

# Killeen Independent School District Energy Conservation Plan

Killeen Independent School District (KISD) strongly supports the implementation of strategies to reduce energy consumption in all of its buildings. The focus of this plan is to outline how KISD can continue to reduce energy consumption. This plan includes measures that have no upfront cost as well as those that may require capital investment. The measures outlined below in each category can be implemented with minimal effort and cost and will reduce the energy used by KISD employees in all buildings.

KISD recognizes that transparency is a key element of a successful energy conservation plan. H. B. 3693 states, in part, "A state agency or institution of higher education that occupies a building or facility located in an air quality nonattainment area or affected county, as those terms are defined in Section 386.001, Health and Safety Code, shall include in the plan described in Subsection (a) (1) a goal to reduce energy consumption in its buildings and facilities located in those areas by five percent per year for five years beginning January 1, 2008". H. B. 3693 was superseded by S.B. 300 which authorized rather than required, school districts to establish a goal to reduce the school district's annual electric consumption by five percent each state fiscal year for six years beginning September 1, 2007. In accordance with this bill, KISD will set measurable goals as part of this plan and publish information on the district's website regarding the progress towards these goals. In some circumstances, this may require issuing anonymous surveys to track self-reported employee participation. KISD will also attempt to quantify the benefits to the environment and savings to the district associated with employees' energy conservation, depending upon the availability of such information, and disseminate this information to employees to motivate greater participation.

An overarching objective, as stewards of our resources, is to take the opportunity to reinvest in efficiencies gained across the District. Investment, reinvestment, and recognition of excellence in energy management performance will benefit the District's bottom line – our students. Ultimately, we are setting the conditions and example for our students to recognize the positive impacts of energy and resource efficiencies.

#### No Cost Measures

## Lighting

<u>Goal:</u> Identify 100% of all occupants within each shared office space (recurring annually due to changeover); achieve 100% participation by employees in turning off lights if other employees in the shared space are out of the office on a daily basis.

Turn off lights when offices/areas are not in use. Many offices in KISD have



single occupants. Occupants in these offices, or those passing by an unoccupied room at the end of the day, should make sure that lights are turned off when leaving the room. In offices where employees share a common light switch with either a common area or with the office of another employee, an employee cannot turn off the lights without also turning off the lights on other employees in the same office. All KISD employees will identify shared light switches, and appropriately coordinate their arrival and departure hours with other occupants in shared spaces, and consistently turn-out the lights when the last person leaves the office.

<u>Goal:</u> Perform continuous audit of lighting areas to identify ways to improve energy conservation.

Remove unnecessary fluorescent lights from lighting fixtures. In order to save energy and cut down on glaring overhead lighting without compromising safety, KISD employees will reduce the amount of overhead lighting in offices by working with the Maintenance Department to remove excess overhead bulbs from each office. Some employees may opt for very little overhead lighting in favor of task lighting using more efficient compact fluorescent light bulbs. KISD will work with Facilities Services technicians to perform an audit of each lighting area, identifying which light bulbs can be removed and ensuring compliance with any workplace safety regulations.

### **Computers & Monitors**

<u>Goal:</u> Achieve 100% participation in shutting down computers and turning off monitors when not in use on a daily basis.

**Shut-down computers and turn off monitors when not in use.** Whenever KISD employees leave their offices for an extended period of time, they will lock their computers and then turn off their monitors. Also, KISD employees will shut down their computers and turn off their monitors when they leave each night.

<u>Goal:</u> Deploy power strips to 100% of offices; achieve 100% participation in turning off power strips at the end of each workday.

Turn off personal electronics when leaving for the day. KISD employees will plug all personal printers, scanners, speakers, and AC adaptors into a power strip and turn off the power strip when leaving for the day. This will make it easy to turn-off all of these devices at once and will ensure they do not continue to draw power during the nights and weekends. Desktop computers will be plugged into separate outlet so that the automatic wake-up feature can be used to install software updates during the night.



#### **Printers, Copiers, Scanners & Fax Machines**

Goal: Achieve 100% participation in using the double-sided feature.

**Use the double-sided feature.** When copying or printing documents, KISD employees will use the double-sided feature whenever appropriate.

The implementation of an energy conservation plan is only possible with the active and consistent participation of all employees. Consistent communication of the importance of the program to management, feedback on employee participation, and information regarding the benefits and savings associated with the program will engender a team effort and increase employee involvement. A few considerations for improving efficiencies across the district include, but are not limited to:

- Self-discipline of individuals and assurance checks by directorate and campus energy leaders to eliminate personal space heaters in workspaces and classrooms, as these are very inefficient and will increase overall energy costs substantially. It is a District policy for employees to not use personal space heaters. If space heaters must be used for physician/doctor validated/prescribed health reasons, employees will unplug these heaters when they leave for the day.
- Within acceptable fiscal limitations, the District Facilities Design and
  Construction Standards establishes minimum specifications for the design, use,
  and/or installation of the highest energy efficient equipment and technologies
  available in any and all new construction, life cycle replacements, and retrofits
  to provide the District and community with the best value.
- District and campus leaders will encourage employees to minimize use of the elevators by walking up for two floors or less and walking down for three floors or less as part of the overall wellness program and as a means to contribute to energy efficiencies.
- Property Management will provide additional recycling collection containers outside of offices to encourage employees to recycle their waste products.

#### Other Energy Conservation Measures

Killeen ISD continuously seeks feasible, acceptable, and measurable means, methods, and funding to improve energy efficiency across the District. We aggressively pursue efficiency improvements through pilot-test programs and adopting proven best practices from school and institutional examples. One example of our methods of improvement is our Energy Management Control System on all HVAC units across the District. The District maintains a 72° (\*/- 2°) set point for heating and cooling, works with campuses and leadership for off-hour scheduling of systems, and is fully able to monitor and manage controls remotely. The District Energy Management team continuously seeks to increase efficiency baselines for new and replacement equipment purchases to ensure we incorporate the most highly efficient systems into our facilities to provide the District and the community with the best value.



While some of the HVAC and lighting upgrades targeted the "low hanging fruit," advances in technology continue to open the door and enables improvements in energy efficiencies. As technology continues to improve and costs reduce with greater availability, we will seek efficiencies in all energy resources to include renewable energy technology.