

Energy Conservation

The Board embraces energy conservation and believes it to be our responsibility to ensure that every reasonable effort is made to conserve energy and natural resources while exercising sound financial management.

We recognize the importance of adopting an energy conservation policy to govern this program. We also affirm the implementation of this policy will be the joint responsibility of the board, administration, faculty, staff, students, support personnel, and Cenergistic. Success is based on cooperation amid all groups.

To ensure the overall success of our behavior-based energy conservation program, the following areas will be emphasized:

1. A designated campus Administrator will be accountable for energy conservation on his/her campus with Energy Specialist teams conducting energy audits and providing timely feedback.
2. All personnel at each campus are expected to make a positive contribution to maximize energy conservation and produce real energy savings.
3. Cenergistic will implement its energy conservation program primarily through an energy management team led by the Energy Specialist(s) in accordance with “Energy Guidelines” that will be adopted by administration and will define the “rules of engagement” for our energy program.
4. Accurate records of energy consumption and cost will be maintained by the Energy Specialist for each campus to provide verifiable performance results on the goals and progress of the energy conservation program.

Further, to promote a safe, healthy learning environment and to complement the energy conservation program, each campus shall review and adhere to the preventive maintenance and monitoring plan administered by the campus physical plant for its facilities and systems, including HVAC, building envelope, and moisture management.

Adopted: February 8, 2010
Reviewed: August 10, 2015
Revised: October 14, 2019

Energy Conservation and Building Management

Responsibilities:

- Every person is expected to become an “energy saver” as well as an “energy consumer.”
- The staff member is responsible for implementing the guidelines during the time that he/she is present in the instruction room or office.
- The custodian is responsible for control of common areas, i.e., halls, cafeteria, etc.
- Since the custodian is typically the last person to leave a facility in the evening, he/she is responsible for verification of the nighttime shutdown.
- The Manager of Buildings and Grounds is responsible for identifying and recording of the total energy usage in all district facilities. The building Principals in partnership with the recommendations from the Manager of Buildings and Grounds are responsible for the total energy usage of all district facilities.
- The Energy Specialist provides monthly program update reports to the Facilities/Support Services subcommittee of the Board of Education.
- The Energy Specialist performs routine audits of all facilities and communicates the audit results to the appropriate personnel.
- The Energy Specialist is responsible for either directly or indirectly making adjustments to the District’s Energy Management System (EMS), including temperature settings and run times for Heating, Ventilation and Air Conditioning (HVAC) and other controlled equipment.
- Chief Communications Officer and Principals will regularly communicate the importance and impact of the energy conservation program to its internal and external constituents.
- The Energy Specialist provides monthly energy savings reports to building Principals detailing performance results
- The District is committed to and responsible for a safe and healthy learning environment.
- To complement the District’s behavioral-based energy conservation program, Cenergistics in partnership with the District shall develop and implement a preventive maintenance and monitoring plan for its facilities and systems, including HVAC, building envelope, and moisture management.

General:

- Instruction room doors shall remain closed when HVAC is operating. Ensure doors between conditioned space and non-conditioned space remain closed at all times (i.e., between hallways and gym or pool area) to the best of our abilities.
- Proper and thorough utilization of data loggers will be initiated and maintained to monitor relative humidity, temperature, and light levels throughout the organization's facilities to ensure compliance with organization guidelines.
- All exhaust fans should be turned off daily.
- All office machines (copy machines, laminating equipment, etc.) and network printers shall be switched off each night and during unoccupied times. Copy machines with Fax capabilities incorporated into them will remain on.

- All computers be will be switched to “energy saver” mode after 30 minutes of inactivity. This includes all attached monitors and speakers. Network equipment is excluded.

<p>Cooling Season Occupied Set Points¹: 72°F - 78°F Unoccupied Set Point: 85°F Heating Season Occupied Set Points¹: 65°F - 70°F Unoccupied Set Point: 55°F</p>

¹ Set points are in accordance with ASHRAE 55 “Thermal Conditions for Human Occupancy”

Air Conditioning Equipment

- Occupied temperature settings shall NOT be set below 72°F.
- During unoccupied times, the air conditioning equipment shall be set back. The unoccupied period begins when the students leave the area at the end of day. It is anticipated that the temperature of the instruction room will be maintained long enough to afford comfort for the period the staff remains in the instruction room after the students have left.
- Air conditioning start times may be adjusted (depending on weather) to ensure instruction room comfort when instruction begins.
- Ensure outside air dampers are closed during unoccupied times in buildings where this can be controlled.
- Ceiling fans should be operated in all areas that have them.
- Relative humidity levels shall not exceed 60% for any 24-hour period in air conditioned areas.
- Air conditioning should not be utilized in facilities during the summer months unless the facilities are being used for summer school or year-round school. Air conditioning may be used by exception only or in those facilities that are involved in team-cleaning, floor waxing or as determined by the Manager of Buildings and Grounds for other maintenance purposes.
- In all areas which have evaporative coolers such as shops, kitchens and gymnasiums, the doors leading to halls which have air-conditioned instruction rooms or dining areas should be kept closed as much as possible.
- Ensure dry food storage areas are maintained within code requirements. Typically, this is 55F-75F temperature and 35%-60% Relative Humidity. Utilize loggers to verify.

Heating Equipment

- Occupied temperature settings shall NOT be above 70°F.
- The unoccupied temperature setting shall be 55°F (i.e., setback). This may be adjusted to day settings during extreme weather.
- The unoccupied time shall begin when the students leave an area, evening activities or other school activities are completed.
- During the spring and fall when there is no threat of freezing, all steam and forced air heating systems should be set back during unoccupied times. Hot water heating systems should be set back using the appropriate loop pumps.

- Ensure all domestic hot water systems are set no higher than 120°F or 140°F for cafeteria service (with dishwasher booster).
- Ensure all domestic hot water re-circulating pumps are switched off during unoccupied times.
- For heat pumps, ensure a 4 °F dead-band between heating and cooling modes.
- Heating oil and propane (if applicable) levels should be physically measured and recorded by “sticking the tanks” at least on the following intervals: 1) recurring scheduled monthly date 2) immediately before new delivery, 3) immediately after delivery.

Lighting

- All unnecessary lighting in unoccupied areas will be turned **off**. Staff should make certain that lights are turned **off** when leaving the instruction room or office when empty. Utilize natural lighting where appropriate.
- All outside lighting shall be **off** during daylight hours.
- Gym lights and auditorium lights should not be left on unless they are being utilized.
- All lights will be turned **off** when students and staff leave for the day. Custodians will turn on lights only in the areas in which they are working.
- Refrain from turning lights on unless definitely needed. Remember that lights not only consume electricity, but also give off heat that places an additional load on the air conditioning equipment and thereby increases the use of electricity necessary to cool the room.

Water

- Ensure all plumbing and/or intrusion (i.e., roof) leaks are reported and repaired immediately.
- Grounds watering should only be done between 4am-10am. Do not water during the heat of the day, typically between 10am – 8pm.
- When spray irrigating, ensure the water does not directly hit the facility.
- Consider installing water sub-meters on irrigation and cooling tower supply lines to eliminate sewer charges.

Disclaimer

- After official approval, a copy should be disseminated to all organization personnel. Copies should be posted on bulletin boards, staff lounges, organization newsletters, etc.
- The organization shall adopt, observe and implement these guidelines as provided. However, these guidelines are not intended to be all-inclusive, and they may be modified for local conditions. These guidelines supersede all previous instructions related to energy conservation or facility management.