SOLUTIONS FOR BUSINESS

EDUCATION

Make the grade with energy improvements

Educational facilities often generate excessive energy waste. Cut energy costs, enhance your operations and improve student performance with these simple energy-saving tips.

Savings Opportunities: Peak Demand Management

Take simple steps now to boost energy savings and manage demand at your learning facility. Learn how to align your energy use with your service plan while providing an optimal learning environment.

Lighting

- Turn off all lights in unoccupied spaces of your school
- Control lighting with timers, occupancy sensors and daylight sensors for optimal energy savings

Plug Loads

- Turn off computers, TV monitors and vending machines overnight
- Use smart power strips to turn off copy machines and printers when not used for extended periods

Long-Term Strategies

- Use a smart thermostat to align temperature set points with student activity
- Install an energy management system (EMS) to centralize control of lighting and HVAC in auxiliary spaces

Did you know...

Upgraded lighting and HVAC systems can reduce student absenteeism and improve academic performance.

Manage Your Account 24/7

At aps.com you can:

- Monitor your daily demand and energy usage
- View monthly and annual comparisons
- Sign up for usage and outage alerts
- Make payments
- Go paperless

aps® Solutions for Business

Ready to lower energy costs and reduce your environmental impact? Check out more quick tips below to improve efficiency in each area of your educational facility:

HVAC

- Install smart thermostats or an EMS to provide more precise temperature control in class-rooms and assembly areas.
- Achieve energy savings and avoid frequent breakdowns:
  - Inspect and replace air filters regularly.
  - Schedule seasonal tune-ups to check refrigerant levels, clean internal components and tighten loose connections.
  - Verify economizer operation (if applicable).
- Install shade screens or window film to reduce solar heat gain.
- Replace older air conditioning units with energy efficient models and save 30% or more.
- Implement rooftop economizers to pull in cool outside air, saving up to 10% on cooling costs.

Plug Loads

- Use the power management settings on computers and monitors so they go into power saving mode when not in use. This can save up to $50 per computer each year.
- Centralize multifunction devices like printers and copiers.
- Unplug electronics such as cell phones and tablets once charged. Adapters plugged into outlets use energy even when not charging.
- Purchase ENERGY STAR® certified computers, TV monitors and kitchen appliances, which are 35% to 60% more efficient than standard models.
- Use vending machine controls to reduce lighting and refrigeration loads during periods of non-use.
- Turn off personal appliances overnight.
- Use timers on exterior signage.

Lighting

- Purchase indoor lighting with an 80+ CRI color quality rating.
- Replace fluorescent lamps with LEDs and save 30% or more.
- Use high illumination levels and high CCT color temperatures (4000K+) for instruction and testing.
- Adjust lighting to lower illumination levels and lower CCT (<3000K) for creative spaces.
- Install occupancy sensors in low foot-traffic areas like restrooms.
- Use skylights to introduce natural light and reduce the need for overhead lighting. Students exposed to natural daylight show faster progress on math and reading tests.
- Select higher color quality and light levels for outdoor lighting to enhance safety in parking lots and visibility on playgrounds and sports fields.

A Case Study in Educational Facility Efficiency

A valuable lesson in energy efficiency, a Phoenix-area high school significantly increased energy savings and improved comfort for students and staff. They completely upgraded the facility's energy management system and controls, installed custom lighting and replaced the HVAC system with a new energy-efficient model. This also proved to be a great opportunity to educate students on the importance of energy efficiency. With a more efficient EMS, lighting and HVAC system, the high school saw both financial and non-financial benefits.

Non-Energy Benefits

- Improved academic performance
- Lower student absenteeism
- Reduced environmental footprint

Financial Benefits

- More than $1,200,000 saved each year in electricity costs
- Decreased maintenance costs

Start saving today.

For more ideas and to learn what rebates are available, call the Solutions for Business team at (866) 333-4735, email us at aps.solutionsforbusiness@dnvgl.com, or visit aps.com/businessrebates.

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