



# Teach Your Students about Green Buildings and Careers

SCHEDULE A FREE GUEST SPEAKER FOR YOUR CLASS

*3C-REN (Tri-County Regional Energy Network) is a free program brought to you by your local County government. 3C-REN speakers are professionals with backgrounds in green building. This speaker series helps younger generations explore the built environment and opportunities in sustainable design and construction.*



## Contact us to schedule

Email [info@3c-ren.org](mailto:info@3c-ren.org) or call  
3C-REN Guest Speaker Liaison  
Lisa Eklund at (805) 290-0691

## Topics Offered

### GREEN BUILDING 101

Through examples of historic and contemporary projects, we will discuss how buildings impact the environment and provide an overview of green building strategies to help mitigate those impacts. We will touch on site, materials, healthy interiors and water, then focus on energy efficiency and carbon reduction.

### GREEN BUILDING CAREERS 101

We will identify a wide variety of careers from developers and designers to builders and inspectors and discuss their potential roles in green building. We will highlight 'green careers' such as energy performance modeling, HVAC technician and renewable energy contractor, as well as discuss how any career can be practiced sustainably.

### HEATING, COOLING, AND VENTILATION

We will introduce building mechanical systems, developing student awareness of space conditioning and how it relates to energy efficiency and healthy interiors. Depending on class experience, we will discuss heat pumps for space conditioning, the role of the building envelope in comfort and efficiency, and options for ventilation.

### WATER EFFICIENCY

We will review the primary uses and quantities of water for buildings, interior and exterior, and review the energy-water nexus to illustrate how saving water saves energy. We will discuss hot water systems and, depending on class experience, highlight all-electric heat pump water heaters as an emerging field.

### ENERGY PERFORMANCE AND ZERO NET ENERGY

California building codes are moving toward Zero Net Energy—energy efficient buildings that are all-electric and generate as much energy as they use. We'll discuss an integrated approach to ZNE with a focus on energy efficiency, on-site renewable energy systems, and battery storage. Depending on class experience, we will discuss how to size and locate photovoltaic (PV) panels and how renewable energy connects with the wider power grid. May be presented as one class or two, depending on level of detail desired.

Each presentation can be adapted to fit your program's needs.