



CENTERS OF EXCELLENCE
Inform Connect Advance



Career Fact Sheet *Energy Efficiency Tools for the Career Counselor*

Orange County

This data was prepared for California Community Colleges and pertains to community college-level coursework as a resource for counselors to share with students.

The Bottom Line

California has moved aggressively to establish a legislative and policy framework that puts energy efficiency at the forefront, in an effort to meet the state's increasing energy needs and fight global warming. Firms that hire energy efficiency workers are found in multiple industries. The following are five industry groups with the greatest concentration of energy efficiency occupational opportunities. This information comes from an Orange County study of energy efficiency conducted by the COE in 2009. More information on this study, including other regions within California, can be found at www.coecc.net/energy.

Utilities & Resource Management

Includes occupations that are engaged in assessment and planning for energy efficiency.

Design & Construction of New Buildings

Includes occupations that are focused on building and designing new energy efficient structures (residential and commercial focus, new structures only).

Retrofitting Homes

Includes occupations that are focused on building and designing energy efficient homes (residential focus, existing buildings only).

Retro-commissioning Buildings

Includes occupations that are focused on building and designing energy efficient facilities (commercial focus, existing buildings only).

Facility or Building Operation & Maintenance

Includes occupations focused on repair and maintenance of new energy efficiency systems that are used in new and retrofitted buildings and facilities.

Regional Snapshot

Eight energy efficiency occupations were identified as high-growth and can be trained for at community colleges. Below is a table that details these occupations and their growth potential in Orange County. More detailed occupational information is available in the complete environmental scan (see Appendix I) at www.coecc.net/energy or visit online.onetcenter.org.

Energy Efficiency Occupations	2009 Employment Estimate	3-year Projected Growth	Growth Rate	Entry Level Median Annual Wage	Experienced Level Median Annual Wage
Building performance or retrofitting specialists	1,110	540	48%	\$46,800	\$64,500
HVAC mechanics, technicians, or installers	2,080	580	28%	\$37,400	\$60,000
Project managers, construction or design work	3,240	990	30%	\$52,000	\$80,000
Building operators or building engineers	520	70	14%	\$56,200	\$74,000
Energy auditors or home energy raters	380	250	66%	\$45,000	\$70,000
Resource conservation or energy efficiency managers	540	220	41%	\$52,000	\$80,000
Building controls systems technicians	960	360	38%	\$45,000	\$73,900
Compliance analyst or energy regulation specialists	640	120	19%	\$60,000	\$80,000
Total, All Occupations (totals may not add due to rounding)	9,460	3,130			

Student Tips

- **Skills Employers Seek:** Employers emphasize that communication skills [written and verbal] are the most important skills they value in new employees.
- **Internships Encouraged:** A recent survey of energy efficiency firms in Orange County revealed that 67% of employers expressed interest in working with colleges to provide four to six month internships for students. Some of the key associations connected to employers working within the energy efficiency sector include:
 - Building Owners and Managers Association [BOMA], Orange County, www.bomaoc.org
 - US Green Building Council, Orange County Chapter, www.usgbc-oc.org
 - International Facility Management Association [IFMA], Orange County, www.ifmaoc.org
 - American Society of Heating, Refrigerating, and Air Conditioning Engineers [ASHRAE], Orange Empire, www.oeshrae.org

For an expanded list of community support and resources in Orange County, download the complete environmental scan at www.coecc.net/energy.

Educational Track

Here is a listing of community colleges in Orange County offering energy efficiency industry programs. For more information, access the complete environmental scan at www.coecc.net/energy.

COLLEGE	Energy Efficiency Occupations								
	Energy Auditor or Home Energy Rater	Building Performance or Retro-fitting Specialist	Compliance Analyst or Energy Regulation Specialist	Project Manager for Construction or Design Work	HVAC Mechanic, Technician or Installer	Resource Conservation or Energy Efficiency Manager	Building Controls Systems Technician	Building Operator or Building Engineer	
	Level of Preparation for and Programs Related to Each Occupation								
Cypress					X – C – D		X		
Orange Coast				X	X – C – D		C		
Santiago Canyon				C					