EcoNotes

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The Price We Pay

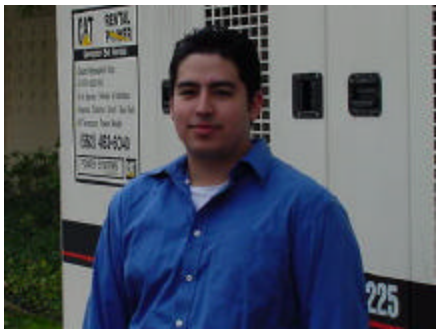
In this issue of EcoNotes we had planned to focus on water conservation and quality. Then the reality of an energy crisis in California hit. After careful consideration, we realized that water and energy conservation are closely linked. Our attitudes and behaviors in the way we use water are tied to the way we use electricity, and vice versa.

This issue will provide meaningful tips and reminders of how we can each reduce the amount of water we use as well as the quantity of electricity we consume. We will also show you the ways that Claremont McKenna is conserving resources, some of which require your assistance.

The fact is that we live in a desert and we purchase much of our water and electricity from outside sources. We must all find ways to live within the restraints of our environment. However, it's a small price to pay for living in a place where you can ski in the morning and surf in the afternoon.

We hope you will read this issue of *EcoNotes* and find new ways to live with the environment in mind. This issue, and an archive of past issues, can also be found on the Claremont McKenna Web site (www.mckenna.edu). Pass it on.

Environmental Concerns Committee – A Student's View



--By Victor Andrade '02

In a recent interview, Victor Andrade '02, a student member of the Environmental Concerns Committee, shared some great thoughts with us.

What role do students play on the Environmental Concerns Committee?

The Environmental Concerns Committee constitutes a forum for student activism at CMC. Students on the committee voice their on-campus environmental concerns with faculty members. This committee creates active dialogue between those who seek changes (i.e. students) and those who can provide them (i.e. administrators). If nothing else, the committee raises the administration's awareness of the concerns of the student body.

Why did you join?

I joined the committee because environmental activism is a both a right and a duty of all students. Voicing the opinions of students on school policy and programs that may be detrimental to our environment is a worthwhile pursuit.

What are your goals on the committee?

When the committee convenes this year, my energies will be directed towards the impending doom of a continued power crisis (it's true that literature students can't resist a pun). Many issues need to be addressed regarding alternative power sources and on-going power conservation strategies.

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Water Use at CMC

Here are the water meter readings taken on a representative day during average occupancy.

Building	Gallons per Student 10/00	Gallons per Student 12/00
Appleby	881	700
Auen	1,226	904
Beckett	859	651
Benson	1,112	786
Berger	1,333	369
Boswell	1,327	1,206
Fawcett	775	550
Green	1,038	917
Marks	1,312	973
Phillips	1,243	1,155
Stark	453	456
Wohlford*	784	688
Average Use	**1,032**	**777**

*No laundry facilities in this building.

As you can see, some dorms are using water more efficiently than others. For tips on how to save water every day, read on…

Ways to Save Water at Home

Here are some great ideas from the City of Los Angeles Water Services Department:

- *Check your toilet for leaks*. Even a small leak can waste thousands of gallons a month.
- *Take shorter showers*. Save up to 5 – 10 gallons for every minute you cut back.
- *Use your washing machine for full loads only*. Every load uses about 15 gallons.
- *Keep a bottle of drinking water in the refrigerator*, so you won't have to run the tap to cool it.
- *If you wash dishes by hand, don't leave the water running for rinsing*.
- *Do not allow the hose to run as you wash your car*. Use a self-closing hose nozzle, or turn off the water between rinses.

A Message from the Dean of Students

While it has been said many times before, we need to hear it again: The energy crisis is a reality in California. It's true we have received some relief in recent days, but we have been in a Stage 3 alert for the better part of three weeks. The key elements during this difficult time will be conservation and preparedness.

We are fortunate in that we have recently installed five (5) new 2-megawatt generators; have existing generators already in place; and have access to generators at the physical plant on Sixth Street. These will be important backups if Edison finds it necessary to institute rolling black outs.

Our office checks the Southern California Edison web site every morning for the latest news and conditions. This, we hope, will give us fair warning of impending blackouts, information that we will pass on to you.

Preparedness on your part means saving your computer work frequently and backing up your files on a regular basis. It also means checking your e-mail for messages from our office warning of any expected problems. In terms of conservation, we need to always be mindful of the electricity we use.

CMC students have been remarkably resilient given the current situation. While we have been temporarily relieved by Federal acts to protect our right to electric service, the reality is that California faces a challenge for at least the next 24 months. This means that we need not to think of this as a temporary situation; we need to think of it in terms of a lifestyle change.

I thank you for your cooperation and for your continued patience as we face this challenge together.

