Kearney Public School District
Energy and Resource Management Policy

All building occupants are expected to be energy savers as well as energy consumers. All building occupants are expected to adhere to the following policies in order to ensure that energy and resources are used efficiently.

The purpose of the KPS District Energy and Resource Management Policy is to provide a document that will serve as a guide to educate staff, administration, students, and community members on energy, water, and waste consumption and the associated costs. The policy will serve as a means to ensure that every effort is made to conserve energy, water, and natural resources. It is equally important, as stewards of public taxes, for the District to prevent wasted dollars being diverted away from District's educational mission.

Every person has a role and can make a difference.

- **District Administrators** set the tone and lead by example.
- **School Principals** are responsible for the total energy and water usage and waste production connected to their building.
- **Teachers** are responsible for implementing the guidelines during the time that he/she is present in the classroom.
- **Custodians** play a key role; their primary responsibility is to maintain a safe, clean, healthy and resource-efficient building.
- **Kitchen Staff** are responsible for wisely using energy and water during food preparation and limiting waste production.
- The district's **Energy Manager** diligently monitors each building's performance, and adjusts as necessary.
- **Students** are responsible users and stewards of the district's facilities.
- **Facilities Management Staff** track district-wide progress and communicate key metrics to the rest of the district.

POLICIES

Lighting

1. All lights in any area should be turned off in any unoccupied area except those as mandated by safety codes. This includes night time custodial cleaning.
2. Any outside lighting should be turned off during daylight hours.
3. Indirect natural light is good for learning and productivity. When possible, rely solely on indirect natural light or use only a portion of the lights in a room to supplement available daylight.

4. Gymnasium lights should only be turned on when it is being utilized.
5. Whenever possible, incandescent lights should be replaced with LED lights.
6. Any new upgrades to lights should include evaluation of light levels. Foot candle recommendations include (the Facilities Department has a light meter):
    a. Classrooms, computer labs, library and offices: 62-65 foot candles (fc) but not less than 50 fc
    b. Corridors: 20 fc but not less than 10 fc
    c. Storage: not less than 10 fc
    d. Gymnasium: 55-95 fc but not less than 30 fc
7. During the school day, lights will be turned on no more than 30 minutes before students arrive. After school when students are not in the building the corridors light should be turned off. Where reasonable, allow occupants to turn on lights as they arrive and enter rooms.
8. Teachers are encouraged to turn off banks of lights not in use during prep periods.
9. Building lights will be turned on in the morning as needed to accommodate breakfast service and KCLC programs.
10. Buildings with automated lighting controls will be adjusted to shut off all classroom lights at 4:00 p.m. and corridor lights at approximately 4:00 p.m. or slightly thereafter depending upon after school activities. Classroom and office lights will not be automatically turned on at any time, except in corridors and points of entry.

Temperature Control

Set Points for KPS Buildings

Occupied heating set point	68-72°F
Unoccupied heating set point	62-64°F
Occupied cooling set point	72-76°F
Unoccupied cooling set point	80-82°F

1. Any temperature control issues should be brought to the immediate attention of the head custodian.
2. Unauthorized personnel or students found tampering with temperature regulating devices such as thermostats, valves or temperature control units will be subject to disciplinary action. Any desired changes to temperature control should be directed to the head custodian.
3. Personnel will not obstruct ventilation ducts or return grilles with books, charts,

furniture or plants.
4. No doors leading to the outdoors should be propped open.

Air Conditioning Equipment

1. During unoccupied times, the air conditioning equipment should 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 classrooms and offices will be maintained long enough to afford comfort for the period that staff members remain in the building after the students have left.
2. Air conditioning start times may be adjusted (depending on weather) to ensure classroom comfort when school begins.
3. Ensure outside air dampers are closed during unoccupied times.
4. Relative humidity levels shall NOT average greater than 60 percent over any 24-hour period.
5. Air conditioning should rarely be used in classrooms during the summer months unless the classrooms are being used for summer school programming.

