

Workforce Training: Credentials, Pathways, and Pipelines to the Green Economy

Presented at the Good Jobs Green Jobs National
Conference
February 4-6, 2009

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About Trade-Tech

- Trade-Tech has an 80+ year history of workforce development
- Trade-Tech has 21 career-technical programs that are #1 in the state for conferring degrees and certificates...54 programs are in the top ten in the state
- 75,000 individuals have completed career-technical courses/training at Trade-Tech over the past five years

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About Trade-Tech

- Trade-Tech's existing career-technical degree and certificate programs align with ALL of the *Industries in L.A. City's Green Technology Sector with the "highest output" and that "add the greatest value"*

(source: Burns, P. & Flaming, D. (January, 2006). Jobs in L.A.'s green technology sector)

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About Trade-Tech

- Trade-Tech is the only community college in the City of Los Angeles with **ALL** of the following programs that support green industry sectors:

Supply Water Technology Chemical Technology Waste Water Technology

Construction Technologies (Carpentry, Electrical, Plumbing, Refrigeration & Air Conditioning Mechanics, Welding, Gas & Electric; Electrical Construction, Electrical Construction & Maintenance - Motor Control, Programmable Logic Controllers, Architecture)

Process Technology

Solid Waste Management

Automotive and Diesel Technology

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About Trade-Tech

- Trade-Tech's green workforce development programs range from alternative fuels and emissions reduction in the Diesel Technology Program to a Supply Water Technology AS degree with an emphasis in water purification

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About Trade-Tech

- Currently Trade-Tech has 52 green-integrated courses and five green-related degree and certificate programs in career-technical, science, health, and liberal arts programs

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Green Workforce Development Challenges

- **Challenge:** Green workforce development requires extensive commitment as it expends an extensive amount of resources including staff time, financial resources, facilities, and equipment
- **Response:** Trade-Tech formally adopted a Green College Initiative in 2006 and then incorporated it in the College's five-year strategic plan in 2008

Green Workforce Development Challenges

STRATEGIC PRIORITY: COMMUNITY AND BUSINESS DEVELOPMENT

Action Plan Title: LATTC Green Initiative

Action Plan Overview: There is increasing recognition of the importance of addressing global warming and the ecological well being of our planet. This issue is important to us both as corporate citizens and as educators of leaders in our community. We intend to stand as a leader in our industry, by developing policies and programs to change the culture and contribution of our College to a sustainable future and to the rapidly expanding green economy. This is an opportunity that fits directly into our core offerings. Our CTE programs will offer training in how to ply trades with an environmental focus, providing our graduates an advantage over others over the next decades.

Objective 1: Adopt built environment standards, policies, and practices to ensure college facilities are designed, built, renovated, operated, or reused in an ecological and resource-efficient manner by December, 2008.

Objective 2: Adopt standards, policies, and practices that meet "clean and green" and "green certified" standards such as using environmentally preferable cleaning products/practices, conserving water, composting, implementing pollution prevention measures, and reducing the amount and/or toxicity of materials entering the waste stream prior to recycling or disposal through waste prevention practices such as electronic work processes, buying products with less packaging, purchasing remanufactured products, and buying copiers that print double-sided by December 2009.

Objective 3: 10 programs will offer special curriculum with environmental component before September 2011.

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Green Workforce Development Challenges

- **Challenge:** There is insufficient information available on green economy, green occupations, requisite skills for green occupations, certification or standards for green occupations—particularly at a local or regional level
- **Response:** Trade-Tech commissioned and conducted green labor market studies focused on the energy and construction sectors

Green Workforce Development Challenges




Clean Technology Workforce Challenges and

Presented to the
Los Angeles/Orange County Regional
Los Angeles Trade-Technical College

February 2008


Partial Funding Provided by
the Los Angeles Department
of Water and Power


REGIONAL ECONOMIC DEVELOPMENT INSTITUTE (REDI)

The
Strategic Opportunity
To Build a Green Workforce
In Los Angeles
(Working Copy)



