

NAZARETH COLLEGE OF ROCHESTER

Energy Management Program



WHAT We're doing now.

Nazareth College has been aggressive in its energy management. The following is a list of green initiatives that have been taken on our campus.

- ▶ Energy efficient motors, lights, boilers, and chillers are all used on campus.
- ▶ Variable Speed Motor Drives – the drives slow the motors to match the speed needed for the load and save energy at the slower speed.
- ▶ Computerized energy management systems lower/raise temperatures and turn air moving equipment on/off based of the occupancy of designated spaces.
- ▶ Low water flow toilets, sinks, and shower faucets all dispense fewer gallons of water.
- ▶ Campus Residence Halls and some academic buildings have low occupancy during the month of December, allowing temperature set backs and reduced energy.
- ▶ We recycle. One ton of paper made from recycled scrap saves 4100 kilowatt-hours of energy; recycling one ton of glass saves the energy equivalent of 10 gallons of oil.
- ▶ Buildings' insulation, windows and doors were upgraded to reduce the need for energy.
- ▶ Our housekeeping staff uses cleaning products that are environmentally safe.
- ▶ The Facilities Department currently operates a green fleet, including 4 fully electric cars and two electric golf carts.

WHAT THE FUTURE HOLDS?

To ensure program success, it is important to continuously maintain and build on the foundation that has been developed. The following are steps Nazareth plans to take in the future to ensure the program's success.



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- ▶ New Opportunities – continue to explore new savings opportunities and state-of-the-art equipment.
- ▶ Share the Success – get the campus actively community involved in the Energy Management Program.
- ▶ Awards – present awards and certificates to Nazareth students, faculty, and staff in recognition of their contributions to the program.
- ▶ Expand the Network – draw more people into the energy program through training and education.
- ▶ Foster Ownership – encourage senior staff to champion program among peers on campus.

WHAT STUDENTS AND THE CAMPUS COMMUNITY CAN DO TO HELP?

There are a number of things that people can do to conserve heating and cooling energy:

- ▶ Dress appropriately for the season; layer your clothing.
- ▶ Avoid the use of portable electric space heaters; call Facilities at 389-2354 for rooms too hot or too cold.
- ▶ Keep thermostats set at 68 degrees during the heating season and 77 degrees during the cooling season.
- ▶ Keep exterior doors and windows closed during the heating and cooling seasons.
- ▶ Remember to close windows when rooms will be unoccupied.
- ▶ During the heating season, open blinds, drapes, and curtains to allow solar heat gain. In the evenings, close blinds, drapes, and curtains to reduce thermal heat loss.
- ▶ Use hot water sparingly.
- ▶ Turn off all unused electrical appliances when not in use.

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- ▶ Know and cooperate with scheduled hours of building operations; do not expect buildings to have fully operational HVAC systems during evenings and weekends when there is minimal occupancy.
- ▶ Report energy waste to Facilities at 389-2354.

There are a number of things that people can do to reduce lighting energy:

- ▶ Use natural daylight when possible.
- ▶ If you spend a lot of time working at a computer, consider reducing the overall brightness level in your room to enhance CRT screen visibility.
- ▶ Report any lighting problems, including burnt-out lightbulbs, defective occupancy sensors, or flickering lights to your Facilities office at 389-2354.
- ▶ Turn off the lights in classrooms, offices, or restrooms when the rooms are not being occupied.
- ▶ Consider using desk lamps ("task lighting") to reduce overhead lighting in the room.
- ▶ If your building has areas where "occupancy sensors" are being used to turn lights on and off (such as conference rooms, rest rooms, and hallways), please cooperate with their use.
- ▶ Replace incandescent light bulbs with compact fluorescent light bulbs where possible.