–Torrey Sun, VP, Dean of Students

2000/2001 Shaping Up As Cleanest Year on Record

For the second year in a row, the greater Los Angeles metropolitan area has not had a single Stage 1-ozone episode when air quality is very unhealthy, according to the South Coast Air Quality Management District. As the smog season drew to a close, there were a total of 40 days that exceeded federal standards for ozone - compared to 41 in 1999. And now for the bad news...also for the second year, Los Angeles held its number two spot for the worst air in the nation, trailing Houston's 44 unhealthy days.

All year long, CMC employees do their part to help keep our air clean! On February 13, employees are invited to attend the annual "Meet Your Match" (rideshare match, that is) Continental Breakfast at The Hub. We will be "matching" rideshare partners, sharing information about ridesharing, and drawing names for prizes. You do not have to be a rideshare participant in order to join in the celebration.

With the high cost of gasoline these days, check out the gas saving tips at the Southern California Association of Government's commuter website at www.socalcommute.org.

–Jill Nicholas, Rideshare Coordinator

We Want Your Ideas

Many of our best conservation ideas come from those on campus who are using the facilities. If you are a student who sees waste, please report it. If you are a faculty member who has found a way to conserve, please share it. If you are staff member who has developed an energy-efficient way to accomplish a task, please let us know.

The Environmental Concerns Committee is made up of faculty, staff, and students. You can submit your ideas to any member of the committee or by contacting Lynn Price in Administrative Services. We will make sure your thoughts are shared with others on campus.

Energy Conservation Tips

Some Great Ideas for Campuses

Following are some conservation ideas from the University of Buffalo. Many of these ideas are directed at campus activities, but can also be applied at home.

Lights

- Turn off unused or unneeded lights.
- Use natural lighting whenever possible.
- If you have a desk lamp, make sure it uses florescent bulbs.
- Do not use halogen floor lamps in any campus building. These lamps are very energy wasteful and may pose a safety risk.

Heating and Cooling

- Dress appropriate to the season.
- During the cold season, open blinds and drapes to let the sun in. If there's no sun, keep them closed to keep the heat in. When it's warmer outside, blinds and drapes keep the hot sun out.
- Use hot water sparingly.
- Keep windows and doors closed in heated and air-conditioned areas.

Computers

- Keep computers off unless they are in use. (A local news program recently reported that it costs more than a dollar a day to keep a computer running.)
- Turn off printers, especially laser printers, unless printing.
- When purchasing computers and peripherals, buy low wattage equipment certified by the EPA's "Energy Star" program.
- Minimize use of screen savers and enable power management features so your computer equipment will go into low power "sleep mode" when not actively used.

CMC Is Energy-Wise

The Facilities Maintenance Control System (FMCS) system at The Claremont Colleges, is a tool used for environmental control, energy savings and building maintenance. All new buildings are designed to meet Title 24 energy standards for HVAC and lighting systems. In the buildings where this system is installed, temperatures are controlled and monitored via computer. The use of large energy-consuming equipment such as air conditioners and boilers is optimized for energy savings. When problems arise in the building, the system initiates alarms and gives direction to maintenance personnel. This minimizes equipment failure and downtime. Facilities officers and building managers can access the system over the World Wide Web to make system changes and monitor facilities.

At Claremont McKenna College more than twenty of our buildings have FMCS. Some building systems are more elaborate than others. The most advanced systems are in Marks and Adams. The latest technology is also installed in our newest buildings like Roberts North & South and Stark Hall. We have also incorporated this system into many of our lighting systems throughout campus. Administrative Services at Story House maintains and operates this system.

Interesting Fact: Even when turned off, CD players in the U.S. still consume enough energy in one year to power the Las Vegas Strip for six months.

--Southern California Edison

EcoNotes is published by the Environmental Concerns Committee, a group comprised of faculty, staff, and students. Any submissions or comments can be directed to the Administrative Services Department. We reserve the right to edit all submissions.

Environmental Concerns Committee (Continued from Page 1…)

In light of the current energy crisis in California, what do you think students should be doing to conserve?

Conservation remains the key solution to the power crunch. Governor Davis has recently signed a bill that will make power conservation mandatory for businesses in California. Our role as a community is to echo these efforts without coercion. Conservation begins in the dorm room. The biggest electricity guzzlers are our beloved computers. The key to cutting down usage is to shut down your computer whenever it's not in use. This includes shutting down before going to bed and while you're in class. I must admit that even I have left my computer on in the past for a day or two in file transfer efforts, but I've changed my ways--so can you. It's also important to turn off or disconnect any appliances or electronics you were using when the power went out. If you have a surge protector, you can just turn that off without unplugging the individual units. Remember to turn off your lights whenever leaving your room. A battery-operated alarm clock is a sound investment considering that blackouts are imminent. Use those stylish flashlights provided by your RA only when the power is out. Avoid using candles at all costs; a dark dorm is better than a burnt dorm. Just use common sense; you don't need to be watching TV, listening to the stereo, and writing a paper all at the same time.

