



Energize Schools provides holistic services to help high school communities **green their facilities, conserve resources, and engage students** in service-learning and environmental leadership.

Nationwide, schools spend more than \$8 billion per year on energy, an operational expense second only to spending on books and computers. With greater resource efficiency, the EPA estimates that 30% of this money could be saved, freeing up funds to support student learning.

Conservation

We provide support for student-led campus conservation initiatives while teaching leadership and project management skills. We support student and faculty leaders in goal setting, action planning, and implementation of conservation strategies including:

- School Green Team recruitment, planning and implementation
- Participation in the annual Energize Schools Energy Conservation Competition

Education

We offer support to build sustainability career awareness and skills through project-based learning. Supportive services include:

- Project-based curriculum, aligned with the Common Core, CTE, and Next Generation Science Standards. See the reverse for a selection of available certificates and units
- In-person and online teacher trainings
- Instructional planning and direct instructional support
- Stipends for Education and Conservation Leaders at participating schools
- Annual Green Careers Conferences to explore green pathways

This program is funded by California utility ratepayers and administered by Pacific Gas and Electric Company, Southern California Edison Company, San Diego Gas & Electric Company and Southern California Gas Company under the auspices of the California Public Utilities Commission.

High School Sustainability Curriculum

Career Technical Courses:

Semester or year-long UC A-G courses that are designed to meet the California Career Technical Education Standards for the Energy, Environment, and Utilities sector.

Introduction to Green Technology: A D-Lab Science course that introduces students to career opportunities in sustainable STEM fields through a series of projects including: wind turbine design, making biodiesel, creating solar cars, energy auditing, and residential circuit building.

Advanced Green Technology: A G-Elective course where students complete projects related to sustainable design, energy efficiency, and renewable energy. The projects are focused on these core topics: zero net energy, solar installation, aquaponics, solar hot water, and biomimicry.

Sustainability Certificates:

Energy Auditing: Hands-on experience that prepares students to perform an energy audit of their school.

Zero Net Energy: Students combine energy auditing, conservation, and solar design to develop and advocate for a plan to achieve ZNE at their school.

Green Building: Lessons in green building, construction, materials, and more to design a LEED certified building.

Sustainable Enterprise: Students address a community problem, develop a business plan, and start an enterprise.

Green Transportation: Learn career skills through activities like designing and building a solar car, making bio-diesel, and designing a transportation friendly city.

Solar: Design, size, and site a school solar system; conduct a school energy audit; and install a residential solar system.

Project-Based Learning Units:

Home Energy Assessment

Home Water Assessment

School Water Assessment

Home Solar Analysis

School Solar Analysis

School Transportation Assessment

Solar USB Charger

Solar Water Heater

Eco Audit - Business Sustainability Assessment

Watersheds and Public Water Systems

Engineering Aquatic Ecosystems

Aquaponics

Biomimicry: Engineering Inspired by Nature

Guides:

School Zero Waste Guide

Energy Conservation Guide

School Sustainability Policy Guide

Sustainability Fair Guide

Water Conservation Guide



Energize Schools provides standards-aligned, project-based curriculum resources to engage students in impactful sustainability projects today, as well as prepare them to be leaders in the future.