



ENERGY CONSERVATION GUIDELINES

In keeping with the Greenville ISD Board of Trustees Energy Conservation Resolution, the following guidelines are applicable to all district personnel and facilities. The directors of departments and principals shall be responsible for the total energy usage of his/her campus or facility and shall help implement conservation procedures and guidelines as approved by the Board of Trustees. Each instructor shall be responsible for implementing the guidelines during the time that he/she is present in the classroom and on campus. District employees and outside vendor employees are responsible for applying these guidelines and for reporting equipment problems or concerns of non-compliance to principals.

The implementation of these guidelines will not impair the educational environment and are intended to assist with energy conservation and will enable the directing of funds towards the education of the District's students.

I. **Guidelines for operating Heating, Ventilation, and Air Conditioning (HVAC).**

- A. The following energy conservation procedures for operating **air conditioning** for cooling are to be observed in all buildings:
1. A daytime temperature shall be maintained between 73 and 75 degrees when occupied by students, teachers, office personnel, and administrators. Certain areas may vary due to design of the building and HVAC system.
 2. Air conditioning shall be available to maintain 73 and 75 degrees at 6:30 A.M. and raised to 85 degrees at 4:40 PM, Monday through Friday for regularly scheduled campus hours. All air conditioning shall be maintained at 85 degrees otherwise. The principal/occupant of space shall be responsible for maintaining the setting of air conditioning systems not controlled by the District's energy management system (Example: portable classrooms).
(Exceptions)
 - a. All kitchen units will come on at 5:00 AM and turn off after the last scheduled use.
 - b. Administrative offices will be on until 5:00 PM.
 - c. The gyms and cafeterias in elementary schools with after school programs will remain on until 6:00 PM or requested time per event.
 - d. Libraries will run the same schedule as the school unless scheduled for additional use.
 3. All air conditioning systems at all campuses shall be maintained at 85 degrees during the summer months except in the following areas, and under the following conditions for summer operations:
 - a. Offices, when occupied by office personnel and administration.
 - b. Sensitive electronic equipment rooms.

- c. Summer school classrooms, summer training classrooms, and areas used for day care.
 - d. Band instrument storage areas.
 - e. Areas where carpet is being cleaned to insure the space is dried to prevent mold growth.
 - f. Offices and classrooms two weeks prior to the school reconvening For the fall semester.
 - g. Air conditioning will be on from 9:00 AM to 4:00 PM on Saturday and from 1:00 PM to 4:00 PM on Sunday the weekend prior to the start of the fall semester (unless not in use).
 - h. Campus areas used for scheduled special events.
4. Doors and windows are to remain closed when air conditioning units are operating.
- B. The following energy conservation procedures for operating **heating** equipment are to be observed in all buildings:
- 1. A daytime temperature shall be maintained at 70 to 72 degrees when occupied by students, teachers, office personnel, and administrators. Certain areas may vary due to design of building or HVAC system.
 - 2. Heating shall be available to maintain 70 to 72 degrees at 6:30 A.M. and set back to 55 degrees at 4:40 PM, Monday through Friday for regularly scheduled campus hours. All heating shall be maintained at 55 degree otherwise. The principal/occupant of space shall be responsible for maintaining the setting of heating systems not controlled by the District's energy management system (Example: portable classrooms, window units, etc.).
 - 3. Libraries will run the same schedule as the school unless scheduled for additional use.
 - 4. Doors and windows are to remain closed when heating units are operating.

II. Guidelines for operating lights.

- A. The following energy conservation guidelines are to be exercised when operating lights in and around district facilities:
- 1. District personnel shall be responsible for turning on/off lights in classrooms, work areas, and offices.
 - 2. Interior lights shall be turned off when area is not occupied including lunch, conference periods and before and after school.
 - 3. Lighting fixtures with "banked switching" or "dual switching" capabilities or any other special capabilities should be utilized to realize potential savings from proper use of special switching. Custodial services will use the lower switch setting when possible.
 - 4. When classrooms are unoccupied by students, teachers are encouraged to utilize "dual" or "banked" switching in area which they are specifically working, if area lighting configuration provides this capability.
 - 5. Personal lamps, for decorative use, shall utilize low wattage bulbs or energy saver fluorescent lamps and shall **not** be left on after regular hours.

