

Preparing Connecticut's Workforce for Green Collar Jobs

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*“...a major shift to renewable energy and efficiency is expected to produce 4.2 million new...**Green jobs** during the next three decades.”*
US Conference of Mayors

*“...a clean energy economy will help the private sector create 3.5 million new **Green jobs**.”*
President Barack Obama

William Leahy, Director
Institute for Sustainable Energy
At
Eastern Connecticut State University
www.sustainenergy.org

Green-Collar Jobs Provide Opportunities

Through certification training, qualify individuals for **“family supporting, career tracking sustainable jobs”**

Jobs that:

- Reduce our dependence on foreign oil, and strengthening national security.
- Promote the use of domestic renewable energy resources and advanced technologies.
- Reduce the tax burdens of inefficient public buildings and public housing.
- Mitigating climate change by cutting green house gas emissions.

What is a Green Collar Job?

- “**Green jobs**...help conserve energy, promote the deployment of new technologies, and contribute to the mission of becoming a more sustainable nation.”

Green Job Corps

- “A **Green-Collar Job** is in essence a blue-collar job that has been upgraded to address the environmental challenges of our country.”

Apollo Alliance

- “When it comes to mechanicals, **Green** means maximizing the energy efficiency of existing equipment, and specifying the most efficiency systems for new applications, using renewable and sustainable fuels and conserving water.”

Green Mechanical Council

Where are most of the Green Collar Job Opportunities:

- Buying and Selling Energy Related Products
- Building Energy Assessment
- Energy Efficient Building Construction
- Building Operations and Maintenance
- Project Engineering and Implementation
- Energy Transmission and Distribution
- Transportation Systems and Services

