CPS ENERGY
SHARED SAVINGS

Earn Money for Your School

Online: www.cps.edu/gogreen
CPS Environmental Action Plan

Energy Shared Savings

PROGRAM OVERVIEW

**Description**
The Energy Shared Savings program was created as an incentive program to motivate schools to reduce energy consumption. Schools who are able to reduce their facilities energy consumption by at least 5% versus a FY13 baseline will earn $.04 per kWh of electricity and $.10 per therm of natural gas saved. Since 2010 CPS Schools have earned a total of $692,000!

**Goal**
Reduce District wide energy consumption 10% by December 2015 versus a 2012 baseline.

HOW IT WORKS

**Enrollment and Financial Awards**
Schools must complete the Energy Shared Savings Application located at cps.edu/gogreen website. Once registered Schools will be required to reduce energy use by **5% or greater** from a FY13 baseline (data will be weather normalized). Winning schools will receive $0.04 per kWh electricity and $0.10 per therm natural gas saved **up to a maximum $10,000**.

**Performance Period and Award Receipt**
The FY15 performance period is **July 2014 to June 2015**. Final results for FY15 Energy Shared Savings will be communicated at the end of the first quarter FY16. Funds will be paid out to each school shortly after and the operating funds can be used for energy efficient projects (occupancy sensors, lighting, building supplies, repairs, and other operating need).

**Registration is now open for FY15**
FY15 Energy Shared Savings registration application is now open to all schools. Please complete the Energy Shared Savings Application in order to be eligible to earn Shared Savings rewards. There are no downsides to registering – only the possibility to earn real dollars! **Thank you for helping to make CPS financially and environmentally sustainable!**

MANAGING YOUR SCHOOL’S ENERGY USE

**Monitoring Your School’s Energy Use**
In FY15 CPS Dept. of Operations will be posting Energy Performance Score Card on the cps.edu/gogreen website. The performance report will include energy consumption, Energy Shared Savings performance and Energy Star scores.

**Reducing Your School’s Energy Use**
Use the Smart Power Planning worksheet to discover how your school uses energy and ways to save.

- **TURN IT OFF** – Turning off equipment, lights, and office hardware when not in use is easy and effective
- **TIGHTEN UP** – Open windows, doors, and other gaps are energy hogs
- **DIAL IT DOWN** – Adjusting your thermostat, even just 1 degree, saves energy
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CPS ENERGY POLICY

This Energy Policy is designed to save resources while supporting the educational mission of the District. The building principal, engineer, and their area supervisors share accountability for following this policy. All operations of the District facilities shall be governed by the following and participation is mandatory for all staff and students of the Chicago Public Schools.

Building Schedules and Occupancy

- A school day is defined as 30 minutes prior the first school bell to the last school bell that releases students from regular class hours. During this time the schools are considered occupied.
- All hours outside of the defined school day are considered unoccupied periods of time and building systems should be scheduled accordingly to prevent unnecessary heating and or cooling.
- Official CPS out-of-school time programs and building rentals that include utility charges are exceptions to the rule.
- Weekends and holidays are unoccupied periods of time and school building systems should be scheduled accordingly.

General Equipment

- Computers shall be logged off each day. Computers automatically update and shut down once logged off; contact the Help Desk at 3-EXCL if computers do not shut down.
- All staff members are responsible for shutting off their office equipment (printers, copiers, scanners, and other peripherals) at the end of each day.
- Personal space heaters are prohibited and will be removed unless authorized by CPS Dept. of Facilities.
- Personal appliances, such as refrigerators, electric coffee makers, microwaves, water heaters/coolers and toaster ovens, shall only be present in designated lunch areas and not in classrooms or at desks.
- All building exhaust fans shall be turned off during unoccupied hours where appropriate.
- All electrical equipment should be shut down or unplugged over long weekends and school breaks.
- All new appliances and equipment, including computers, monitors, printers, photocopiers and facsimile machines, shall meet Energy Star certification. When Energy Star labeled products are not available, products that fall in the upper 25 percent of energy efficiency performance, as designated by the Federal Energy Management Program shall be purchased.

http://www1.eere.energy.gov/femp/technologies/EEP_fedrequirements.html
**Lighting Conservation**

- All interior lights shall be turned off in any area that will be unoccupied for more than fifteen minutes except in corridors, stairwells, and exits as required by code.
- Use task lighting to reduce overall illumination levels when possible.
- After-hours building service workers, such as custodians, are to turn on lights only in the areas where they are working.
- Take advantage of daylight. Many classrooms have dual light switches which allow for half of a classroom’s lights to be turned off when enough daylight is available.
- Exterior lighting shall be off during daylight hours and scheduled accordingly as seasons change.
- Stadium lighting should be turned on no more than ½ hour before dusk or game time, whichever is later. Stadium lighting shall not be on when not in use.
- All marquee signs shall be shut off by 10pm on school nights and on holidays and weekends.

