Energy Conservation Plan

Adopted by the Board of Trustees
October 15, 2013

TWIN RIVERS UNIFIED SCHOOL DISTRICT ENERGY PLAN

Overview of the Energy Plan

The guidelines contained in this Energy Plan are adopted by the Twin Rivers Unified School District for implementation by District staff to reduce the use of energy and water in the operation of District facilities. This Plan is enacted for the purpose and intent of reducing District operational expenses associated with energy and water use.

The District has established a goal to reduce overall energy use by 5 percent (5 %) in the first year, 5 percent (5 %) in the second year, and 5 percent (5 %) the third year of this plan by implementing the practices, measures, and procedures outlined in this Energy Plan. The energy savings resulting from this plan will provide energy cost savings and reduce greenhouse gas emissions associated with the operation of District facilities.

At an annual interval, the District will measure the fiscal effect of the conservation efforts by comparing total annual energy billings to historical usage (adjusted for energy cost increases or inflation) and reallocate any savings as determined by the 'Retention of Savings and Rebates' section of the Performance Measure, Management and Reward sub-section of the Implementation Plan.

The Energy Plan is comprised of four major areas and supports the Energy Policy adopted by the Governing Board (BP 3511). The major components are:
1. Mission Statement, Goals and Performance Criteria
2. Guidelines for Implementation
3. Practices and Measures for Reducing Energy Costs
4. Equipment Standards

The Energy Plan is not intended to cause discomfort to students or staff, and there is flexibility for individual situations where adjustments must be made for health and safety reasons.

It is important that each person in the District do their part to ensure that the guidelines and standards are implemented and followed throughout the course of each workday in order that the District may prevent energy costs from seriously affecting classroom instruction.

The Twin Rivers Unified School District's Energy Plan moves toward managing energy costs by:
• *Reducing Energy Waste*
• *Improving Equipment Performance.*
• *Developing Energy Efficiency into Renovation, Modernization, and New Construction Projects*
• *Involving District Employees in Energy Use Decisions*

Mission Statement, Goals, Performance Criteria

TWIN RIVERS UNIFIED SCHOOL DISTRICT ENERGY PLAN

MISSION STATEMENT

Our District commits to environmental protection through energy efficiency as a fundamental operational objective and integral to the strategy of fulfilling our educational mission.

We recognize that the efficient operation of our facilities reduces environmental impacts.

We recognize our position as responsible community citizens and the opportunity to create a positive role model for resource conservation in public educational assets.

Therefore, our operational and planning decisions will incorporate the prudent use of energy resources by:
• Preventing and minimizing energy related pollution and waste.
• Fostering a sense of personal responsibility for resource conservation among all District employees.
• Emphasizing a resource conservation and environmental protection ethic among all District employees.
• Continually improving our Energy Plan performance.
• Deploying resources to reflect the District's environmental protection commitment through energy efficiency and resource conservation.

GOALS of the ENERGY PLAN

The District commits to actively improving our energy practices in order to save taxpayer dollars and reduce emissions that contribute to environmental pollution, and to improve the quality of educational facilities and demonstrate community leadership in resource conservation.

Improve Energy Efficiency
• The District will institute an Energy Plan that reduces energy consumption through the application of cost effective efficiency measures and employee training.
• The Energy Plan will speed the introduction of cost-effective, energy-efficient technologies into our facilities.

Reduce Greenhouse Gases
• Through cost effective energy efficiency measures, the District will reduce the greenhouse gas emissions attributed to our facilities energy requirements.

Address Renewable Energy
• The District will evaluate renewable energy resources (passive solar, solar thermal, solar electric, wind, geothermal, biomass) within our facility operations on equal footing with conventional energy resources.

• The District will evaluate purchasing electricity from renewable energy sources (if available).
• The District will evaluate the implementation of 'Grid Neutral Schools' concepts as offered by the Division of the State Architect.
• The District will consider the Collaborative for High Performance Schools [CHPS] version 2009 Climate Credits CL2.1 Grid Neutral or CL2.2 Zero Net Energy as a guideline where feasible in all new construction projects.

Improve Transportation Efficiency

• The District commits to reduce petroleum fuel consumption through improvements in fleet fuel efficiency and by the use of alternative fuel vehicles if practical.
• The District will promote the use of alternative modes of transportation including public transportation, carpooling, bicycling and walking.
• New school design will incorporate District, parental and student traffic mitigation design elements.

Water Conservation

• The District will reduce water consumption and its associated energy delivery use in our facilities by implementing cost effective efficiency measures.