There are a number of daily things we can do to reduce the environmental and energy costs of personal computer use on campus:

- ▶ Do not leave your computer running overnight and on weekends. Wait until you are ready to use your computer before turning it on.
- ▶ After 16 minutes, the energy needed to run your computer outweighs the start-up energy. So, if your computer is going to be inactive for more than 16 minutes, consider turning it off.
- ▶ A modest amount of turning on and turning off will not harm your computer or monitor. The life of a monitor is related to the amount of time it is in use, not the number of on and off cycles.

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- ▶ Try to plan your computer-related activities so you can do them all at once, keeping the computer off at other times.
- ▶ Do not turn on the printer until you are ready to print. Printers consume energy even while they are idling.
- ▶ Do not print emails unless it's necessary.
- ▶ Most computer equipment now comes with power management features. Check to make sure they are enacted.
- ▶ The best screen saver is no screen saver at all. Turn off your monitor when you are not using it. (This option is second best only to turning off your computer all together.)
- ▶ Use "paperless" methods of communication such as email and fax modems.
- ▶ When typing documents that will be printed, especially drafts, use smaller font and decrease the spacing between lines. Keep your document to the fewest possible pages.
- ▶ Review your document on the screen instead of printing a draft. If you must print a draft, use the blank back side of used paper.
- ▶ Use a printer that can print double-sided documents. When making copies, use double-sided copying.
- ▶ Always buy and use recycled-content paper. Look for papers with 50-100% post-consumer waste and non-chlorine bleached.
- ▶ Recycle your print paper.
- ▶ Only buy a monitor as large as you really need. Although a large monitor might seem more attractive, you should remember that a 17-inch monitor uses 40 percent more energy than a 14-inch monitor. The higher the resolution, the more energy it needs.
- ▶ Ink jet printers use 80 to 90 percent less energy than laser printers.
- ▶ Request recycled/recyclable packaging from your computer vendor.
- ▶ Buy vegetable (or non-petroleum-based) inks. These printer inks are made from renewable resources, require fewer hazardous solvents, and in many cases produce brighter, cleaner colors.

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School Shopping List for New Students

Energy used to power everyday products often comes from fossil fuel-burning power plants. Because using less energy reduces greenhouse gas emissions and improves air quality, choosing ENERGY STAR equipment is one way you can protect our planet for future generations.

Computing the Savings - ENERGY STAR Qualified Computer Equipment



Computer Monitors

ENERGY STAR qualified computer monitors automatically power down to 15 watts or less when not in use, saving up to 90% more energy than standard monitors.

Printers

Printers that have earned the ENERGY STAR rating can cut the equipment's energy use by more than 60%.



Scanners

ENERGY STAR qualified scanners, printers, and computer monitors undergo less wear and tear because they power down to "sleep" mode during periods of inactivity.

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Tuning in to Energy Efficiency - ENERGY STAR Qualified Electronics



TVs

ENERGY STAR qualified TVs use about 25% less energy than standard models.

DVD Players

If all DVD Players sold this year carried the ENERGY STAR, we would reduce air pollution by 6 billion pounds.



Stereos

Each year, Americans spend more money to power home audio equipment when turned off than when actually in use. ENERGY STAR qualified consumer electronic products in the "off" position use up to 60% less energy than conventional equipment.

A Cool Way to Make a Difference - ENERGY STAR Qualified Compact Refrigerators



Compact Refrigerators

ENERGY STAR qualified compact refrigerators use 20% less energy than standard models.

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Making a Connection with a Cleaner Environment - ENERGY STAR Qualified Telephones and Answering Machines



Cordless Phones

Telephones that have earned the ENERGY STAR operate on one-third of the power used by standard models.

Answering Machines

If all cordless phones, answering machines, and combination units sold this year were ENERGY STAR, we would reduce air pollution by over 650 million pounds, the equivalent of taking 7,000 cars off the road.



Brightening the Future - ENERGY STAR Qualified Desk Lamps and Lighting



Desk Lamps

Ninety percent of the energy generated by standard light bulbs is wasted as heat, leaving only 10% to be converted into visible light. However, light bulbs that have earned the ENERGY STAR use two-thirds less electricity than conventional models.