6. Skylights and windows with natural lighting capabilities should be utilized. When applicable, light fixtures mounted in and around skylights shall remain off if not controlled by automatic sensors.
7. Lighting for display purposes (trophy cases, bulletin boards, etc.) shall be turned off at night and for summer/winter shutdown, except for special occasions and specified security purposes.
8. Evening custodians shall turn lights on only in areas where they are presently working.
9. All outside lighting shall remain off during daylight hours.
10. As required for the security of employees and the safety of the buildings, all outside security lighting will be set to turn on at dusk and off at twilight.
11. Decorative outdoor lighting, canopy lighting and skylight illumination shall remain off during the day, and illuminated at night at administrator discretion.
12. All vending machines shall be de-lamped.
13. Recommended illumination levels, as adopted by the Texas Education Agency and established by the Illumination Engineering Society (IES), shall be maintained throughout the district.

III. Energy conservation guidelines for after school hour's use of campus and facility.

- A. It shall be the responsibility of the principal or his/her designee to schedule heating, air conditioning, and lighting for after school events.
- B. Administrators/Principals shall utilize the current campus/facility request forms to pre-schedule, at least 72 hours in advance.
- C. Consideration should be given to having "activity days or evenings" and group these events together at general times on selected days.
- D. Training and activities shall be strategically grouped within the facility in order to optimize HVAC savings.
- E. The campus principal or their designee will become familiar with their HVAC system and how it is "zoned".

IV. Guidelines specific for gymnasium and Library energy conservation.

- A. Schedules for on and off times should be closely maintained in gymnasiums with lighting that must warm up for several minutes prior to use. This particular type of lighting should not be switched frequently due to the long start-up period.
- B. In high school and middle school gyms, when air conditioning is required for regular district hours, it will be maintained at 73 and 75 degrees starting at 6:30 A.M. and set to 85 degrees at 5:00 P.M., unless otherwise scheduled by the Athletic Department.

- C. In high school and middle school gyms, when heating is required for regular district hours it will be maintained at 70 to 72 degrees starting at 6:30 A.M. and set to 55 degrees at 5:00 P.M., unless otherwise scheduled by the Athletic Department.
- D. HVAC shall not be provided for unapproved activities / functions or gratuitous use of gyms.
- E. Libraries will have temperature maintained at 73 and 75 for cooling and 70 to 72 degrees for heating during occupied hours and will be set to 85 degrees in unoccupied cooling mode and 55 degrees in unoccupied heating mode. Libraries will also have humidity sensors to monitor humidity during unoccupied periods.

V. General guidelines for energy conservation.

- A. Use of personal electric space heaters is prohibited, **unless** prior approval by Supervisor, District Risk Manager and meet GISD Safety guidelines (See GISD School and Classroom Safety Rules).
- B. The use of refrigerators, microwaves, and coffee pots located away from convenient, central locations is strongly discouraged.
- C. No electrically heated candles, potpourri pots, or plug in fragrances shall be allowed.
- D. In order to provide proper operation of thermostats and sensors, furniture, equipment and electronics shall not be placed in front of or in close proximity.
- E. Business machines, such as computers and/or monitors, copiers, printers and any other applicable office machinery, shall be turned off when circumstances are appropriate. All district computers will be set to go to “sleep” after a long period in nonuse. However, if warm-up and start-up procedures are time consuming or complex, machines with hibernation function may remain on.
- F. Principals shall include energy awareness in staff meetings. The principal, with the assistance of the Energy Manager, shall conduct periodic energy conservation inspections for compliance with guidelines.
- G. As new buildings are designed, an energy management system (EMS) will be installed on all electric hot water heaters and applicable gas heaters. An EMS system will be installed on any new replacement water heaters. The energy management system (EMS) shall be set for normal campus hours.
- H. Temperature of hot water heaters/boilers shall be set as follows:
 - 1. Water heaters for kitchen utensil and equipment sanitation shall maintain 170 degrees in compliance with health department regulations.
 - 2. Other heaters shall maintain 130 degrees in compliance with health department regulations.