ENERGY PLAN PERFORMANCE CRITERIA

• Maximize opportunities to reduce energy costs through energy efficient lighting and mechanical systems, improved lighting and mechanical equipment controls, natural lighting, maintenance and operations best practices (for example: as prescribed in CHPS Maintenance and Operations (M&O) Best Practices Manual for general equipment efficiency and maintenance).
• Specify sustainable building practices (based on CHPS or Leadership in Energy & Environmental Design [LEED] guidelines) during new construction and renovation to increase energy performance to exceed the minimum level of energy efficiency prescribed by California State Standard Title 24.
• Specify and ensure that fundamental building system components are constructed, installed, commissioned, and maintained to function as intended to achieve energy performance goals.
• Encourage energy conservation, energy efficiency, load management, customer owned generation, solar and renewable technologies and demand response to reduce environmental impacts associated with energy use.
• Require architects, vendors, and contractors to support the environmental standards of this plan and to work in partnership with the District to ensure that facilities and operations incorporate the highest level of environmental protection through energy efficiency.
• Ensure that personnel who work with energy equipment or are involved in energy-related decisions receive training for implementing this Plan.

Guidelines for Implementation

TWIN RIVERS UNIFIED SCHOOL DISTRICT ENERGY PLAN

The District will continually work to reduce its energy use and costs by:
• Purchasing and installing energy efficient and water efficient equipment that reduces energy costs and conserves natural resources.
• Promoting energy efficiency, water efficiency, material reuse, recycling, and renewable energy resources.

The District will seek to institutionalize energy efficiency as a public value by:
• Providing training and technical resources to assist the Facilities and Maintenance Departments in evaluating various energy-saving technologies.
• Enabling the Facilities and Maintenance Departments to implement energy efficiency projects using financing strategies such as energy cost savings reinvestment, participation in the California Energy Commission low-interest loan program, and participating in utility financial incentive programs for energy efficiency.
• Implementing outreach and communication strategies to increase awareness among all District employees, not only those involved in energy or facility management.
• Encouraging all District employees to practice energy efficient habits in the workplace.
• Serving as a positive example to the community by demonstrating the benefits of energy efficiency, water efficiency, and renewable energy resources.

IMPLEMENTING THE ENERGY PLAN

Leadership
• The District will designate an individual responsible for meeting the goals and requirements of this Plan, including the preparation of an annual Governing Board summary. The annual summary will address Plan performance and include a statement of the net annual energy and cost saving impacts of Plan activities.

Energy Team
• The District will form an energy team consisting of appropriate procurement, legal, budget, instructional, management, and technical representatives as well as a utility representative to expedite and encourage the goals and requirements of this Energy Plan.

Life-Cycle (or Long Term) Cost Analysis for Efficiency Decisions
• The District will avoid using 'lowest first cost' criteria and instead use life cycle (or at least long term) cost analysis for decisions regarding investments in products, services, design, construction, and other projects to reduce energy and water consumption and lower energy and resource costs.
• Where appropriate, the District will consider the life-cycle costs of blended projects, particularly to encourage bundling of energy efficiency projects with renewable energy projects. This strategy supports the DSA Grid Neutral concept.

• The District will retire inefficient equipment on an accelerated basis where replacement results in lower life-cycle costs.

Energy and Water Audits at District Facilities

• The District shall conduct a no-touch or walk-through energy and water efficiency survey of each of its facilities. The surveys shall be used to rank facilities for future comprehensive energy and water efficiency audits.

Comprehensive Energy and Water Facility Audits

• Based on the no-touch or walk-through surveys, the District will develop and implement a plan to conduct or obtain comprehensive energy and water efficiency audits.
• The District will conduct these audits as soon as possible, either independently or through utility service offerings.
• Audits of facilities performed within the last three (3) years may be considered current for the purposes of implementation.
• "No-cost" audits will be utilized to the extent practicable.
• The District will conduct surveys and audits of any leased facilities to the extent that the recommendations of such surveys and audits could be implemented under the lease terms.

Implementation of New Audit Recommendations

• Based on preliminary data from the initial walkthrough surveys, high priority energy/water audits will be completed first.
• Within six months of the completion of a comprehensive energy/water audit of each facility, the District will begin implementing cost-effective recommendations for the installation of energy and water efficiency recommendations and renewable energy technologies as practicable.

Implementation of Existing Audit Recommendations

• Within one month of the date of adoption of this Energy Plan, the District will begin implementing the cost-effective recommendations of any audit performed within the past three (3) years for the installation of energy and water efficiency and renewable energy technologies as practicable.

Retro-Commissioning Program

• The District will utilize retro-commissioning to ensure that existing building systems, equipment, and controls are restored to optimal performance levels.

