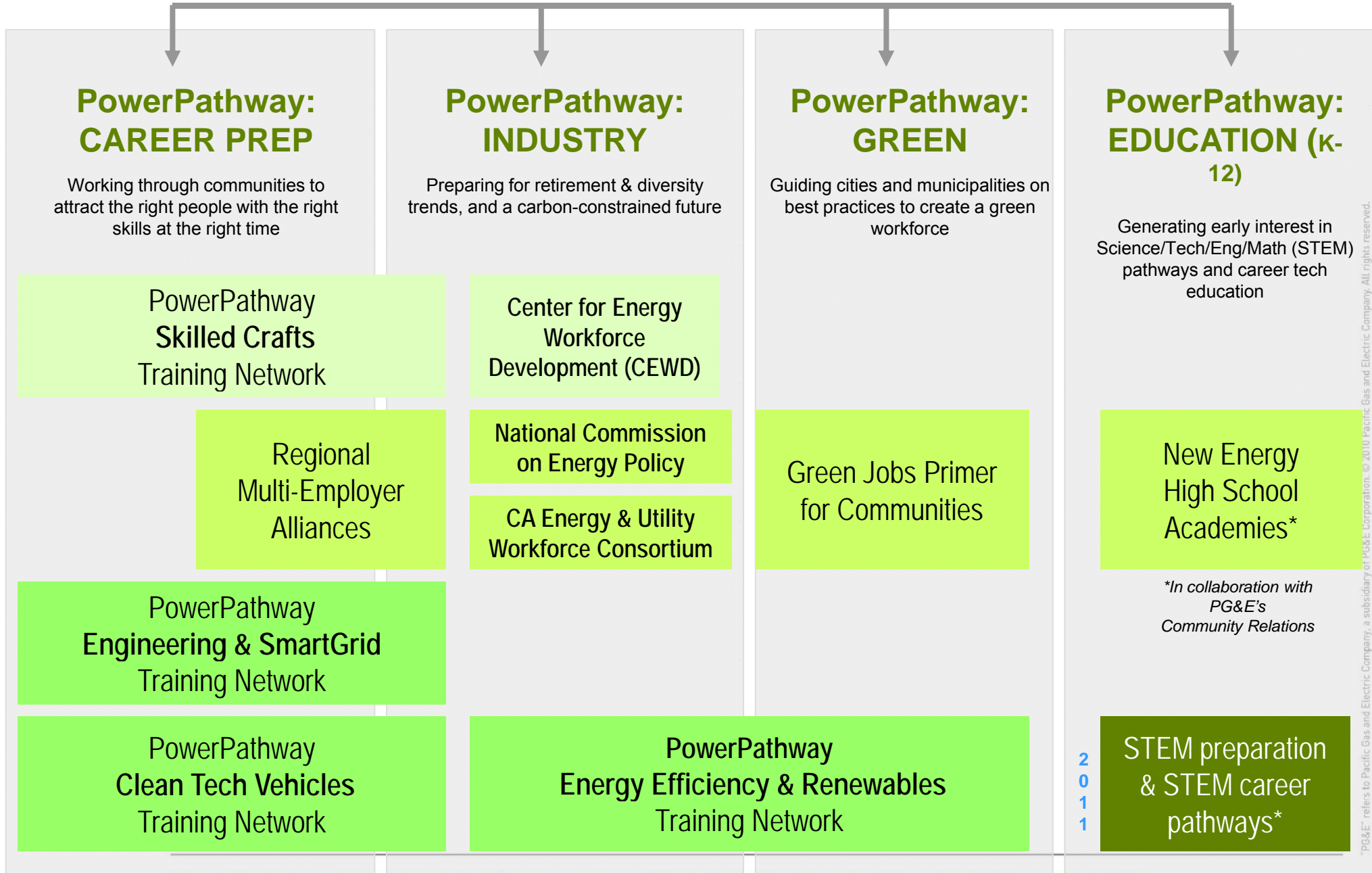


PG&E PowerPathway.

**Your future starts here**  
in the energy efficiency & renewables  
training network



# PowerPathway™ Portfolio



Your future starts here in the energy efficiency & renewables training network

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# PowerPathway and the Energy Efficiency Services Sector (EESS)

## Key Findings, 2009

# Energy Efficiency Occupations in the Bay Region



Centers of Excellence  
Economic and Workforce Development  
California Community Colleges

### Employers' Top 3 Most Important Knowledge and Skill Areas

1. Ability to communicate with customers, in writing and in person.
2. Understanding of local and state energy efficiency requirements and incentives for new and existing buildings.
3. General understanding of the mechanics and engineering of energy systems, including HVAC, lighting, and renewable energy systems.