- I. Hot water circulating pumps shall be examined on a unit-by-unit basis to determine necessity of daily use. Pump will be operated only for a period of specific demand.
- J. The energy manager shall conduct a concise energy audit each year at every facility.
- K. The energy manager shall make periodic energy conservation visits and surveys of each campus and make monthly energy use reports to each principal.
- L. District equipment and lighting shall be rated and designed to provide optimum energy efficiency.
- M. Any logical or practical opportunities to conserve resources via adjustments to or limited usage of equipment and lights should be taken. Energy use habits should be examined and adjustments made as needed.

VI. Guidelines for summer shutdown procedures.

- A. HVAC schedules shall be adjusted, as noted under section I.A.3.
- B. All interior lights shall be extinguished with the exception of exit and emergency lighting.
- C. Electric water heaters and associated pumps shall be turned off, except in areas of summer program usage.
- D. Business machines are to remain off, except those which are vital to district network communications.
- E. All vending machines are to be disconnected, except for those located in teacher lounges or administration areas.
- F. Public address systems shall be turned off.
- G. All timers, for parking and security lights, shall maintain minimum "on" time periods.
- H. All walk-in and reach-in freezers will be maintained at 50 degrees and all walk-in and reach-in coolers/refrigerators will maintain 60 degrees during summer non-use if they are empty.
- I. Outside security, parking, perimeter and flood lamps shall be turned off during the day.
- J. All time clocks shall be checked and adjusted for summer operation.

- K. Any leaking water valves shall be reported to Facilities Maintenance Department.
- L. Light fixtures shall be cleaned on a regular basis by custodial staff. Lamps shall be installed properly and maintained in optimum condition. Defective fixtures shall be reported to Facilities Maintenance Department.
- M. Electronic scoreboards shall be turned off.
- N. Chilled water fountains that are not in use, shall be turned off.
- O. Ice makers and other equipment located in concession stands will be turned off when not in use.
- P. All district and non-district summer camps shall be scheduled with energy conservation in mind.

VII. Guidelines for Winter Break Shutdown.

- A. Guidelines for lighting shall be followed as noted in section VI.B.
- B. All applicable heating thermostats shall be maintained at 55 degrees, excepting scheduled events.
- C. Guidelines for summer shutdown shall be followed as noted under section VI.B. through VI.L.

VIII. Guidelines for Spring Break.

- A. Guidelines for lighting shall be followed as noted in section VI.B.
- B. Guidelines for air conditioning shall be followed as noted under section I.A.2, excepting scheduled events.
- C. Guidelines for summer shutdown shall be followed as noted under section VI.B through VI.L.



GREENVILLE
Independent School District

Energy Conservation Goals

1. Reduce energy consumption in Greenville ISD by 5% a year for the next six years. (HB 3693)
2. Provide resources and training for all teachers, staff, and students on ways they can help improve the energy performance of their schools.
3. Record district energy use and establish a baseline for that use.
4. Continue to design and build new buildings with energy efficiency in mind.
5. Perform energy audits on every building at least once a year.
6. Report energy use to each campus principal every month.
7. Develop Energy Conservations Guidelines in the following areas:
 - Guidelines for HVAC
 - Lighting Guidelines
 - After School Hour Guidelines
 - Gymnasium Guidelines
 - General Guidelines
 - Summer Shutdown and Summer Use Guidelines
 - Guidelines for Winter and Spring Break
8. The Energy Conservation Guidelines will not adversely affect the learning environment of the schools.
9. Report energy use and cost on the district web page. (HB 3693)
10. Make annual reports to the board on energy use and energy reduction.