ENERGY MANAGEMENT FINANCING AND STRATEGIES

Utility Rebate Programs

• The District will participate in all appropriate utility rebate programs and equipment manufacturer rebates. Many utility companies provide cash rebates for qualifying low cost measures, financial incentives for investment grade measures based on calculated energy efficiency measures, and for efficient design and construction using the Savings by Design (SBD) program. Utility rebates and incentives may be viewed as 'after-the-fact' grants.

Use of Financing and Special Programs

• In addition to any available appropriations, the District will consider participating in programs such as the California Energy Commission low interest loan program, utility financial incentive programs, and utility demand side management programs to meet the goals and requirements of the Energy Plan.
• The District will work with its purchasing department to identify and eliminate internal regulations, procedures, and barriers to the implementation of the energy efficiency goals of this Plan.

Deferred Maintenance

• Equipment scheduled for deferred maintenance, hardship grant, emergency repairs or special needs replacement or allocations should always contain elements of energy efficient performance.

Participate in Cooperative Purchasing Programs

• The District will activate membership in Government sponsored bulk purchasing opportunities for energy products, equipment, and services such as electricity, natural gas, water and others that would reduce costs, enhance energy efficiency and conserve natural resources.

Energy Star® and Energy Efficient Products

• The District will select Energy Star® or other resource efficient products when acquiring energy or water consuming equipment. For product groups where Energy Star® ratings are not yet available, the District shall select products that are in the upper 25 percent of energy efficiency for their respective product categories.
• The District will include a preference for Energy Star® products in specification language developed for Basic Ordering Agreements, Blanket Purchasing Agreements, and all other purchasing procedures.

The Collaboration for High Performance School (CHPS)

• The District will require sustainable design principles based on current CHPS standards for all new construction and modernization projects. The District will apply CHPS principles to the orientation, design, construction and operation of new facilities.
• The District may consider using LEED™ standards in assessing voluntary individual projects.
• The District will optimize life-cycle costs, pollution reduction opportunities and other environmental and energy costs associated with the construction, operation and decommissioning of District facilities.
• The District will consider designing their facilities to meet the School Facility Program High Performance Schools standards, which will enable them to apply for High Performance Incentive Funds if the District has eligibility for the State New Construction Program.

Facility Efficiency Improvements

• The District will investigate efficiency opportunities for lighting and control solutions for steam systems, boiler operation, air compressor systems, ventilation direct digital controls, and renewable energy technologies.

Highly Efficient Systems

• The District will require high performance energy systems in new construction or retrofit projects when the systems are determined to be life cycle cost-effective.
• The District will consider incremental efficiency specifications when upgrading existing equipment when the efficiency upgrades are life cycle cost-effective.
• The District will survey local natural resources to optimize use of naturally occurring energy sources such as wind, solar, or geo-thermal (ground-source) combined with heat pumps.

Self Generation

• The District will consider alternative energy systems including solar hot water, solar electric and solar outdoor lighting where such systems are life cycle cost-effective and offer additional benefits including pollution reduction, source energy reduction, reduced infrastructure cost, increased efficiency through distribution loss avoidance or expedited service, increased demand response capability, and possible future revenue generation.

Electricity, Natural Gas, and Water Resources

• To advance the greenhouse gas reduction and renewable energy goals of this Plan, and to defer source energy use, the District will strive to use electricity from clean, efficient, and renewable energy sources. Alternate solutions to the utilization of natural gas as a source of heat or hot water, in order to reduce greenhouse gas emissions are encouraged.

Competitive Power

• The District will evaluate competitive opportunities in electric, natural gas, water, and other resource markets to reduce costs and enhance services.

Fleet and Transportation Efficiency

• The District will work to reduce fleet operations petroleum fuel consumption by practicing energy efficient driving habits, evaluating use of District-owned vehicles, minimizing individual trips, and eliminating the unnecessary idling of District pool vehicles. The District should consider the acquisition of alternative fuel vehicles or higher fuel economy vehicles when replacing District vehicles.

PERFORMANCE MEASUREMENT AND MANAGEMENT FOR ENERGY EFFICIENCY

Annual Budget Submission

• The District's annual budget submission should specifically request funding to achieve the goals of this Energy Plan. Budget submissions should include the costs associated with:

- Administering the Energy Plan.
- Providing contractual capabilities to implement cost-effective efficiency measures.
- Procuring cost-effective efficiency products.
- Constructing sustainable new buildings.

- Implementing energy efficiency in the modernization and renovation of District facilities.

Annual Implementation Plan

• The District will provide annual adjustments to the Energy Plan to fulfill the goals of the Plan. Adjustments should be noted in the annual Governing Board summary.

