive of: automobile dealerships that will be marketing EVs in the 2010 2012 timeframe; independent repair shops that service EVs; companies that convert conventional vehicles to electric drive operation; EV charge station manufacturers and the electrical contractor community that will install them; public and private fleet operators; local government transport, building, planning, and public works officials.

Primary Partners: Primary partners in the Consortium include Workforce Investment San Francisco (the lead applicant agency and the designated Workforce Investment Board for San Francisco City and County); the WIBs of Sonoma and Marin County, City College of San Francisco, the College of Marin, Santa Rosa Junior College (located in Sonoma County); the S.F. EV Association, and the Bay Area EV Corridor Project, which is a coalition of Bay Area regional public agencies, local governments, EV companies, and business organizations advancing a coordinated plan to make the Bay Area the "EV Capital of the United States." Primary Bay Area EV Corridor Project partners include the Joint Policy Committee of the four regional public agencies of the Bay Area (the Association of Bay Area Governments, the Metropolitan Transportation Commission, the Bay Area Air Quality Management District, and the Bay Conservation and Development Commission); the City and County of San Francisco; the City of San Jose; Coulomb Technologies; and many other employer and business organizations.

Target Population Served (60% incumbent workers; 40% unemployed or underemployed): The Bay Area EV Training Consortium target population includes: 1) individuals seeking employment in the auto technician field with a broad array of skills - including conventional and electric drivetrain components; 2) incumbent technicians seeking advancement through knowledge of EVs.

Proposed Training Activities: Consortium training activities will include training for at least 144 incumbents and job-seekers via: 1) Nine introductory and intermediate auto technician training courses with an emphasis on electric vehicle drivetrains (including hybrid-electric, plug-in hybrid electric, and pure battery-electric vehicles); 2) Training in electric vehicle conversions; and 3) Training in electric vehicle charge station network planning, installation, and maintenance. In addition, at least 100 EV infrastructure planners and installers will be trained in multi-disciplinary teams through a series of 24 "EV Charger Supply Chain Workshops" led by experienced EV industry professionals affiliated with the Bay Area EV Corridor Project. To ensure that technician program training participants fully understand the demands and expectations of the EV-related workplace, job shadow and work-based learning activities will be organized with leading employers, coordinated by the SF EV Association. We anticipate

that at least 73% of college auto tech trainees will be placed in unsubsidized employment. EV Charger Workshop participants will be incumbents not needing placement services.

Career Pathways: The career pathways that EV Training Consortium participants will be engaged in include automobile service technicians and managers; fleet managers; and I L. EVinfrastructure and charge network~J2Janners, technicians, and manager.