Windows & Doors

1. Ensure exterior doors and windows close and close tightly.
2. Doors between conditioned spaces and non-conditioned space should remain closed and closed tightly at all times.
3. Close classroom doors and windows when the building is being heated/cooled.
4. During the heating season, close windows, blinds, and curtains at the end of the day to keep heat in, and open during the day to let daylight/heat in.
5. During cooling season, keep windows, blinds, and curtains closed during the day when direct sunlight is entering.
6. Adjust blinds and other window coverings so that they are closed at the end of each school day. During the day, they should be adjusted so that they bounce light off of the ceiling and minimize glare.

Electronics

1. All office equipment including laminators, copiers and computers should be powered off at the end of each day (except for fax machines).
2. Plug load energy consumers should be unplugged during nonuse. Examples include DVD players, TVs, power strips, VCRs, computer speakers, monitors, projectors, etc.
3. Printers should be in common use locations for shared use.
4. All computers and monitors should be programmed to utilize energy savings capabilities - ex - going into screen saving (energy saving) mode after 10 minutes of inactivity.
5. Vending machines in the commons should be turned off during summer months.

Bathroom Facilities

1. Turn the chiller off in water fountains during unneeded/unoccupied times of the year.
2. Energy Star and WaterSmart plumbing fixtures (urinals, toilets, faucets, etc.) shall

be installed when replacement is deemed necessary.

3. Energy Star certified hand drying mechanisms shall be installed when replacement is deemed necessary (hand dryers, automated toweling dispensers, etc.).
4. The domestic hot water system should be set no higher than 120° F.
5. Evaluate domestic hot water heater efficiency on a yearly basis.
6. Shut down domestic hot water recirculating pumps when unoccupied.
7. Repair leaking faucets, fixtures, valves and piping promptly.

Kitchen

1. The food service hot water heater should be set with a minimum of 120°F for hand sinks and 140°F for sanitary cleaning. Food services operations requiring higher temperature levels by code shall use booster units or dedicated water heaters when possible.
2. Incrementally start up and shut down equipment.
3. Turn off lights in coolers, freezers, storerooms, offices and serving areas when unoccupied.
4. Use lids on braising pans and kettles when cooking.
5. Use timers on ovens and steamers.
6. Use only the sections of the char broilers and griddles that are necessary to prepare the food.
7. Regularly check door and cart gaskets and replace when appropriate.
8. Only use the exhaust hood when needed and make sure it is properly cleaned and maintained.
9. Serving line pre-heat times should be 20 minutes, and turned off in between meals.
10. Set holding carts to appropriate temperatures and turn them off when not in use.
11. When cooking/holding equipment is in use, keep doors closed to retain heat.
12. Clean refrigerator and freezer coils twice per year.
13. Limit the use of disposable paper and Styrofoam products for serving food and beverages/water.
14. Recycle all hard plastics (#1, #2, #4, and #5), unsoiled paper products, and metals (including the large #10 size food cans) produced by kitchen operations.
    a. Metal cans with thick food residue (e.g., pasta sauce) should ideally be rinsed out with water before being placed in a recycling container.
    b. Discarded cardboard produced from kitchen operations should be flattened and stored in an area that the custodian can easily collect the cardboard material so that it can be placed in the cardboard recycling dumpster.

Recycling

1. All building occupants are required to recycle.
2. Recycling containers will be available in each classroom and in all common areas for use.
3. Recyclable materials shall be separated and made ready for pick up.
4. Use district-approved signage.
5. Establish a regular system for collecting mixed recyclables from offices and classrooms, and involve students in the collection process if possible.

a. Paper, metal cans, flattened cardboard, and rigid plastics (#1, 2, 4, and 5) can all be placed in the same recycling container located in a given classroom or office. If possible, non-confidential paper should be put in a paper bag first before being placed in the recycling bin.
b. Shredded confidential paper and used plastic bags (e.g., grocery bags and clothing store bags) can also be recycled by bagging them separately in a plastic bag before being placed in a recycling container with other mixed recyclables.
c. The large amounts of flattened cardboard produced specifically by food services and custodial services should be separated out and placed directly in the cardboard recycling dumpster.
d. See the KPS Comprehensive Recycling list to see all that is accepted as part of the mixed recycling program.

