



Meeting Minutes from the

Maryland Energy Administrations School Energy Manager Workshop

October 4th, 2004

This document includes a summary of the School Energy Manager Working Group discussions as well as additional information from the Maryland Energy Administration.

I. Energy purchasing strategies

II. Indoor air quality/mold strategies

III. Other strategies and concepts brought up at this meeting

IV. Issues MEA is working on as a result of working group feedback

I. Discussion on Energy Purchasing Strategies, led by Alem Zewoldai, Federick County

The group seemed to agree that the key to energy purchasing was to identify favorable rates and lock them in to protect the district against price fluxuations. Here are some strategies identified in the course of that discussion:

- Establish purchasing agreements in the summer to take advantage of lower prices
- Buy energy in bulk whenever possible
- Continuously gather data on energy costs from peers, energy professionals, and the internet. Follow the market closely because timing is everything
- Chance policies that limit contract lengths in order to secure longer-term fixed pricing
- Mix interruptible with non-interruptible service
- Lock in rates whenever possible
- Coordinate with existing state contracts that may have more favorable terms than those the school district could obtain on its own
- Coordinate with other school districts when possible to increase your bargaining power

II. Discussion on Indoor Air Quality, led by Dianne Gerlowski, Anne Arundel County

The presence of mold as the result of unwanted moisture was the focus of the group's discussion. Some of the causes for this moisture were identified as:

- Moisture presence in insulation
- Rapid cycling of cooling coils resulting in condensation
- Not enough outside air in tight buildings
- Malfunctioning exhaust fans and thermostats
- Running A/C longer to accommodate custodial staff
- Overuse of water by the custodial staff

Some strategies for combating these issues that were identified in the meeting and afterward through MEA research are:

- Preventative maintenance, commissioning, and recommissioning. Watch for condensation and wet spots. Fix leaky plumbing and leaks in the building envelope as soon as possible. Perform regular building/HVAC inspections and maintenance as scheduled
- Remove carpeting wherever possible to reduce the potential water absorption
- Work with custodial staff to reduce water use in the cleaning process
- Utilize gas phase exchange filters
- Employ room dehumidifiers in areas with particularly high humidity or mold issues
- Have custodial staff utilize “cluster” or “team” cleaning to reduce wet areas and the need for school-wide HVAC load
- Use wicking insulation and vapor barriers to reduce condensation
- Keep HVAC drip pans clean, flowing properly, and unobstructed
- Vent moisture-generating appliances, such as dryers, to the outside where possible
- Don't let foundations stay wet. Provide drainage and slope the ground away from the foundation

For more information on managing indoor air quality, visit the following Web resources:

- EPA's Indoor Air Quality Web page has a wealth of information and resources. Also note that the 2006 Indoor Air Quality Tools for Schools National Symposium will take place on January 12-14, 2006 in Washington, DC. (<http://www.epa.gov/iaq/>)
- Of particular interest might be EPA's documentation on mold remediation for schools. (http://www.epa.gov/mold/mold_remediation.html)
- If you need to explain your concerns about mold or obtain funding for mold remediation, there is some excellent language about mold and its risks to human health here: (<http://www.library.ca.gov/crb/01/notes/v8n1.pdf>)
- For professional education programs on mold remediation, see the Indoor Air Quality Association Homepage. (<http://www.iaqa.org/>)

III. Several other great **ideas and strategies** were shared at this meeting. Here are some of them:

- The Community Energy Loan Program (CELP) is a way that the state can help fund certain energy-related projects. Look into CELP funds as a way to support your next project. (<http://www.energy.state.md.us/programs/government/communityenergyloan.htm>)
- The Maryland Energy Efficiency Standards Act is in a state of public review until October 21st. Take the time to review the act and make comments to ensure that your interests are represented in the final regulations. (<http://www.energy.state.md.us/eesa/index.html>)
- A great way to weed out phantom plug loads is to make a conscious effort to unplug items before the summer break. Montgomery County has a big event on the last day of school to make sure everything is unplugged.
- Vending machines are big energy users. Negotiate your contracts to ensure that all the machines utilize energy saving technologies. Also, make sure that all of your vending

machines are earning more in revenue than they are costing in energy.

(http://www.energystar.gov/index.cfm?c=vending_machines.pr_vending_machines)

- Coordinate with other counties to purchase new energy efficient equipment in bulk. Bulk purchasing can reduce the per-unit cost of an item, thereby reducing any additional marginal cost associated with a more energy efficient product. Need help here? Contact your MEA rep (info below).
- In-person meetings with energy management experts is available to Maryland school districts. These meetings can cover issues ranging from energy management planning, to facility performance benchmarking, to school walk-throughs. Contact your MEA rep (info below) to schedule a meeting.

IV. The Maryland Energy Administration is interested in helping schools save money and energy. We rely on your feedback to show us the best way to get this done. Here are some projects MEA is looking into based on school feedback.

- A central MEA web portal for energy management information for schools. This resource could include links to energy management resources, communications between school districts, and a calendar with upcoming activities of interest.
- Success stories/case studies of school district successes in energy management.
- Ways to work with teachers to reduce phantom plug loads.
- Providing an energy awareness training program for teachers, administrators, and other school staff.
- Support and planning for special events like an end of term “unplug” day or student energy saving competitions.
- Creating and administering small financial incentives to be used to promote energy awareness and savings in schools.

Do you have ideas related to any of these projects? Do you have ideas for other exciting projects that MEA can help you with? If so, absolutely let us know! Contact one of our school energy management representatives:

Brian Levite
240-223-5541
blevite@sentech.org

Alanna Gino
240-223-5544
agino@sentech.org

Thanks again to our sponsors for this workshop

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