Annual Governing Board Summary Requirements

• The District will measure and include in the annual Governing Board summary its progress in meeting the goals and requirements of the Plan. An annual Governing Board summary for the previous fiscal year is due within the first 2 months of the new fiscal year.
• The Governing Board summary will describe how the District is using the strategies described in this Plan to help meet resource cost savings and environmental pollution reduction goals. The Governing Board summary explains which strategies saved energy costs, and which did not.

Position Descriptions and Performance Evaluations

• The District will consider including provisions of the Energy Plan in the position descriptions and performance evaluations of District leadership, the energy committee, project managers, site administrators, facility managers, energy managers, facilities personnel, or other appropriate employees.

Training and Education

• The District will ensure that all appropriate personnel who work with energy equipment or are involved in energy related decisions receive training for implementing this Plan.
• The District will provide training or training materials for any programs made available relating to the resource efficiency strategies contained in this Plan.
• Each new employee working in facilities or with energy equipment will be given basic instruction on whole building energy systems, lighting, HVAC, energy management systems and resource efficiency.
• The District will incorporate training for the Purchasing Department that includes life-cycle cost analysis, utility rebate and incentive programs, energy savings performance contracts, Energy Star® purchasing options and resource conservation opportunities.
• The District is encouraged to develop outreach programs that include education, training and promotion of Energy Star® products for all its employees.
• The District will extend the above training and education to its site administrators, faculty, staff and at appropriate intervals to student groups where these measures have been implemented.
• The District should consider sending Maintenance staff to energy efficiency training such as Building Operator Certification (BOC) sponsored and provided by the utility energy centers. BOC offers technical training and a recognized credential in energy efficient building operation. For more information see www.theboc.info/ca.

Showcase Facilities

• The District will designate exemplary new and existing facilities (with significant public access and exposure) as showcase facilities to highlight energy, water efficiency, or renewable energy improvements, including grid neutral or Zero Net Energy.

New Building Showcases

• When the District constructs a new building, it will designate the building, at the earliest stages of development, as a showcase highlighting best practices for resource efficiency.

Existing Building Showcases

• The District may designate one major building as a showcase to highlight energy efficiency, water efficiency, renewable energy technologies, and indoor air quality improvements. Building selection will be based on considerations such as the level of community visitors / students, historic significance and the likelihood that visitors will learn from displays and implement similar projects.

Equipment Standards

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Overview

Any non-District owned equipment must be approved by the site administrator and Facilities/ Maintenance manager before it is used at District facilities. The site administrator will complete an equipment approval form and forward it to the Facilities/Maintenance department for record keeping until the end of the academic year. All personal appliances are the sole responsibility of the owner and Twin Rivers Unified School District is not responsible for any damage, theft or loss. (Reference BP 4156.3, Ed Code 35213)

Equipment

Microwaves, ice makers and refrigerators shall be permitted only in staff break rooms, nurse's rooms, science prep areas, and athletic locker room areas. Appliances shall meet District standards for energy efficiency and shall remain unplugged during summer, winter, and spring breaks. Per OSHA recommendations, microwaves should be accompanied by a warning sign visible to those who may have a pacemaker or certain type of hearing aid that may be vulnerable to microwaves.

Coffee warmers/coffee makers are permitted in employee areas (*other than classrooms*) as long as timers or automatic shutoff devices are used to prevent overheating. It is understood that safe use is expected at all times and employees are expected to take all precautions necessary to protect the safety of students, other occupants, and property.

Computers, televisions, VCR's, overhead projectors, printers and other equipment needed for instruction are required to be plugged directly into wall outlets or approved surge protectors. Where applicable, appliances shall be attached with approved anchoring devices to prevent theft and accidental falling in the event of an earthquake. If a power strip is available, it should be turned off at the close of the day; CD players should be unplugged.

Only District-approved (heavy grade with ground) extension cords are allowed. At no time are extension cords to be used to permanently power any appliance. If permanent power is necessary, a work order is to be submitted to the Maintenance Department that will complete the necessary modifications. No ground plug adapters will be allowed. Plug strips, surge suppressors, and backup battery equipment shall not be "daisy chained" together.

Office equipment such as copy machines, mimeograph and duplication equipment shall be installed as per manufacturer recommendations. Adequate ventilation will be established before use. The equipment is to be turned off at the close of business each day.

Electric space heaters are not permitted unless provided by the Maintenance Department, and then only as a temporary measure. A space heater or other means of heating may be used after the site administrator or her/his designee has submitted a work order and the repairs cannot be completed in time to ensure the comfort, health, or safety of students and staff. All heaters must be unplugged when the room is unoccupied and flammable material shall be kept away from the electric heaters at all times. Space heaters are a temporary measure and not intended for permanent use.