How do you think students are doing? (You don't have to answer anything that may be self-incriminating.)

Overall, students are coping well with the power crisis. At first the prospect of attending dark classrooms/igloos (those fortunate students with early classes in Roberts South will understand this quite well) proved to be a great incentive for vagrancy. Escape to the outside world, where power flowed and light was had by all, became the

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Environmental Concerns Committee (Continued from Page 5…)

only refuge for many students. But as the outages became more regimented, students were less apathetic and nomadic. Now, due to suspension of fines for interruptible power customers, the colleges should remain online even during interruption requests.
Moreover, all colleges are in the process of implementing powerful back up generators that could potentially keep the campuses with power even during rolling blackouts. These measures should assuage even the most embittered soul, but should not prevent students from doing their part to conserve.

Thank you, Victor!

Water Web Sites

Check out these web sites dedicated to clean water and conservation:

American Water Resources Association (www.aura.org) - A professional scientific society promoting understanding of water resources and related issues.

Groundwater Resources Association of California (www.grac.org) - Dedicated to keeping California's water supply clean.

Surfrider Foundation (www.surfrider.org) - A non-profit environmental organization dedicated to the protection and enhancement of the world's waves and beaches.

Other CMC Efforts to Conserve

In addition to the high-tech Facilities Maintenance Control System (FMCS) system, CMC also uses to low-tech ways to conserve resources around campus. Here are just a few:

- Turn off the fountains during energy crisis alerts and during hotter months when water evaporates quickly.
- Turn off the irrigation system as often as possible. After storms and during milder weather, the sprinklers may remain off for several weeks at a time.
- Turn off lights at the tennis courts at 8 p.m. every night.
- Turn off track lighting when generators are necessary and run track lighting only a limited schedule during normal periods.

Other programs have been in place for many years. For example, offices and classrooms are equipped with motion-detection lights that turn off when the room is not occupied for an extended period of time. Administrative Services has also been diligent about providing stickers in public facilities such as restrooms asking visitors to report leaking faucets and turn off lights. During the summer, when residence halls are unoccupied, all lights are turned off – including hall lights that are regularly on throughout the year.
Conservation is both an economical and environmental issue. It just makes sense.

You can do your part to help conserve this winter by shifting your electrical usage to "off-peak" winter periods when the demand for electricity is lower, before 4 p.m. and after 7 p.m.

--Southern California Edison

Electricity Use at CMC

Here are the electric meter readings taken on a representative day during average occupancy. The cost per day will only continue to rise as the energy crisis continues. Once again we can see that conservation has an economic value, in addition to the environmental considerations.

Building	Consumption 10/00	Cost	Consumption 11/00	Cost
Appleby	7,600	$389.49	6,632	$338.00
Auen	33,001	1,691.77	29,148	1,485.52
Beckett	13,960	715.43	11,902	606.58
Benson	23,738	1,216.54	18,309	933.11
Berger	13,059	669.26	11,978	610.46
Boswell	6,960	356.69	6,340	323.12
Fawcett	36,120	1,851.10	32,640	1,663.49
Green	7,600	389.49	6,632	338.00
Marks	34,169	1,751.12	26,070	1,328.65
Phillips	13,352	684.27	12,479	635.99
Stark	49,983	2,561.56	43,345	2,209.07
Wohlford*	6,960	356.69	6,340	323.12
Average Use	**246,512**	**********	**211,815**	**********

*Consumption is measured in kilowatts.

Other Campuses Discuss Energy

Following is a partial reprint of an article that appeared in the January/February 2001 Facilities Manager magazine.

Does anyone have or know of websites(s) that promotes desktop energy savings opportunities? Is anyone aware of public entities, utilities, and/or corporations that have promoted office/desktop energy savings opportunities? How about information on recent energy conservation projects?

In response to your question about personal workstation office equipment energy use, EPA has a lot of information in their Energy Star Program about energy efficient office equipment. Energy Star labeled equipment has power management features that put equipment into a "sleep" mode when it is not being used and then return to full power almost instantaneously. Energy Star products have all the performance features of standard equipment, but you must make sure the power management features are activated in order to get the savings…. On a monthly basis, this equipment uses about half as much electricity as conventional equipment. This means a typical office could save approximately 50 percent on the energy costs for these products by taking advantage of the power management features of Energy Star-labeled office equipment. Interestingly enough, specifying Energy Star-compliant features on equipment generally doesn't increase equipment cost in quality equipment.

Take a look at the EPA website www.epa.gov/appdstar/esoe/index.html for a good description of myths and facts about energy efficiency and office equipment operation. Another source of energy efficiency information is the Energy Solutions Database operated by the energy Ideas Clearinghouse at www.energyidea.org/energy_solutions.

…There is an excellent website that might have what you're looking for: www.energyideas.org.