

What Are School Districts Doing to Reduce Energy Costs?

Kent Ramseyer
Newport-Mesa Unified School District

Introduction and Overview

- Three questions:
 - What is an Energy (Efficient O&M Program) Manager?
 - Why does an Energy Manager position have to exist?
 - What's new that you don't already know?
- The Pay-Off
- Reference: *School Operations and Maintenance: Best Practices for Controlling Energy Costs Guidebook*.
 - Prepared by: Princeton Energy Resources International under a grant from the US Department of Energy
 - Reviewed by: Association of School Business Officials (ASBO) and Association of Higher Education Facilities Officers (APPA)
 - To download your free copy, go to www.ase.org and click on the educators link, then select School Operations and Maintenance: Best Practices for controlling Energy Costs

Energy Manager Responsibilities

- Task 1: Gain top-level management commitment and support
 - Establish and energy efficient O&M policy
 - Prepare a shared savings plan (incentives, etc.)
- Task 2: Contact utility reps (water, gas and electric)
 - Review incentive program offerings (rebates) and rate schedules

Energy Manager Responsibilities

- Task 3: Organize resource accounting data
 - Select commercial energy accounting software
 - Input billing data and analyze for billing errors and anomalies
 - Establish base year consumption for each facility
 - Determine facilities with greatest savings potential

Energy Manager Responsibilities

- Task 4: Cultivate the support of facility O&M staff
 - Arrange introductory meetings
 - Develop facility operation guidelines through a brainstorm process with staff
 - Schedule periodic meetings to help with program implementation

Energy Manager Responsibilities

- Task 5: Develop school-based teams
 - Establish teams (kitchen, maintenance, grounds and technical staff, occupants and management)
 - Use teams to develop and implement facility operations guidelines and other activities
- Task 6: Conduct conservation audits of facilities
 - Target facilities with greatest savings potential
 - Perform pre-audit interviews with facility operators
 - Perform audits and develop a recommendations report

Energy Manager Responsibilities

- Task 7: Provide training for all staff
 - Provide energy efficiency awareness training for all staff who have control of their work spaces
- Task 8: Set facility-specific goals
 - Set new goals annually based on audits performed and the energy software data
- Task 9: Provide incentives and recognition
 - Establish methods of recognition (awards, newsletter announcements, etc.)

Energy Manager Responsibilities

- Task 10: Communicate programs status – program visibility
 - Develop strategies to involve and inform the public and staff to keep the program visible
 - Provide monthly or quarterly reports to facility operators, administrators and others

Energy Manager Responsibilities

- Task 11: Implement energy efficient O&M savings opportunities
 - Identify low-cost/no-cost options
 - Estimate costs for any system modifications
 - Implement strategies: ex. summer school site selection, redirecting some of the program savings back into purchasing higher efficiency replacement equipment
- Task 12: Communicate and reward program success
 - Publicize resource and cost savings internally and externally
 - Approve success incentives to staff and students

Energy Manager Qualifications

- Extremely strong technical expertise not a requirement
- Strong interpersonal communication and persuasive skills, flexibility and creativity
- Moderate level of computer and analysis skills
- General understanding of the operation of school buildings
- Experience in business, education or technical fields
- Sometimes, a retired school employee or administrator

What can you do right now: TLC

- **T**hermostats- Physically audit largest schools first and turn off or set back individual HVAC thermostats and/or EMS systems at the beginning of an extended school recess
- **L**ights- Ensure all unnecessary lighting is off and exterior time clocks are set properly
- **C**omputers- Inform school sites that computers (except servers), monitors and peripherals (not including fax machines) are designed to be turned off at the end of the day. Monitors should be programmed for sleep mode (not screen saver mode) after about ten minutes of inactivity