6. Recycling containers should be just as accessible as trash containers and should have consistent and uniform signage.
7. Develop a recycling program in the cafeteria that collects the following: metal cans, plastic bottles, and plastic food containers with no food residue.
8. Make recycling containers available for large extracurricular activities and sporting events.
9. If funding is not available for purchasing new recycling containers, existing trash containers can be repurposed and should have recycling signage placed on them.
10. Scrap metal can also be recycled; contact Facilities Management for pick up.
11. Identify unwanted junk mail and remove the school from those mailing lists.
12. Set the default on multifunction printers/copiers to double-side print.

Small/Personal Appliances

1. The use of personal appliances such as electric coffee makers, space heaters, toasters, microwaves, refrigerators, toaster ovens, pizza ovens, pizza makers, and/or other cooking or refrigeration appliances, Christmas lights and floor lamps will not be allowed. The use of radios and small fans is allowed, but should be turned off when the room in not in use. A limited number of appliances will be allowed in each building's staff lounge.

Water

1. Exterior water
    a. Check irrigation system settings to ensure the system runs for the appropriate amount of time and applies the appropriate amount of water. Also check system for leaky valves and heads that may be wasting water.
        i. When issues arise, submit a Work Order.
    b. Check the irrigation systems coverage to ensure that it is not watering pavement, the building, or other areas that do not need water.
    c. The average turf lawn needs approximately 1.0 inch of water per week. A good rule of thumb is to water infrequently and apply more water to encourage a deeper, more resilient root system. Avoid frequent watering that promotes shallower root systems

and weeds (e.g. crabgrass). Daily watering is, in the vast majority of cases, unnecessary and wasteful.

i. Exceptions are newly seeded lawns where the surface needs to stay moist, newly sodded lawns that have not yet rooted into the soil, or when summer patch disease is a problem.

d. Check your watering volume using a rain gauge or bucket with depth markings. Mark a bucket with a line one inch from the bottom to get a sense for how quickly your particular sprinklers will apply one inch of water.
e. Water primarily during the early morning hours (2:00 a.m. – 7:00 a.m.) to prevent evaporation and maximize the amount absorbed by the soil and root systems.
f. Check the weather. Do not over-water turf grass (pay attention to weather and limit artificial watering when it rains). If it rained the night before, do not water at all. If the forecast indicates more than a 50 percent chance of rain for the day/evening, turn off your irrigations system or wait to water the turf if projected rain does not occur.
g. Plant only native plants on the exterior of the building. They require significantly less water once established.
h. Work with experts to select drought-tolerant plants and lawn turf that do not require a lot of water or maintenance.
i. Consider replacing existing clock timers for irrigation with WaterSense labeled irrigation controllers.
j. Drought lawn/turf maintenance procedures:
    i. Mowing. Rule of thumb is to never remove more than 1/3 of the grass height when mowing. Mowing grass higher forces grass to develop and use deeper roots. Best height for most grasses in the summer is 3.5 inches.
    ii. Mowing. Let clippings remain on the lawn. This mulching promotes water and nutrient retention.
    iii. Mowing. Sharpen mower blades 2-3 times per summer. Dull blades tear grass, forcing grass to use 40-60 percent more water trying to recover from stress.
    iv. Aerating. Consider aerating irrigated portions of lawn/turf in the spring or fall. Aeration creates small holes in the ground that allow water to soak deeper into the soil, promoting root growth.

2. Building Water Use
    a. Promptly report and fix leaking faucets, toilets, and showers.
    b. Choose WaterSense labeled faucets, showerheads, toilets and flushing urinals where possible.
    c. Install faucet aerators and low-flow showerheads.
    d. Run dishwashers (kitchen & teacher/staff lounge) only when full.
    e. Water heater temperatures should never exceed 120˚F.