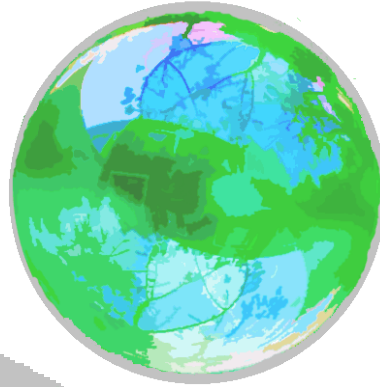
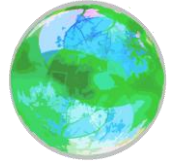


First Edition



COLONNADES NEIGHBORHOOD

Sustainable Living Guide



Students have the opportunity to become models of sustainable living in campus residential housing. The new Colonnades residence halls are the first residential buildings on campus to be built according to the LEED 2009 requirements. More importantly, all Colonnades neighborhood members can adopt sustainable living habits to reduce their environmental impact. This guide suggests tips to reduce your environmental impact in terms of power and water consumption, waste management, transportation and purchasing.



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Colonnades + LEED

Elon's Green Building Policy specifies all new buildings exceeding 8,000 square feet must pursue LEED certification. The three new residence halls in the Colonnades Neighborhood are each about 33,500 square feet. This demonstrates Elon's commitment to sustainable design and construction practices.

What is LEED?

LEED stands for Leadership in Energy and Environmental Design.

The new residence halls in the Colonnades Neighborhood follow the LEED 2009 requirements. The U.S. Green Building Council created LEED as a way to mainstream sustainable building and design processes to encapsulate environmentally conscious and energy efficient principles.

LEED 2009 is unique because it includes a regional priority category.

The three new residence halls are registered for LEED with a goal of Silver certification.

The two existing residence halls are not LEED certified; however, they do have sustainable features.

LEED 2009 Credit Categories

- Sustainable Sites
- Water Efficiency
- Energy & Atmosphere
- Materials & Resources
- Indoor Environmental Quality
- Innovation & Design Process
- Regional Priority

Elon University is a member of the U.S. Green Building Council.



Highlights of New Residence Halls

- Increased overall energy efficiency of each residence by 28%
- Installed a geothermal system to serve as the primary source of heating and cooling
- Used high-efficiency lighting and mechanical systems
- Diverted about 90% of construction waste from the landfill
- Installed low-flow toilets, showerheads and other plumbing fixtures
- Installed vegetation adapted to the local climate
- Used regional building materials
- Used products with recycled content
- Used low-emitting materials containing low or no amounts of Volatile Organic Compounds (VOCs)
- Adopted a green cleaning program for use in the buildings

Highlights of Existing Residence Halls

- Installed solar thermal systems to meet hot water needs
- Used high-efficiency lighting and mechanical systems
- Installed low-flow plumbing fixtures
- Installed vegetation adapted to the local climate
- Used products with recycled content
- Used low-emitting materials containing low or no amounts of VOCs

POWER



On average, the existing Colonnades residence halls consume 17,625 kWh per month. This equates to 180,039 pounds of CO₂ each school year. This is the equivalent emissions of burning over 9,000 gallons of gasoline. Help reduce this amount by following the simple tips provided here.

Thermostats

Keep your thermostat on 76 or higher on "cool" during warm months and 68 or lower on "heat" during cold months. Make small adjustments to thermostat at first. Adjusting the thermostat to the season can cut energy consumption by 4% per degree.

Thermostats vary by building; please see the Physical Plant's website www.elon.edu/physicalplant for an educational video on the appropriate settings for your thermostat.

Benefits of CFLs

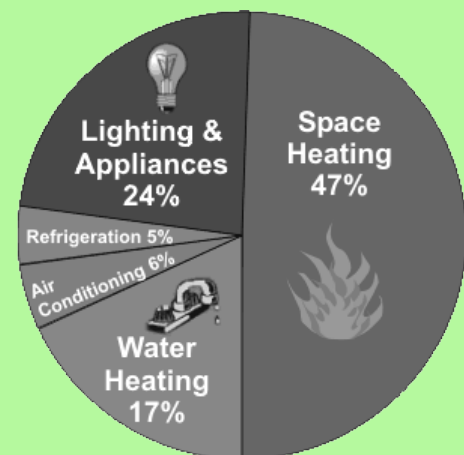
- A Compact Fluorescent Lightbulb or "CFL" can save up to \$40 throughout its lifetime.
- It uses 75% less energy, lasts 10x longer and produces 75% less heat than an incandescent bulb.