**Heating, Ventilation, and Air Conditioning (HVAC) Temperature Control**

A number of variables determine whether people are comfortable with the temperature and relative humidity of the indoor air. Factors such as clothing, activity level, age, and physiology of people in schools vary widely, so the thermal comfort requirements vary for each individual. The below temperature settings were adopted based on ASHRAE Standard 55, Thermal Environmental Conditions for Human Occupancy.

**Heating Season (October 15 – May 15)**

- Classroom and Office temperatures will be set between 68-72 degrees in occupied mode
- All spaces should be set at 55 degrees when the building is unoccupied (Nights, weekends, Holidays)
- Gyms, Auditoriums and Shops should be set at 68 degrees
- Unoccupied spaces should be set to 55 degrees
- Evening temperatures shall be set at a point that minimizes boiler operation during non-occupied hours while ensuring system recovery for occupancy. Severity of weather may alter this setting from time to time but the recommended setting is 55 degrees.
- Heat shall be furnished only for official CPS activities and user groups that have specifically contracted for heat. Consolidate necessary CPS evening work into the minimum number of zones as possible. Heating is not provided for individual staff outside of normal hours.
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Cooling Season (May 15 to October 15)

- During occupied hours, thermostat settings should be set at or above 75 degrees and turned off when the area is unoccupied. *(Each degree below this can increase energy consumption by 2%)*
- All A/C units should be shut down by 4 pm each day (except when there is an official after school event being held).
- Whenever possible, consolidate official after-hour events in close proximity to minimize cooling
- Air conditioning shall be turned off in classrooms during summer months unless the classrooms are being used for summer school or year-round school.

Year Round Policies

- All windows and exterior doors must be kept closed to prevent hot or cold air from escaping the building. (During cooling season this only applies to schools with air conditioning.) Corridor doors, classroom doors, and doors to gyms and pools should also be kept closed.
- Do not obstruct ventilation ducts with books, charts, furniture or plants.
- External entrances and exits in use should be limited to minimize heating / cooling loss.
- Portable space heaters and portable air conditioners of any kind are banned within the District’s facilities, except where approved by the Dept. of Operations for authorized use based on system malfunction or special circumstances.
- Employees and staff are encouraged to wear appropriate clothing during the heating and cooling seasons.
- Non-classroom warehouse and garage facilities, when unoccupied by personnel, will be maintained at 55 degrees during heating season.

Year Round Maintenance Requirements

- **Water Heaters**: Hot water temperature set point will be 120 degrees, with the exception of Food Service operation. Periodically blow down your hot water heater to reduce sediment buildup.
- **Filters**: Routinely replace or clean filters to minimize pressure drops.
- **Belts**: Routinely adjust drive belts for proper tension and replace worn belts.
- **Bearings**: Routinely lubricate motor and equipment bearings.
- **Dampers**: Inspect dampers, damper seals, linkages and operators for proper sealing and operation. Repair and replace as needed for proper cycling, full closer and tight sealing.
- **Insulation**: Repair or replace damaged or missing pipe, duct and equipment insulation.
- **Piping Systems**: Routinely blow down strainers and clean strainers and clean strainer screens. Repair or replace leaking system components.
- **Air Systems**: Seal leaks in duct work, around coils and in air handling equipment with duct sealer and /or sheet metal closures.
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- **Building Automation Controls**: Optimize building start/stop equipment schedules to minimize operating time and stagger start-up times to limit electrical demand.
- **Boilers and Cooling Tower Blow down systems**: Check and adjust automated blow down systems to minimize blow down while maintaining appropriate cycles of concentration.
- **Cooling Towers**: Check and clean spray nozzles, distribution basin, fill and sump screens.
- **Boiler Burners**: Routinely analyze flue gas and adjust burners for optimum fuel-air ratios.
- **Steam Traps**: Routinely test and repair or replace leaking or failing steam traps.

**Water Conservation**
- Repair leaking faucets and faulty flush valves promptly.
- Make sure irrigation systems are turned off when it rains.
- Irrigate only in the early morning or late evening hours. This will help minimize water evaporation.

**Pool Conservation**
- Indoor pool water temperature shall be between 76°-82° during occupied hours.
- Set pool filter pump to meet State if Illinois requirements for flow rate and turnover (typically 6-hour turnover, with 4 or more turnovers/day). If variable speed pump is available, set speed to meet required flow rates for occupied and unoccupied times.
- If dehumidification equipment is used, set it to maintain 60 percent relative humidity in pool room.
- Pool cover shall be on whenever the natatorium is closed and locked, and off any time it is open. Check that pool and natatorium are empty before deploying cover.