From: The Advanced Technology Environmental and Energy Center

Emerging Occupations

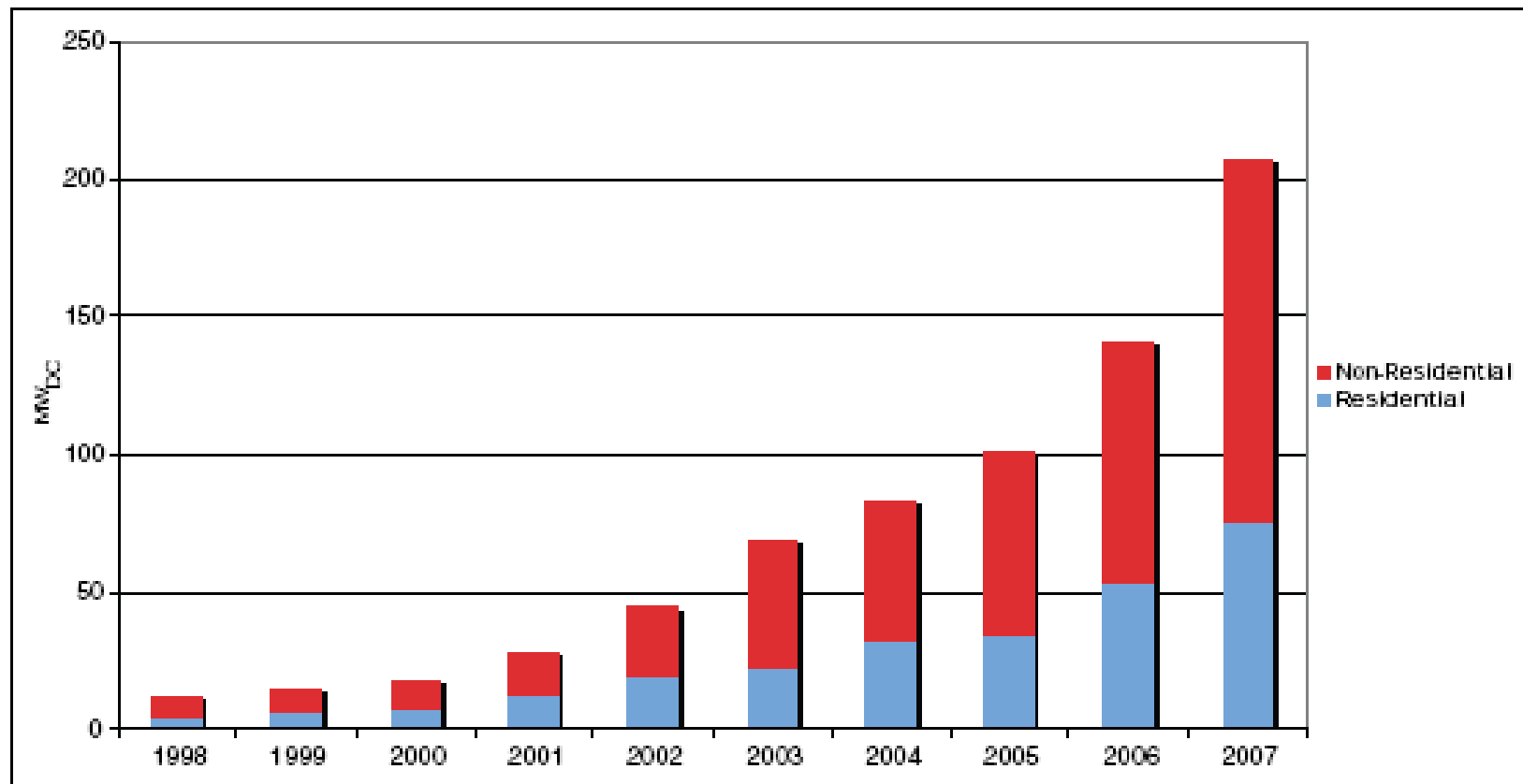
Green Job Opportunities

- Power Purchaser & Carbon Trader
- Renewable energy site assessor
- Geothermal assessment specialist
- Tradesmen and Supervisors for energy efficiency construction
- Renewable energy systems installer
- Building automation specialist
- CHP Installers and operators
- Ice storage Technician
- Biofuel Processing Technician
- Fuel Cell Technician
- Sustainability Coordinator
- Advanced Transportation Systems technician



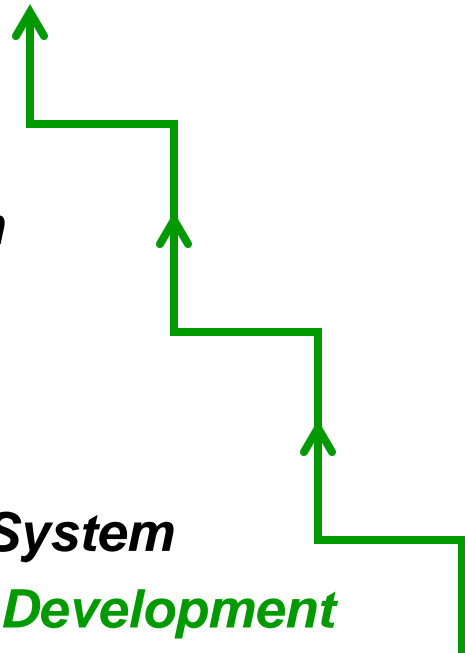
Market Growth in Renewable Energy Installations

Example: Photovoltaic (PV)



Annual Increase in Photovoltaic Cell Installations

Connecticut has a Educational Continuum for “Green Collar” Workforce Development

- ***Tier 1 Research Opportunities***
University of Connecticut & Yale
 - ***Business Applications and Public Policy***
Connecticut State University System
 - ***Tomorrow's High-Tech Technicians***
Community and Technical Colleges
 - ***Upgrade the Trades and Apprenticeships***
Connecticut Technical High School System
 - ***Urban Revitalization and Small Business Development***
Dept of Labor, DECD, CAP Agencies, Business Incubators
- Preparing for
Green Collar Jobs
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Weatherization Training can lead to “Family-Supporting, Career Tracking Sustainable Jobs”



Where should Green Job Training take place?

- Universities offer four year Degree Programs and Graduate Degrees in Business, Engineering, and the Sciences.
- Community Colleges offer both two year Business and Technical Degree Programs and Certification Programs.
- Tech High Schools offer Trade preparation with hands-on technical laboratories, apprenticeship programs and some certification programs.
- Dept of Labor, partnering with Community Colleges, Tech High Schools, Unions and Business offer Job Skills Training programs and Apprenticeships.

Greening Can Revitalize of our Urban Areas

- **Weatherization**, energy efficient retrofits and energy management for existing buildings; New Green Buildings
- **Clean “Green” Energy**; renewable energy systems (solar photovoltaic, solar thermal, geothermal, small wind, landfill gas, anaerobic digesters, biofuel production, and cogeneration);
- **Pedestrian and bike friendly**, mass transit options, automotive retrofits for reduced emissions and use of alternative fuels;
- **Community farming and markets**, sustainable landscaping, urban forestry, waterfront restoration, and green roofs;
- **Recycling**; waste reduction, and single stream separation;
- **Deconstruction**; recycling of building construction waste, and reuse of building materials;
- **Brownfield Remediation**; Clean-up abandoned, idle or under used sites, restore value to tax rolls.

Greening Can Differentiate Businesses

Being a **Green** organization or community means changing the way you purchase, develop, produce, and provide products and services, so you have a positive impact on the environment.

Decision-making utilizes the Triple Bottom Line:
Considers Financial, Social Justice and the Environment.

- Attracts new clients
- Improves business Image
- Become a recognized environmental leader
- Reduces risk of higher energy cost
- Enjoys lower operating cost
- Improves employee morale and health

From: Green Energy Council

Institute for Sustainable Energy at Eastern CT State University

The Institute's Mission is *"...to be an objective energy and educational resource regarding the means for achieving a more sustainable energy future for Connecticut."*

Established 2001



At Eastern Connecticut
State University