Energy Saving Tips

- Switch your light bulbs to CFLs
- Turn off lights when not in use or where natural light is sufficient
- Turn off appliances when not in use, such as televisions, speakers and computers
- Unplug appliances, such as cell phone and computer chargers when not in use
- Keep the windows and exterior doors closed when the AC and heat are in use
- Use a fan whenever possible to cool a room before turning down the thermostat
- Close blinds or curtains on hot days to reduce room temperature increase
- Open blinds or curtains on cool/cold days to allow in sunshine to increase the room temperature
- Use less hot water: wash your clothes in cold water and take shorter and cooler showers

Phantom Loads

This is the energy that is still being used while an appliance or charging cord is powered off but still plugged in. In other words, items that are plugged into the outlets are still using energy. This amount of energy is called a *phantom load*.



Source:
<http://www.pasolar.ncat.org/images/graph02.gif>



WASTE MANAGEMENT

Reduce, Reuse, Recycle



How can you reduce?

- Bring a coffee travel mug instead of using disposable cups and lids
- Use a reusable water bottle instead of bottled water
- Purchase fewer food items with excess plastic or paper wrappings
- Only print documents that are necessary to have in hardcopy
- Set printing property settings to print double-sided (duplex)
- Purchase quality goods that will not go out of style or break quickly

Where do you put recycling oddities?

Locations listed in closest proximity to Colonnades

Cardboard locations: Colonnades Dining Hall and Moseley Center - trailer behind buildings

Printer Cartridge bin locations: Colonnades A Trash Room and Moseley Center - outside Phoenix Card Office

Household Battery bin locations: Belk Library - main stairwell and Moseley Center - outside Phoenix Card Office

Please see the Office of Sustainability's Web site for a complete list: www.elon.edu/sustainability.



How can you reuse?

- Get creative!
- Make that glass bottle your new water bottle
- Make a notepad out of your old documents or drafts of papers
- Save those glass food containers for storing leftovers; do not heat in the microwave or oven
- Reuse cardboard boxes as designated in-room recycling containers



What can you recycle?

- Paper (all kinds & colors)
- Magazines
- Newspaper
- Cardboard
- Plastic #1 and #2
- Glass
- Aluminum cans
- Steel/Tin cans
- Batteries
- Printer Cartridges

What is it recycled into?



Polar fleece, tote bags, furniture, carpet



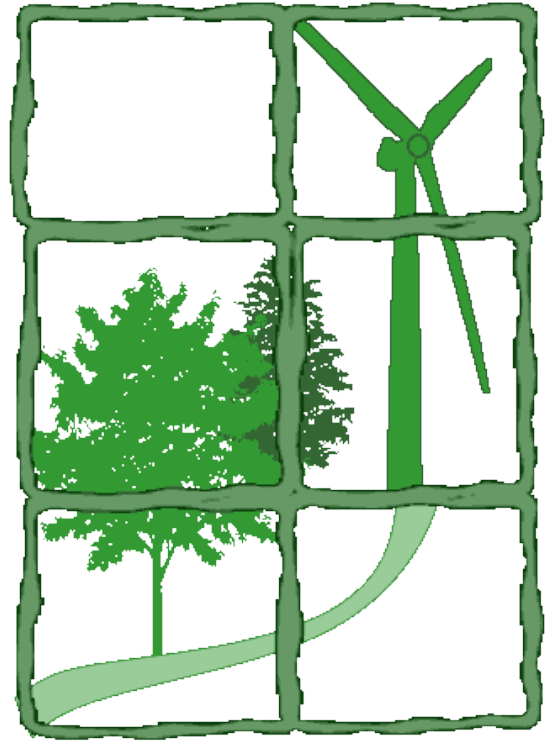
Laundry detergent bottles, oil bottles, pens, recycling containers



