



STATE FACILITIES ENERGY COUNCIL

The mission of the State Facilities Energy Council is to develop energy procurement and management strategies for State of Georgia facilities. The council was created by Governor Perdue through Executive Order in February 2006. Led by the Department of Administrative Services and the Georgia Environmental Facilities Authority, the Council combines the experience of diverse State energy users with the energy and contracting expertise of Georgia's state energy office and central contracting agency.

Low Cost Ways to Save Energy in State Facilities

According to a preliminary analysis by the Georgia Environmental Facilities Authority (GEFA), the annual electricity bill for state facilities totals approximately \$100 million, and the natural gas bill exceeds \$35 million annually. In addition, these costs are going up—U.S. Department of Energy data shows that the average natural gas price for the commercial sector in Georgia more than doubled from 2000 to 2005. During the same timeframe, the average electricity rate for the commercial sector in Georgia climbed 18% — and recently proposed rate increases will bump that number up still higher.

These increased costs for electricity and natural gas are negatively impacting all state agencies' operating budgets. To help you control the costs of operating your facilities, the State Facilities Energy Council has compiled the following list of suggested energy-saving ideas and strategies. This list is not intended to be comprehensive, but includes some practical strategies that can be implemented without the need for significant capital investment.

HVAC Equipment (chillers, boilers, air handlers, controls, and related hardware)

- Implement preventive maintenance programs that include maintenance schedules and records of all maintenance performed on building equipment and systems.
- Keep track of the annual and seasonal energy consumption and costs at your facility.
- Perform routine maintenance of HVAC systems at least annually. Inspect motors, belts, and steam traps, and rebuild or replace them when necessary. Replace filters and adjust dampers to ensure a tight seal. Clean boiler heat transfer surfaces and coils.



Are there energy savings practices that have worked for your facility? If so, we'd like to hear from you and help share your ideas and 'best practices' with other state entities. To provide input, or for more information on the State Facilities Energy Council, please contact:

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Low Cost Ways to Save Energy in State Facilities (continued)

HVAC Equipment (chillers, boilers, air handlers, controls, and related hardware)

- Make full use of any automatic controls available within your building systems. Incorporate such strategies as air and water-side economizing, night setbacks, and chilled and heating water resets.
- Keep current operational procedures and manuals on all equipment present at your facility. Obtain the manufacturer performance test data and “figures of merit” (FOM) for all major plant equipment, or establish benchmarks for the equipment using field measurements.
- Periodically review occupant schedules and check and adjust start/stop strategies, temperature setups and setbacks, and other strategies for turning equipment on and off. Also review and monitor on/off controls, such as occupancy sensors, lighting photocells, and timers.
- Establish a frequency for tracking equipment performance through such methods as manual or automatic datalogging or permanently installed monitoring and metering equipment.
- Conduct after-hours night or weekend walkthroughs of the facility to see if any equipment is on when it isn’t needed. Consider low cost solutions such as occupancy sensors in areas with intermittent use, such as storerooms.

Lighting

- Use occupancy sensors to turn off lights in rooms where the lights are frequently left on, or where rooms are unoccupied for long periods during the day.
- Retrofit older T12 fluorescent lamps and magnetic lamp ballasts with T8 lamps and electronic ballasts.
- When replacing or installing exit signs, choose signs illuminated by light-emitting diodes (LEDs) or compact fluorescent lamps (CFLs) rather than incandescent lamps.



Additional Resources on Energy Savings in Government Facilities:

U.S. Department of Energy—Energy Efficiency and Renewable Energy program www.eere.energy.gov

U.S. Department of Energy—Federal Energy Management Program www.eere.energy.gov/femp

Energy Star www.energystar.gov

Fifteen O&M Best Practices for Energy-Efficient Buildings (prepared with funding from U.S. EPA and U.S. DOE) www.energystar.gov/lia/business/15best.pdf