Used or New refrigerators or freezers offered by the public for use at District facilities shall not be accepted unless the refrigerator or freezer is certified as an Energy Star® unit.

Notes on Equipment Use

- All appliances shall be UL® listed and Energy Star® rated
- All appliances shall be plugged directly into a wall outlet or District-approved outlet strip
- All appliances will be cleaned and unplugged by the owner during Spring, Winter and Summer breaks
- All appliances are subject to be moved without notice for any reason to accommodate maintenance and custodial purposes
- All SIA safety rules and fire department inspection recommendations will be followed, i.e. no extension cords being used as a permanent power source.
- All appliances MUST be in good working order including:
    - Refrigerator door and door seals in good shape to create a perfect seal
    - All electrical cords are in perfect condition and have functioning grounding plugs and end caps
    - Must not have any unforeseen condition that would create a wasteful or dangerous environment
- TRUSD and Maintenance Department reserve the right to refuse the use of appliances if electrical load is exceeding safe capacities.

Practices and Measures for Reducing Energy Costs

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Building Standards

Hours of Operation

- Building temperatures in classroom areas will be maintained until one half hour after students are dismissed.
- Other building spaces will be controlled to match the usage of the building.
- As a result of delayed building temperature response, run times schedules will be set to maintain appropriate climate during unoccupied times.
- All TRUSD-sanctioned programs will be provided with "occupied" climate conditions, provided zone control is available in the space the group will be using.
- Refrigerated vending machines will be turned off when not intended to be used for a period of 16 hours or more or less as appropriate.
- "VendingMiser" will be required of vendor as appropriate for all vending machines.
- Display case/front lighting on all vending machines will be disconnected by the vendor.
- All domestic hot water systems are to be set no higher than 120 degrees Fahrenheit or 140 degrees Fahrenheit for cafeteria service (with dishwasher booster).
- All domestic hot water re-circulating pumps are to be switched off during extended breaks and vacations.
- Buildings will achieve full interior lighting conditions 30 minutes prior to scheduled start time.
- Buildings will be unlocked and open for service 30 minutes or less prior to scheduled start time.
- For summer and/or night programs, consolidate classroom usage to a central area or building that is individually cooled/heated.
- Where possible electronic marquee signs will operate between the hours of 6:30 a.m. and 11:00 pm.

High Schools

- Gym(s) will remain in the occupied mode until 4 pm Monday – Friday unless in use.
- Library will remain in the occupied mode until 4 pm Monday – Friday unless in use.
- Cafeteria/Multipurpose Room will remain in the occupied mode until 2 pm Monday – Friday unless in use.
- Buildings will maintain exterior light during the school year until 11:30 pm, Monday – Friday unless in use. Safety considerations need to be made as appropriate.
- Exterior lighting will be monitored and adjusted to be operational at appropriate times based on the season.

Middle Schools

- Gym(s) will remain in the occupied mode until 4 pm Monday – Friday unless in use.
- Library will remain in the occupied mode until 4 pm Monday – Friday unless in use.
- Cafeteria/Multipurpose Room will remain in the occupied mode until 2 pm Monday – Friday unless in use.

- Buildings will maintain exterior light during the school year until 11:30 pm, Monday – Friday unless in use. Safety considerations need to be made as appropriate.
- Exterior lighting will be monitored and adjusted to be operational at appropriate times based on the season.

Elementary Schools

- Library will remain in the occupied mode until 4 pm Monday – Friday unless in use.
- Buildings will be unlocked early and keep appropriate lighting levels to accommodate all latch key and/or childcare programs.
- Cafeteria/Multipurpose Room will remain in the occupied mode until 2 pm Monday – Friday unless in use.
- Buildings will maintain exterior light during the school year until 11:30 pm, Monday – Friday unless in use. Safety considerations need to be made as appropriate.
- Exterior lighting will be monitored and adjusted to be operational at appropriate times based on the season.

Lighting

- All unnecessary lighting in unoccupied areas will be turned off.
- Utilize natural lighting where appropriate.
- All outside lighting will be off during daylight hours.
- All lights will be turned off when the building closes for the evening. Custodians will turn on lights only in the areas in which they are working.
- Refrain from turning lights on unless definitely needed. Utilize bi-level lamp switching whenever possible. Lights consume electricity and give off heat that places an additional load on the air conditioning equipment.
- Both interior and exterior lights will be turned off each day after the buildings are locked for the night, with the exception of security lighting. Times will be adjusted for seasonal change and based on requests from Police Services.
- The amount of lighting used for athletic events should be appropriate for the activity and used only when necessary. Use appropriate partial lighting for after-hours activities (i.e. partial banks of lights for practice or group meeting).
- Exterior lights will remain on for all TRUSD-sanctioned events taking place within the building.
- Exterior lights will be turned on and off where appropriate to accommodate staff entering and leaving the building at unusual hours.
- Security lighting should be used appropriately and adjusted dependent on campus layout and recommendations by Police Services.

