



ENERGY STAR® Teaches Universities and Schools to Save Energy and Money A Case Study

Energy wasted by computers and monitors costs organizations, such as colleges and universities and K-12 schools, about \$1.5 billion every year. Universities' computers and monitors use more electricity than all other forms of office equipment combined. More than half of this energy is wasted because 60 percent of computers and monitors are left on at night and 40 percent of monitors are not enabled for power management.

ENERGY STAR, a program managed by the U.S. Environmental Protection Agency to promote energy efficiency, is helping colleges and universities, and schools eliminate costly waste through the "Million Monitor Drive" –the campaign to activate monitor power management on at least 1 million computer monitors. The Harvard University Kennedy School of Government, Penn State University, and Tulane University are among the leaders in higher education that have joined the Million Monitor Drive. Watt Watchers of Texas, a non-profit devoted to promoting energy efficiency in Texas schools, has also joined.

Power management, when enabled, allows computer monitors to go into a low-power sleep mode during periods of inactivity. Then, instead of paying utility bills for computer monitors that are kept on all day and night, schools and universities pay only for the time that the computers are in use. For large organizations, this single step leads to annual savings of thousands of kilowatt-hours and dollars. A university, for example, can expect to save 200,000 kilowatt-hours per year, or about \$17,000 in energy bills, for every 1,000 university monitors.

To make implementation of power management simple, ENERGY STAR created EZ Save, software that allows IT professionals to enable entire networks of computer monitors from a central location, and EZ Wizard, a tool that helps individuals to enable their own desktops. Both can be downloaded from the ENERGY STAR website at no cost.



The Crimson Green Their Computers

The Harvard University Kennedy School of Government (KSG), in partnership with ENERGY STAR, is saving more than \$14,000 a year on its energy bills by enabling 800 computer monitors to power down to sleep mode when not in use. Using EZ Save software developed by ENERGY STAR, the entire enabling process was carried out in less than four hours. Without the software, the changeover would have been impractical because of the staff time required to enable individual workstations, according to Stewart Uretsky, Associate Dean and Chief Financial Officer at KSG.

KSG is also helping the environment. By putting their monitors to sleep, the school has reduced energy consumption by 160,000 kilowatt-hours per year, enough electricity to power more than 180 U.S. homes for one month. This single step eliminates the same amount of air pollution that would be associated with burning 7,000 gallons of gas. Efforts have expanded to the Harvard undergraduates as well. The Harvard Computer Energy Reduction Program employs the ENERGY STAR EZ Wizard software tool to allow students, often not hooked up to a network, to activate monitor power management on their computers quickly and easily by clicking on an icon located at their web site.



Penn State Saves a Lion's Share of Energy and Money

A survey of the Penn State Physical Plant office building found that only four percent of the building's 268 computer monitors were set to go to sleep after the desired period of 10 minutes of inactivity. Doug Donovan, Penn State's Energy Program Engineer, used ENERGY STAR's EZ Save software to perform a survey of monitor power management status and then, with a few simple steps, enabled all 268 computer monitors for power management. Donovan is now expanding the program within Finance and Business, Penn State's main administrative unit. Extrapolating the results over the entire University Park campus, the university can expect to save about 740,000 kWh per year or more than \$17,000 a year in energy bills at 2.3 cents/kWh energy costs. Receiving their electricity from a coal-fired utility, these savings are equivalent to removing 780 tons of carbon dioxide emissions each year.

Tulane University

Tulane University Students Like to Sleep

At Tulane University, energy management is not just university administrators' job. For three sophomore students who reside in a two-bedroom ENERGY STAR dorm suite, energy efficiency is a way of life. During January, these students began promoting their own "Sleep is Good" campaign to raise students' awareness about putting computer monitors to sleep.

The students are encouraging the campus-wide use of ENERGY STAR EZ Wizard, an ideal tool for college students that are usually not hooked up to a conventional network. Students simply click on an EZ Wizard link located on the Tulane Web-site, <http://green.tulane.edu/energysmart/Computers.html> to enable power management on their computer in seconds. For each computer monitor put to sleep with EZ Wizard, about \$13 per year can be saved. If all 6,000 campus computers were activated for power management using EZ Wizard, the university would reduce energy bills by more than \$78,000.



We want Y'ALL to PASS IT ON!

Watt Watchers of Texas Watch Out for Energy Savings

A non-profit program designed to help save Texas school districts' energy dollars, Watt Watchers of Texas has pledged 100,000 computer monitors to the ENERGY STAR Million Monitor Drive by May 2003. Working alongside energy managers at 162 school districts in Texas, Watt Watchers hopes to enable monitor power management features in at least 100,000 of the approximately 269,000 or more computers in the school districts.

Enabling monitor power management and switching these monitors into low-power sleep mode during periods of inactivity will provide a great energy savings for these districts. Watt Watchers of Texas initiated the student-led campaign with the Texas Energy Education Development (TEED) Project. Through this campaign, 1,000 disks with the Energy Star EZ Wizard program will be distributed to schools across Texas, helping them reduce energy usage by utilizing power management features on their individual classrooms' monitors. The Watt Watchers staff will also deliver workshops to student councils throughout the school year to emphasize the importance and ease of implementing power management. In all, an estimated \$1.6 million in energy costs can be saved when the monitors switch into sleep mode. These dollars will go toward projects and activities that enhance the students' scholastic experience.