

Logan City School District

ENERGY MANAGEMENT CONSERVATION POLICY

As the School Board of the Logan City School District, we believe it to be our responsibility to ensure that every effort is made to conserve energy and natural resources while exercising sound financial management.

The implementation of this policy is the joint responsibility of the board members, administrators, teachers, students and support personnel and its success is based on cooperation at all levels.

The district will maintain accurate records of energy consumption and cost of energy and will provide information to the local media on the goals and progress of the energy conservation program.

The principal will be accountable for energy management on his/her campus with energy audits being conducted and conservation program outlines being updated. Judicious use of the various energy systems of each campus will be the joint responsibility of the principal and head custodian to ensure that an efficient energy posture is maintained on a daily basis.

To ensure the overall success of the energy management program, the following specific areas of emphasis will be adopted:

1. All district personnel will be expected to contribute to energy efficiency in our district. Every person will be expected to be an "energy saver" as well as an "energy consumer."
2. Energy management on his/her campus will be made a part of the principal's annual evaluation.
3. Within sixty (60) days, administrative Energy Guidelines will be adopted that will be the "rules of the game" in implementing our energy program.

Further, to maintain a safer and healthier learning environment and to complement the energy management program, the district shall develop and implement a preventive maintenance and monitoring plan for its facilities and systems, including HVAC, building envelope, and moisture management.

Whereas the School Board bears responsibility for the best use of tax dollars, and

Whereas public education can provide leadership in developing a realistic energy ethic and awareness of energy needs and costs,

Therefore, the School Board of Logan City School District directs the superintendent and/or his/her agents to develop short and long range strategies in the areas of facilities management and preventive maintenance.

Adopted this _____ day of _____, 20__.

President
School Board
Logan City School District

Attest:

Secretary
School Board
Logan City School District

(After being officially accepted by the School Board, a signed and dated copy should be disseminated to the widest distribution possible within the district; i.e., all bulletin boards, teacher lounges, district newsletters, etc.)



ENERGY
EDUCATION, INC.
ENERGY MANAGEMENT CONSULTING

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Empowering people to conserve natural and financial resources.

5/5/2008

Mr. Eric J. Newell
Energy Manager
Logan City School District
875 N 200 E
Logan, UT 84321

Dear Eric:

We are providing to you the attached suggested energy management guidelines for your district. It is our recommendation that you work with your staff in order to tailor these guidelines to the specific needs of your district. A caution is in order: The attached guidelines are the results of over 20 years of fine-tuning and any changes that you make to these suggested guidelines will "water down" your efforts in effecting good management in your district. It is for this reason we strongly encourage you to deviate only in those specific situations in which your district has a special need that is not expressed in our suggested guidelines.

Sincerely,

ENERGY EDUCATION, INC.

Dr. William S. Spears
CEO - Founder

Attachment

cc: Dr. Mike Monson, Assistant Superintendent

Guidelines

(Energy Conservation and Building Management)

Responsibilities:

- *Every person is expected to be an "energy saver" as well as an "energy consumer."*
- *The teacher is responsible for implementing the guidelines during the time that he/she is present in the classroom.*
- *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 building in the evening, he/she is responsible for verification of the nighttime shutdown.*
- *The principal is responsible for the total energy usage of his/her building.*
- *The Energy Manager performs routine audits of all facilities and communicates the audit results to the appropriate personnel*
- *The Energy Manager is responsible for either directly or indirectly making adjustments to the District's EMS, including temperature settings and run times for HVAC and other controlled equipment.*
- *The Energy Manager provides regular reports to Principals indicating performance with regards to energy savings.*
- *The district is committed to and responsible for maintenance of the learning environment.*
- ***To complement the district's energy management program, 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

1. Classroom 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).
2. Proper and thorough utilization of data loggers will be initiated and maintained to monitor relative humidity, temperature, and light levels throughout the district's buildings to ensure compliance with district guidelines.
3. All exhaust fans should be turned **off** daily.
4. All office machines (copy machines, laminating equipment, etc.) shall be switched **off** each night and during unoccupied times. Fax machines should remain on.
5. All computers should be turned **off** each night. This includes the monitor, local printer, and speakers. Network equipment is excluded.
6. All capable PC's should be programmed for the "energy saver" mode using *the power management* feature. If network constraints restrict this for the PC, ensure the monitor "sleeps" after 10-minutes of inactivity.

Guidelines

(Energy Conservation and Building Management)

Cooling Season Occupied Set Points¹:	74°F - 78°F
Unoccupied Set Point:	85°F
Heating Season Occupied Set Points¹:	68°F - 72°F
Unoccupied Set Point:	55°F

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

AIR CONDITIONING EQUIPMENT

1. Occupied temperature settings shall *NOT be set below 74°F*.
2. During unoccupied times, the air conditioning equipment shall be **off**. The unoccupied period begins when the students leave the area at the end of the school day. It is anticipated that the temperature of the classroom will be maintained long enough to afford comfort for the period the teacher remains in the classroom after the students have left.
3. Air conditioning start times may be adjusted (depending on weather) to ensure classroom comfort when school begins.
4. Ensure outside air dampers are closed during unoccupied times.
5. Ceiling fans should be operated in all areas that have them.
6. Relative humidity levels shall not exceed 60% for any 24 hour period.
7. Air conditioning should not be utilized in classrooms during the summer months unless the classrooms are being used for summer school or year-round school. Air conditioning may be used by exception only or in those schools that are involved in team-cleaning.
8. In all areas which have evaporative coolers such as shops, kitchens and gymnasiums, the doors leading to halls which have air conditioned classrooms or dining areas should be kept closed as much as possible.
9. Where cross-ventilation is available during periods of mild weather, shut down HVAC equipment and adjust temperature with windows and doors. Cross-ventilation is defined as having windows and/or doors to the outside on each side of a room.
10. 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.

Guidelines

(Energy Conservation and Building Management)

HEATING EQUIPMENT

1. Occupied temperature settings shall NOT be above 72°F.
2. The unoccupied temperature setting shall be 55°F (i.e. setback). This may be adjusted to a 60°F setting during extreme weather.
3. The unoccupied time shall begin when the students leave an area.
4. During the spring and fall when there is no threat of freezing, all steam and forced air heating systems should be switched off during unoccupied times. Hot water heating systems should be switched off using the appropriate loop pumps.
5. Ensure all domestic hot water systems are set no higher than 120°F or 140°F for cafeteria service (with dishwasher booster).
6. Ensure all domestic hot water re-circulating pumps are switched off during unoccupied times.
7. For heat pumps, ensure a 6 °F dead-band between heating and cooling modes.
8. 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

1. All unnecessary lighting in unoccupied areas will be turned **off**. Teachers should make certain that lights are turned off when leaving the classroom when empty. Utilize natural lighting where appropriate.
2. All outside lighting shall be **off** during daylight hours.
3. Gym lights should not be left on unless the gym is being utilized.
4. All lights will be turned **off** when students and teachers leave school. Custodians will turn on lights only in the areas in which they are working.
5. 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

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

Guidelines

(Energy Conservation and Building Management)

(After official approval by administration a copy should be disseminated to all district personnel. Copies should be posted on bulletin boards, teacher's lounges, district newsletters, etc.)

Disclaimer: The district 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 building management.