Temperature

Hours of operation for HVAC in classrooms

- Elementary Schools, Middle Schools, and High Schools: one half hour before instruction begins until one half hour after students are dismissed
- 30 minute overrides or as system allows
- Or as necessitated by use

Cooling Season
Cooling Season Occupied Set Point: 76 degrees Fahrenheit – During peak and load shedding periods the District may consider raising the set point.

Unoccupied set point: 85-90 degrees Fahrenheit

- While attempting to maintain a consistent temperature, normal fluctuations may occur due to cycling mechanical equipment, direct sunlight, changes in occupancy, etc. Normal fluctuations should be within +/- 2 degrees of stated set point.
- Air conditioning start times may be adjusted (depending on weather) to ensure classroom comfort when school begins.
- Ensure mechanically controlled outside air dampers are closed during unoccupied times.
- Ceiling fans should be operated in all areas that have them.
- Air conditioning should not be utilized in any buildings during the summer months unless the spaces, including gymnasiums, are being used for summer school, year-round school, or another appropriate use.
- The Supervisor Resource Conservation will monitor and adjust set points for individual cases as needed.

Heating Season
Heating Season Occupied Set Point: 68 degrees Fahrenheit

Unoccupied Set Point: 45-50 Fahrenheit

- While attempting to maintain a consistent temperature, normal fluctuations may occur due to cycling mechanical equipment, direct sunlight, changes in occupancy, etc. Normal fluctuations should be within +/- 2 degrees of stated set point.
- 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.

Irrigation
- All watering will be completed between 9 p.m. - 6 a.m. as allowed.
- When spray irrigating, the water will not hit buildings or adjacent hardscape areas.
- Fields will be irrigated as appropriate to be ready for fall use.
- All irrigation systems will be shut down during rain.
- Watering will be allowed as needed outside of these hours based on use and logistical limitations.

TRUSD Staff Expectations
- Employees will ensure doors between conditioned space and non-conditioned space remain closed at all times (i.e. classroom doors will remain closed when HVAC is operating).
- Thermostats should be adjusted within the energy conservation program guidelines.
- Lights should be turned off when leaving the room-even in rooms with occupancy sensors.

- All exhaust fans should be off at the end of every day and during unoccupied hours.
- All office machines (copy machines, laminating equipment, etc.) will be switched off each night and during occupied times when not in use.
- Fax machines should remain ON.
- ALL COMPUTERS SHOULD REMAIN ON TO ALLOW ITSS STAFF REMOTE ACCESS. THEY WILL BE SHUT DOWN APPROPRIATELY WHEN MAINTENACE TASKS ARE COMPLETED.
- All computer peripheral equipment should be turned off each night - this includes the monitor, local printer (connected to the PC) and speakers. Network equipment is excluded.
- All projectors, overheads, VCR's, DVD's, etc. should be shut off when not in use.
- Where possible staff should utilize power strips, which can be switched off at the end of the work day to ensure complete power shut down of applicable equipment and devices.

Individual/Stakeholder Expectations

- **Board of Trustees Members**
  - Support and endorse the energy conservation program.
  - Encourage District employees to comply with the energy conservation guidelines.
  - Communicate concerns about energy conservation programs to the Superintendent.

- **Superintendent Responsibilities**
  - Regularly meets with Superintendent/Director Facilities Planning and Construction and the Supervisor Resource Conservation to monitor program.
  - Maintains District awareness of the energy conservation program.

- **Associate Superintendent Responsibilities**
  - Maintains awareness of the energy conservation program.
  - Regularly monitors division of responsibility to ensure adherence to guidelines.
  - Meets with the Supervisor Resource Conservation as required establishing improvement strategies for division of responsibility.

- **Supervisor Resource Conservation Responsibilities**
  - Performs routine audits of all facilities and communicates the audit results to the appropriate personnel.
  - Provides regular reports to Principals, Administrators, and the community indicating performance with regard to energy savings.
  - Assures that proper and thorough utilization of data loggers will be initiated and maintained to monitor temperature and light levels throughout the District's buildings to ensure compliance with District guidelines.
  - Conducts an energy-training program for maintenance, grounds, and custodial staff that provides specific steps, tailored to each school on how to reduce energy waste.
  - Develops organized shutdown procedures to turn off additional equipment during daily or extended unoccupied times.

