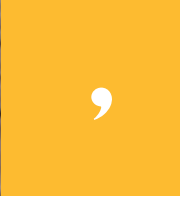


FIVE AREAS IN WHICH SCHOOL DISTRICTS CAN REDUCE ENERGY COSTS



Energy costs for school districts have as much as doubled in the past ten years, increasing pressure on yearly budgets and consuming revenues that could be better spent on educating our children.

Districts often do not address inefficient buildings until state reimbursement is available. In most cases, however, the cost of upgrades to increase building energy efficiency can be recovered in less than five years from direct energy savings. Upgrading energy efficiency can therefore increase district revenue over time.

Districts should review current energy usage at their facilities and look for project opportunities that pay for themselves through reduced energy consumption.

1. LIGHTING:

Newer lighting technology makes it possible to achieve comparable light levels while realizing as much as a 20% reduction in electrical use. Lighting replacements can usually be achieved using the existing wiring and are minimally disruptive to ceilings and other finishes.



2. BOILERS:

Modern boilers operate at above 85% efficiency and some can exceed 95%. Considering the seasonal efficiency of older boilers in poor condition may be as low as 50-60%, replacement of old units with new boilers can greatly reduce a building's heating costs.

3. VENTILATION:

Ventilation or the introduction of treated outside air into school buildings can account for up to 30% of the energy costs for heating and cooling. In most school facilities, ventilation air is heated or cooled, introduced to the building and then exhausted, which essentially throws away the energy consumed after one "use." Dedicated ventilation systems can be installed in existing building systems to recover 50-85% of this energy from exhaust air before it is discharged from the building. This recovered energy is then re-used to pre-treat the new outside air coming into the building.



4. DIRECT DIGITAL CONTROLS:

Direct digital controls (DDC) can detect room usage and adjust the temperature, ventilation, and lighting accordingly, thus reducing the energy wasted to condition unused portions of the building.

5. FACILITY ENERGY EVALUATION:

Many times building systems are in good physical condition, but operate inefficiently because they are out of adjustment. Just as an automobile needs a tune-up every few years, so do building systems. Even facilities that are as few as five years old can benefit from energy evaluations, adjustments, and maintenance.