A Regional Education and Training Action Plan
February 2008


Prepared for
Los Angeles Trade-Technical College
Regional Economic Development Institute
REDI@latnc.edu
<http://www.latnc.edu/dept/latnc/REDI/index.html>

In partnership with
The Los Angeles Infrastructure & Sustainable Jobs Collaborative
<http://www.latnc.edu/dept/latnc/REDI/Utility.html>

The Regional Economic Development Institute (REDI)
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Industry Sector Report

**Utility Industry Sector Report:
Los Angeles
July, 2008**



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Green Workforce Development Challenges

- **Response:** Trade-Tech is partnering with other institutions to attempt to standardize curriculum/programs
 - Sustainable lighting curriculum development in partnership with 4 community colleges in California
 - Sustainable Green Construction Education Task Force: a statewide effort to develop and implement standards for green construction curriculum in California high schools and community colleges

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Green Workforce Development Challenges

- **Challenge:** A plethora of the “green jobs” are only a portion of an existing occupation in which a set of new skills and comprehensions are required for that part of the position that is being greened— they are also imbedded within industry sectors

Green Workforce Development Challenges

- **Response:** Trade-Tech serves as an “intermediary” for sector-based workforce development initiatives placing emphasis on those occupations necessary for “greening” the sector

Green Workforce Development Challenges

LA Infrastructure and Sustainable Jobs Collaborative a Collaborative that brings together key stakeholders to plan and implement a seamless education, training and workforce infrastructure for both traditional and greened occupations in the utility and construction sectors. Partners of the Collaborative include: Los Angeles Department of Water and Power; Southern California Gas Company (a Sempra Energy Utility); The Los Angeles Unified School District; The Center of Excellence hosted at the Los Angeles Community College District; California State University Los Angeles (CSULA), College of Engineering, Computer Science, and Technology; IBEW, Local 18-LADWP Joint Training Institute; Southeast-Crenshaw Worksource Center; IBEW Local 11; California Building and Construction Trades Council; and the Metropolitan Water District of Southern California to name a few.

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Green Workforce Development Challenges

- **Response:** Trade-Tech has greened its Carpentry program entirely—primarily by greening a portion (e.g., materials and techniques) of its existing courses and adding only a few new courses

Green Workforce Development Challenges

- **Challenge:** One can quickly become overwhelmed with the myriad of potential for green workforce development and can easily get side tracked, lose focus, and divert precious resources from their green workforce agenda

Green Workforce Development Challenges

- **Response:** Trade-Tech prepared a priority list for developing education and training programs to address the most promising green-related occupations in the energy/utility, construction, and transportation sectors

Green Workforce Development Challenges

- **Challenge:** Financing green workforce development activities, until recently little funding is available
- **Response:** To support green workforce development activities, Trade-Tech had to leverage and “package” existing and new funding sources

Green Workforce Development Challenges

\$150,000 planning grant from the Los Angeles Department of Water and Power to establish the Sustainable Development Education and Training Institute (SDETI)

Los Angeles Metropolitan Authority donated two Compressed Natural Gas (CNG) engines to support the greening of the diesel technology program

\$1 million dollar grant from the Bank of America Foundation to establish the Regional Economic Development Institute (REDI)

\$250,000 contract from the City of Los Angeles Community Development Department to establish and support the work of the LA Infrastructure and Sustainable Jobs Collaborative

\$1.35 million grant from the Department of Education to implement the STEM Success Program (SSP) in which all program components will be integrated with the College's Green College Initiative

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Green Workforce Development Challenges

- **Challenge:** The green economy is emerging and thus continuously and rapidly changing, workforce development practitioners must monitor and report progress frequently, conduct continuous environmental scanning to be aware of new developments, and adjust plans if necessary

Green Workforce Development Challenges

Response: Trade-Tech program development teams meet frequently (every two weeks) in-person or electronically to prioritize program development activities, report on progress, and coordinate activities. Program development priorities are routinely adjusted based on developments such as policy changes and the availability of funds and resources. And, accomplishments are frequently chronicled on the Green College Initiative website.