- Monitors and analyzes utility bills.
- Sets annual benchmarks and goals.
- Develops set points during heating and cooling seasons based on industry standards.
- Determines air conditioning seasonal start up and daily starts to ensure classroom comfort for instructional program.
- Determines lighting utilization in occupied and unoccupied areas.
- Encourages behavior promoting energy conservation and best practices.
- Maintains a high level of awareness on energy efficiency.
- Utilizes checklists to communicate appropriate behaviors.
- Identifies and resolves issues related to the energy conservation program.
- Educates TRUSD staff about energy consumption.
- Improves building mechanical controls to maximize energy savings.
- Develops building energy teams.
- Sends reminders to shut off and unplug equipment during extended break periods.
- Maintains accurate records of energy consumption and energy costs.
- Provides an annual report outlining progress of the energy conservation program to the Board of Trustees.
- Finds ways to provide incentives to school sites for conserving resources.
- Serves as a liaison with local utilities to leverage the District's position as a significant customer and ensure our services and rates are at peak and acceptable levels.

- **Principal/Site Administrator Responsibilities**
  - Maintains responsibility for the total energy usage of his/her site.
  - Schedules the use of classrooms and other spaces wisely and with the coordination of the Supervisor Resource Conservation to reduce energy consumption.
  - Ensures building thermostat settings remain within the guidelines of the energy conservation program.
  - Keeps a focus of energy conservation among staff throughout the year and utilizes data to evaluate progress.
  - Maintains ongoing communication with the Supervisor Resource Conservation to ensure optimum learning conditions.
  - Solicits suggestions from staff for better building efficiency.
  - Ensures that during times of extreme weather that HVAC systems will be turned on prior to the start of school.
  - Whenever possible, suggests scheduling custodial staff during summer vacations and extended breaks to a day shift to Operations Director to maximize energy conservation savings.
  - Works with the Supervisor Resource Conservation and site employees to create a plan for common areas that provide employees with access to refrigerators and microwaves for personal use.
  - In cooperation with the Supervisor Resource Conservation, makes any determination necessary to conserve energy while maintaining an appropriate educational environment.

- Promotes and supports student clubs or groups that focus on energy conservation measures and environmental awareness.

- **Supervisor/Director Responsibilities**
  - Responsible for the total energy usage of his/her department.
  - Schedules the use of rooms and other spaces wisely and with the coordination of the Supervisor Resource Conservation to reduce energy consumption.
  - Ensures department thermostat settings remain within the guidelines of the energy conservation program.
  - Keeps a focus of energy conservation among staff throughout the year and utilizes data to evaluate progress.
  - Establishes ongoing communication with the Supervisor Resource Conservation to ensure optimum learning conditions.
  - Solicits suggestions from staff for better building efficiency.

- **Teacher Responsibilities**
  - Closes blinds and drapes on windows that receive direct sunlight when air conditioning systems are on and at night during the winter months and closes doors and windows when heating or cooling systems are in use.
  - Keeps classroom area air supply and return grills clear of furniture or displays.
  - Keeps thermostats accessible, without a heat source nearby such as computer monitors, copiers, lamps, etc.
  - Keeps thermostats within the energy conservation program guidelines.
  - Reports faulty thermostats and other equipment that may be malfunctioning.
  - Makes certain that lights are turned off when leaving the classroom empty.
  - Turns off all ceiling, wall and floor fans when leaving the classroom.
  - Encourages students to dress appropriately for the weather.
  - Additional teaching equipment requiring electricity such as aquariums should be limited to that utilized for direct instruction.
  - Promotes and supports student clubs or groups that focus on energy conservation measures and environmental awareness.

- **Clerical Responsibilities**
  - Closes blinds or drapes on windows that receive direct sunlight when air conditioning systems are on and at night during the winter months.
  - Keeps office area air supply and return grills clear of furniture or displays.
  - Keeps thermostats accessible, without a heat source nearby such as computer monitors, copiers, lamps, etc.
  - Keeps thermostats within the energy conservation program guidelines.
  - Reports faulty thermostats and other equipment that may be malfunctioning.
  - Makes certain that lights are turned off when leaving the office empty.
  - Turns off all ceiling, wall and floor fans when leaving the office.

- **Custodial Staff Responsibilities**
  - Verifies the nighttime shutdown.
  - Checks for proper thermostat settings and functions. Checks for overheated and overcooled areas and communicates this information to the Supervisor Resource Conservation.
  - Turns off lights in unused spaces.
  - Turns off all exhaust fans every night or during unoccupied hours unless necessary for indoor air quality.
  - Follows procedures for setbacks/shutdowns during weekends and vacations.
  - Whenever possible, adjust custodial start time during breaks and summers to more appropriate seasonal work hours and use the team cleaning concept during summer months.
  - Utilizes daily, weekend, and holiday shutdown lists.
  - Responds to building requests for climate control only when rooms/spaces are outside energy plan guidelines.
  - Communicates to the Supervisor Resource Conservation the spaces in District buildings that fall outside the guidelines.
  - Maintains set points for heating and cooling unless authorized by appropriate personnel.
  - Adjusts building run times to coincide with the seasons of the year and changes in daylight savings time.
  - Reports wasteful practices or situations to appropriate personnel (i.e. leaking faucets, malfunctioning windows, etc.).
  - Communicates areas of success, improvement, and concern to Site Administrator and the Supervisor Resource Conservation.

