



## Powerful Solutions That Put You in Control

Ready to make your school more energy and cost efficient? Although energy costs account for only 2% to 4% of school expenditures, they impact about 16% of controllable operational costs. Energy is one of the few expenses that you can reduce without negatively impacting classroom instruction. By implementing energy-efficient operations and maintenance strategies and incorporating efficient equipment into retrofits, your school can generate substantial energy cost savings while improving the physical environment of educational facilities.

We're here to help. Start with simple, no-cost, temporary actions that instantly conserve energy, and then consider easy-to-implement **lighting** and **air-conditioning upgrades** that will permanently reduce energy consumption. We invite you to take advantage of tools, tips, and financial incentives — all customized for buildings like yours, to help you save energy. Consider us your source for energy management solutions, with the resources you need to get started.

### Where your energy dollars are used.

#### K-12<sup>1</sup>

Lighting .....	27.3%
Space Cooling .....	18.4%
Ventilation .....	16.7%
Office Equipment .....	7.8%
Refrigeration .....	5.6%

#### Colleges & Universities<sup>2</sup>

Lighting .....	35.0%
Ventilation .....	19.3%
Space Cooling .....	23.3%
Office Equipment .....	8.3%

<sup>1</sup> U.S. Information Administration 2003 (average industry numbers)

<sup>2</sup> U.S. Energy Consumption in Colleges and University Buildings 2003 (average industry numbers)



## Make a Savings Plan

Did you know that school buildings in the U.S. use an average of 10 kilowatt-hours of electricity per square foot annually? Knowing where you use energy can help you identify ways to reduce your use and overhead. We can help you make a plan. Start with an **Energy Audit** — an analysis of your current energy use to identify savings opportunities, customized to your needs. Our customers who implement Energy Audit recommendations typically benefit from reduced energy use and lower operating costs.

## Eliminate Energy Guzzlers

Consider participating in our **Express Solutions** or **Customized Solutions** programs, developed with your industry in mind. Investments in new, energy-efficient equipment like **occupancy sensors, dimmable ballasts, lighting controls**, or **energy management systems (EMS)**, along with infrastructure improvements and facility upgrades pay off in the long term — and many qualify for incentives right now.

## Demand Response

**Demand Response** rewards you for reducing energy usage when demand for electricity is highest — typically the summer months — and when rates are highest, too. If your business has the flexibility to shift energy usage, you could plug into serious savings. We offer several Demand Response programs so that you can choose the best options based on your business needs.

Sign up for **Critical Peak Pricing** and get rewarded for voluntarily reducing electricity consumption during CPP “event” hours, when energy conservation during peak hours is most needed. Or, save with our **Commercial Summer Discount Plan** which automatically cycles your air conditioner units on and off during periods of peak demand, and allows you to only cycle a few units.

Want more control over when — and how much — you reduce your demand? With **Automated Demand Response**, you can reduce energy use with a click, so it’s even easier for you to save both time and money.

## Small Steps to Control Your Energy Expenses

When you use energy is as critical as how much you use. Just a few targeted changes in your heating and cooling patterns or lighting use can really add up. And, many ways to save require little or no financial investment.

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### Flip the Switch

Brighten your energy-use forecast by dimming the lights, swapping your incandescent bulbs for efficient lighting, and installing sensors. You'll be surprised how much lighter your energy load will be.

- Install **dimnable ballasts** to control the currents passing through fluorescent lamps to lower energy costs
- Turn off unnecessary lighting, ornamental, or display lighting
- Reduce lighting levels
- Replace incandescent or halogen lamps with **LED** lamps
- Replace T12 fluorescent lamps and magnetic ballasts with **T8** or **T5** tubes
- Install **occupancy sensors** in general usage areas so lights turn on only when area is occupied and automatically turn off when it isn't

### Keep Your Cool

Heating and cooling systems and the water they use are major energy guzzler for schools and universities. Simple measures, weatherizing, and small upgrades can make a big impact on your bottom line.

- Shut down unused rooms and facilities
- Pre-cool campus buildings/classrooms or cycle air conditioning and ventilation
- Raise cooling thermostat settings
- Perform routine maintenance on heating and AC filters, belts, coils, and bearings
- Increase insulation in walls and ceilings, when possible
- Inspect weather stripping for deterioration or gaps around doors and windows
- Consider installing **window film** or efficient windows to keep heat out in summer
- Add interior or exterior blinds, to block heat in summer and allow daylight in during winter

### Time It Right

Schedule some of your non-essential equipment use to "Off-Peak" nights and weekends during the summer season. You'll pay a lower rate, while helping reduce pressure on the grid.

- Install **photocells** or **time clocks** on outdoor lighting systems so they only operate from dusk to dawn
- Charge batteries and battery-operated equipment during off-peak hours
- Reschedule dishwashing and laundry processes after hours

### Power Down

Make sure your school building and facilities aren't using energy unnecessarily — it can make a real difference on your bill.

- Install **timers** or **programmable thermostats** to power down during non-school hours
- Install **sensory controllers** on vending machines, or shut them down for short periods of time
- Turn off commercial ice machines
- Turn off decorative fountains
- Install **variable speed drives** on swimming pool/spa pumps
- Turn off excess or unused elevator banks or escalators
- Optimize system efficiency through smart **SCADA** controls
- Upgrade to **high efficiency pumps**

### Highly Rated

Computers and office equipment consume energy even when not in use. Upgrading to newer ENERGY STAR®-rated equipment can have a significant impact on costs, and investing in sensors and software that minimize waste will generate smart energy savings.

- Install **plug load occupancy sensors** to turn off equipment when areas of the campus are unoccupied
  - Upgrade to **high-efficiency copiers**
  - Install **PC network software** to automatically control the power setting of networked computers
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## Power Tools for Long-Term Savings



### Finance for Free

We offer **On-Bill Financing** to help your school spread out the cost of qualifying energy efficiency upgrades over time, at no fee to you and with zero interest. Payments may even be offset by savings resulting from your efficiency investments. Some equipment may also qualify for financial incentives — making it even more attractive to upgrade.

### Make Your Mark

**Benchmarking** provides an “apples-to-apples” comparison of your school’s energy performance to other school facilities and a road map to greater efficiency.

### Go Retro

**Retrocommissioning (RCx)** will help keep your schools operating efficiently. For schools, RCx generally focuses on Heating-Ventilation-Air Conditioning (HVAC) and lighting improvements.

### Design to Save

**Savings By Design** encourages high-performance, non-residential building design and construction by providing financial incentives, detailed analysis, and design support.

### Green, Clean Solutions

Embracing innovative energy sources, like solar and self-generation, can reduce your carbon footprint — and your energy bill.

“ The district’s energy-saving projects offer cost avoidance, so we can keep more money in the classroom, as well as save jobs. ”

— Carla Kleinjan, Chino Valley,  
Unified School District Energy/Resource  
Conservation Technician

## MORE INFORMATION

To learn more about Energy Management Solutions and apply for incentives, visit [sce.com/schools](http://sce.com/schools) or call your **SCE Account Manager**.

Programs are funded by California utility ratepayers and administered by SCE under the auspices of the California Public Utilities Commission. Incentives and savings will vary by customer, and SCE does not make any representation herein concerning actual or potential savings amounts. Funds are limited and are available on a first-come, first-served basis until program(s) are discontinued, or until funds are depleted. Terms and conditions may apply.