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Centers of Excellence, Economic and Workforce Development Program

# Occupational Employment

Energy Efficiency Occupations	Estimated 2008 Employment	3-year Projected	Growth Rate
<b>Project managers for construction or design work</b> are responsible for communicating with project partners and ensuring that the project is completed in a timely manner and within budget.	10,630	2,850	27%
<b>Building performance or retrofitting specialists</b> are contractors who improve the energy efficiency of homes or buildings by installing insulation, windows, lighting and other energy efficient products.	4,630	2,690	58%
<b>HVAC mechanics, technicians or installers</b> install, repair and maintain heating, ventilation, air-conditioning and refrigeration systems.	5,250	1,630	31%
<b>Energy auditors or home energy raters</b> are responsible for collecting, analyzing and validating energy usage in the field and preparing reports on a building or home's total energy profile.	2,980	1,470	49%
<b>Resource conservation or energy efficiency managers</b> assess current energy and resource consumption and develop strategies to reduce usage.	3,080	1,400	45%
<b>Building controls systems technician</b> combine some of the traditional skill sets of building technicians with advanced skills in controls programming, networking, and systems integration.	2,790	1,160	42%
<b>Compliance analyst or energy regulation specialists</b> evaluate if projects are meeting regulatory requirements and/or incentives and provide recommendations as needed to meet compliance.	2,000	1,190	59%
<b>Building operators or building engineers</b> troubleshoot, install, replace, and repair building energy systems and controls to optimize energy efficiency.	3,280	710	22%
<b>Total, All Occupations</b> (totals may not add due to rounding)	<b>34,640</b>	<b>13,090</b>	

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# Creation of PowerPathway™ Energy Efficiency & Renewables Training Network

- PG&E has trained over 77,000 individuals in green skills for over 32 years through our Energy Training Center – Stockton
- PG&E established the Energy Efficiency & Renewables Training Network to help strengthen our communities' access to green jobs; share curriculum; provide letters of support; faculty train-the-trainer; mentoring, as needed.
- Community College members of the PowerPathway Energy Efficiency & Renewables Training Network:
  - Fresno City College
  - Laney College (Oakland)
  - Modesto Junior College
  - Workforce Institute/ San Jose/ Evergreen Community College District
  - San Joaquin Delta College (Stockton)
  - Los Rios Community College District (Sacramento)

# Energy Training Center- Stockton

## Full Scale Hands-On Training



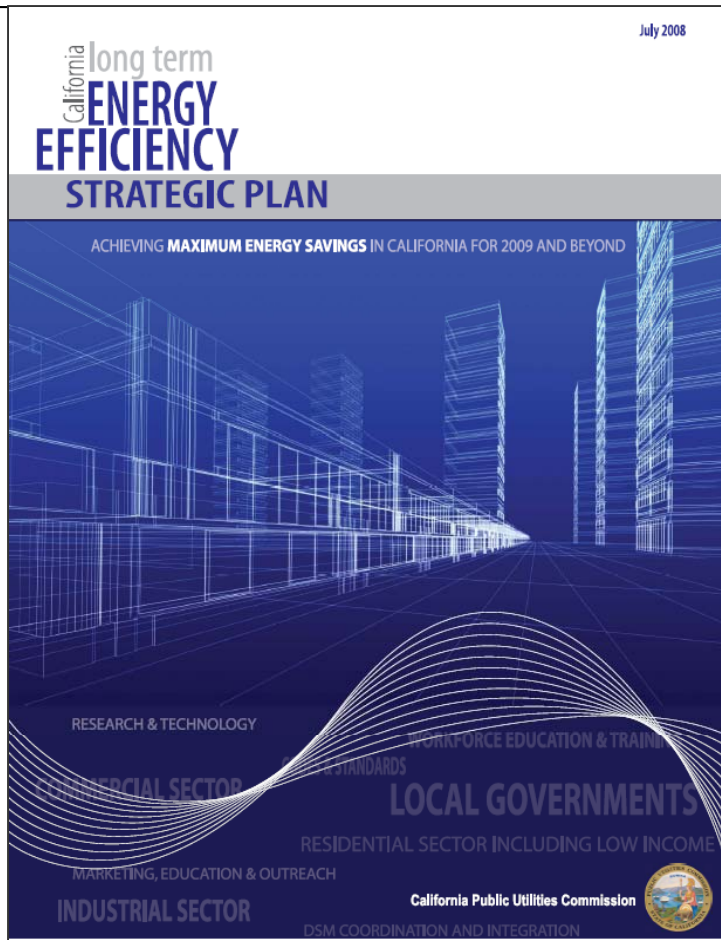
# What Curricula is our Energy Efficiency & Renewables Training Network Offering?