- **Food Service Staff Responsibilities**
  - Efficiently utilizes kitchen equipment during periods of food preparation.
  - Keeps District-owned refrigerator compressors and condensers clean.
  - Appropriately monitors kitchen equipment, turning it on for usage time only. Pre-heat should follow posted equipment guidelines.
  - Assists coordination efforts during extended break periods, taking appropriate measures to turn off unnecessary equipment.
  - Works with custodial staff to coordinate shutdown activities and maintenance.

- **Technology Staff Responsibilities**
  - Programs all capable PCs for the “energy saver” mode using the power management feature. If network constraints are restrictive, ensure the monitor “sleeps” after 10 minutes of inactivity.
  - Coordinates with the Supervisor Resource Conservation to ensure technology needs and guidelines are being met while at the same time taking advantage of all energy conservation measures as they pertain to technology.

- **Maintenance Staff Responsibilities**
    - Verifies HVAC equipment is running properly and achieving night setback temperatures.
    - Identifies equipment unresponsive to TRUSD controls and shares information with the Supervisor Resource Conservation.
    - Inspects heating and air conditioning equipment according to schedule.
    - Replaces worn seals, fittings, traps, etc. and check ducts for leakage.
    - Keeps HVAC equipment (filters & coils) clean and lubricated.
    - Maintains consistent settings with the EMS system unless authorized by appropriate personnel.
    - Checks and repairs as necessary, all building insulation, caulking and weather-stripping.
    - Secures all attic and roof hatches.
    - Keeps doors in good working condition.
    - Repairs damaged windows and doors as soon as possible
    - Replaces dislodged, broken, damaged or missing ceiling tiles
    - Inspects drinking fountains for proper operation and leaks.
    - Checks all plumbing for leaks.
    - Ensures all plumbing and/or intrusion (i.e. roof) leaks are reported and repaired immediately.
    - Develops and implements a preventative maintenance and monitoring plan for its facilities and systems including heating and cooling.
    - Installs timers on equipment where feasible to conserve energy.

- **Contractor Responsibilities**
    - Adhere to the TRUSD energy conservation and building management guidelines.
    - Turn off all work equipment at the end of the work day.
    - Keep doors and windows closed unless moving equipment/materials in and out of buildings.
    - Leave HVAC systems off unless authorized by the Supervisor Resource Conservation or District authority.
    - Program/Set the HVAC systems to the TRUSD standards.

- **Facilities & Planning Responsibilities**
    - When planning and carrying out new construction, modernization or deferred maintenance, the Facilities Planning and Construction Department will make every effort to exceed the energy efficiency standards outlined in Title 24 of the California Building Codes.
    - To reduce initial cost, the District shall seek out and apply for all appropriate grants, rebates, or discounts from utility providers, state, or any other source from which said grants, rebates, or discounts are available.

- **Police Services**
    - Coordinates with the Supervisor Resource Conservation to establish effective and necessary security lighting throughout the District.
    - Provides feedback and suggestions to the Supervisor Resource Conservation pertaining to exterior security lighting as it relates to potential safety and/or security matters.

- **Temporary, Joint Use, and Long Term Facility Users**
    - Receives and implements energy guideline requirements from Facilities Services.
    - Joint Use partners will be expected to observe and practice all aspects of the energy conservation guidelines.
    - Groups, organizations, and individuals who utilized the District's facilities by way of a long term facility use agreement will be expected to observe and practice all aspects of the energy conservation plan.

- **Students**
    - Students will always be encouraged to assist the District in conserving energy and water in all District facilities. Students will be encouraged to participate in conservation efforts that help to ensure that the District will not waste any resources including electricity, gas, and water.

Superintendent's Advisory Committee
Energy Conservation Plan Committee Members

Facilities Services
Maintenance Services, to include Electrical, HVAC and Grounds
Grounds
Operations
Technology
Nutrition Services
Police Services
Communications
PTA/PTO
Cabinet
TRUE/CSEA/TRPOA
SMUD
Elementary Administrator
Elementary Teacher
Secondary Administrator
Secondary Teacher
Supervisor Resource Conservation