

# ENERGY, ENVIRONMENT & UTILITIES INDUSTRY SECTOR



With the increase in public investments in renewable energy, clean energy generation, energy efficiency and the Smart Grid, career opportunities in this industry will continue to grow. In fact, jobs in energy and the environment could triple over the next decade. Energy employers need skilled workers for traditional energy jobs as well as future energy-related positions.

People are obsessed with energy...how to make it more available, how to make it less expensive, how to use it more efficiently, and how to use it without hurting the environment. There are four circuits to this pathway: Electromechanical Installation and Maintenance, Energy and Environmental Technology, Public Utilities, and Residential and Commercial Energy and Utilities. These four options lead to hundreds of exciting careers - everything from installing the wiring in a new high-rise to maintaining the electrical grid for the entire state. The Energy Efficiency & Utilities (EE&U) sector employs technicians in electrical, mechanical, and construction jobs as well as architects, engineers, business managers, sales/marketing professionals, and public policy specialists.

## CAREER PATHWAYS

### IS THIS INDUSTRY A GOOD MATCH FOR YOU?

#### Are you?

- Creative
- A problem solver
- Interested in new technologies
- Interested in the environment

#### Do you?

- Like to work outdoors
- Like math and science
- Adapt to change
- Want to help people and the environment

### EDUCATION LEVEL & RELATED

#### High School

Waste Management Worker  
Electrical Worker  
Utilities Worker

#### Certificate and/or Associate Degree

Waste Management Technician  
Utility Technician  
Environmental Pollution Technician

#### Bachelor+ Degree

Waste Management Engineer  
Energy Management Engineer  
Facilities Design Engineer

FOR MORE INFORMATION ON THE ENERGY, ENVIRONMENT, & UTILITIES INDUSTRY SECTOR, GO TO THE CALIFORNIA CAREERZONE.



## ENVIRONMENTAL SERVICES

The Environmental Resources pathway prepares students for employment, postsecondary education, and/or training in a variety of environmental industries.

### Sample occupations associated with this pathway:

- Air Quality Technician
- Climatologist
- Environmental Biologist/Technician/Scientist
- Environmental Health and Safety Officer
- Hazardous Waste Operations and Emergency Response Technician

## ENERGY AND POWER TECHNOLOGY

The Energy and Power Technology pathway provides learning opportunities for students interested in preparing for careers in the energy and power industries.

### Sample occupations associated with this pathway:

- Energy Efficiency Evaluation Specialist
- Energy Engineer
- Energy Generation/Power Distribution, Maintenance, Inspection, and Repair Technicians
- Energy/Building Retrofit Specialist
- Plant/Field Weatherization Installer

## TELECOMMUNICATIONS

The Telecommunications pathway prepares students for employment and postsecondary education and training in the wireless and fixed-line communications industries. The sharing of information is essential for personal, commercial, educational, government, and military functions. Information is stored, sent, and accessed primarily via the telecommunications industries.

### Sample occupations associated with this pathway:

- Cable/Telecommunications Installation and Maintenance Technicians
- Line Workers
- Network Operators, Technicians, Designers, and Managers
- Network Security Administrator
- Satellite Systems Installation/Engineers