The Community Colleges in the PowerPathway Energy Efficiency & Renewables Training Network have access to curriculum categories that relate to :

- **Residential Retrofit Contractor**
- **Energy Efficiency Auditors**
- **Heating, Ventilation, Air Conditioning (HVAC) Contractors**
- **Heating & A/C Contractors**
- **Weatherization Contractors**

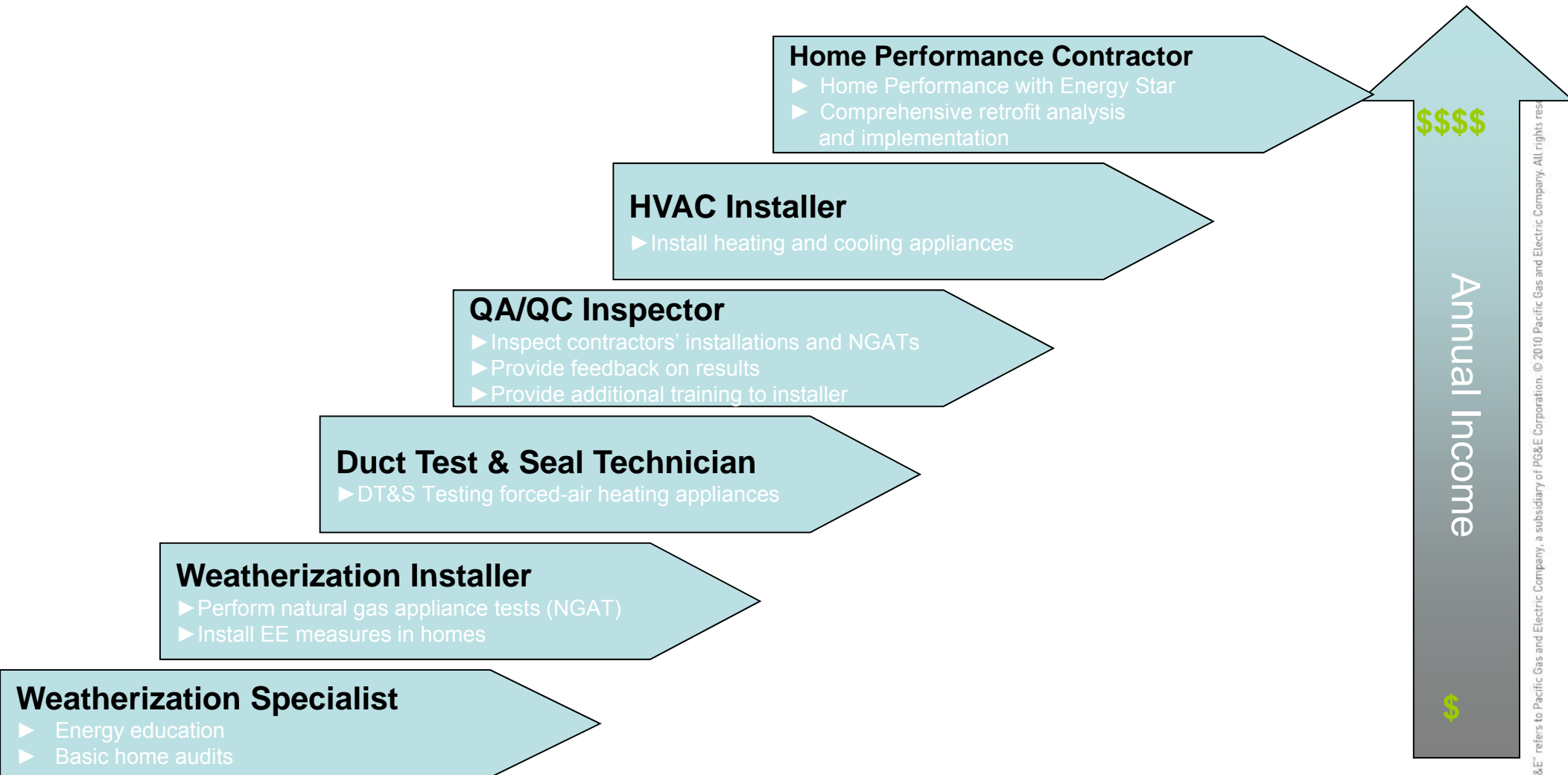


# California Long-Term Energy Efficiency Strategic Plan



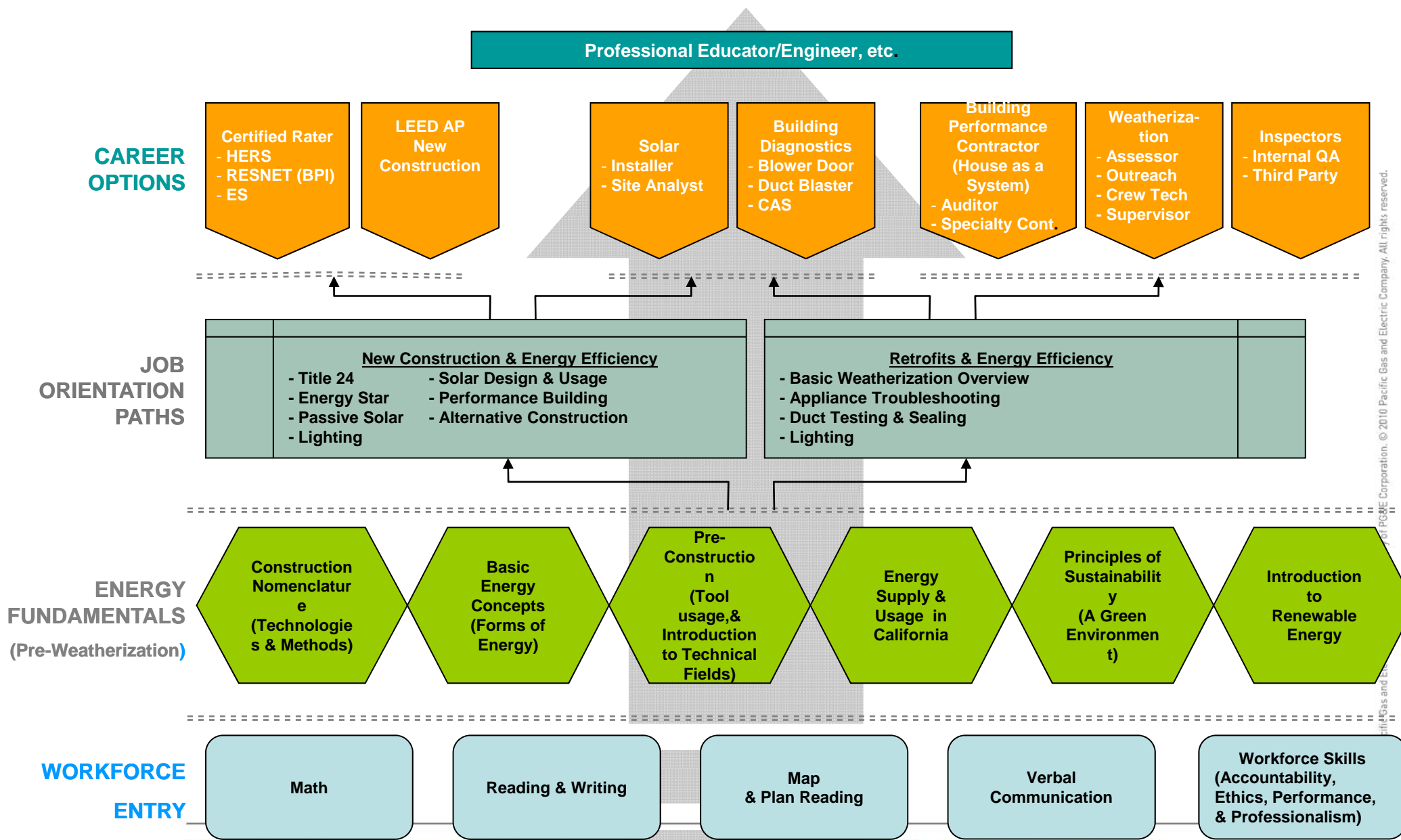
- Support Community Colleges to Develop Education Based on Visible Career Paths in Energy Efficiency and Related Fields
- Technical Training:
  - HVAC
  - Building Operator Certification
- Career Laddering Considers Energy-Related Jobs

# Creating Meaningful Career Paths for the Long-Term



# Residential Training Paths

Source: Richard Heath and Associates; Chico, CA



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## Next Steps

- Network colleges begin/continue to launch programs built with the green curriculum PG&E is sharing
- As green-skilled workers are needed by cities/counties to perform energy audits, weatherization, etc., we encourage our government partners to reach out to contacts at network community colleges to link to potential first source entry-level candidates
- Look for ways to follow the graduates to point of hire: what jobs? which employers?