IN THE RESIDENCE

Bedroom

- Turn off and unplug items when not in use
- Use CFLs in all light fixtures
- Keep windows closed if using air conditioning or heat
- When purchasing new bed linens, consider buying organic cotton or other eco-friendly products such as hemp or bamboo
- When cleaning out closets consider donating items to local charities and thrift stores
- Clean your room to increase indoor environmental quality leading to improved productivity and happiness
- Consider buying clothes from local second-hand shops
- Designate a paper recycling bin or basket for unwanted papers and magazines
- Use a desk lamp or natural light when possible, instead of overhead lighting



Kitchen

- Turn off the water if not in immediate use
- Use cold water when possible as hot water requires a large amount of electricity
- Use the dishwasher only with full loads
- Use an electric tea pot to heat water rather than a stove top
- Unplug kitchen appliances such as a toaster, coffee maker, electric tea pot and others when not in use
- Buy a water filter pitcher to fill a reusable water bottle rather than buying bottled water

Go to <http://www.epa.gov/osw/education/pdfs/lunch.pdf> to learn how to make a waste-free sack lunch.

- Buy less paper napkins, use more washable cloth napkins
- To decrease temperature fluctuations in the refrigerator allow hot food and container to cool first before moving to the refrigerator
- Designate a recycling bin to put next to the indoor trashcan
- Stock up the freezer, less available space in the freezer uses less electricity to cool





Bathroom

- Report all faucet leaks and faulty toilets to Physical Plant (336-278-5500)
- Take shorter and cooler showers
- Turn off the shower or faucet water while you shave and brush your teeth
- Avoid using your toilet as a waste bin whenever possible - put feminine products and old medications in the trashcan
- Buy a long lasting shower curtain that does not need to be replaced frequently
- Unplug hairdryers, electric razors, straighteners and curling irons when not in use
- Leave bathroom door open after showering to prevent mold growth
- Use washcloths to avoid face pad and cotton swab waste
- Think about purchasing more environmentally friendly toiletries and make-up
- Keep your bathroom clean to prevent mold growth, illness and to improve quality of life

According to the USGS, the average U.S. citizen uses 50 to 80 gallons of water per day. (ga.water.usgs.gov/edu/qahome.html)

Lounge

- Unplug devices such as TV, DVD player, stereos, Xbox, Playstation 3 and others when not in use
- Use lamp lighting and natural lighting as much as possible, rather than overhead lights
- Purchase electronic devices with the Energy Star label

Keep track of your energy

With Building Dashboard, you can monitor residence hall energy consumption daily, monthly and annually. Compare residences and see how many pounds of carbon are emitted. Visit <http://www.buildingdashboard.net/elon/>

Computer Tips

Laptops use 50% less energy than desktops

- Allow your laptop computer to almost completely drain its battery before charging again
- Unplug laptop charger when not in use
- Shut down all computers when you are away from them
- Remember screen savers do not save any energy and actually use more
- Enable energy saving settings on your computer
- Research the more energy efficient and environmentally aware computer companies before purchasing a new computer. See <http://www.energystar.gov>



Conventional washing machines can use 40 gallons of water per wash. Energy Star washing machines are 37% more energy efficient and use less water.

Laundry

- Use the washing machine with full loads of clothes
- When small loads are necessary adjust the water level accordingly
- Do laundry less often
- Set the water temperature to Cold/Cold which reduces energy consumption
- Use laundry detergent with the high efficiency symbol, when applicable (Front loading washing machines require high efficiency detergent to minimize soapsuds for the machines.)
- Also look for phrases such as non-toxic, biodegradable, chlorine-free, non-petroleum based
- Hang clothes on a drying rack or outside whenever possible

LABELS TO LOOK FOR

High Efficiency Detergent



Sierra Club Seal



EPA: Design for the Environment



Green Seal Certified



Green Cleaning

Why Use Green Cleaning?

Most conventional cleaning products are petroleum based and high in toxic chemicals that cause health problems. Green cleaning uses natural products and methods that are effective in the battle on dirt and germs and do not have adverse side effects. In addition to improving indoor environmental quality, green cleaning practices reduce transmission of toxic chemicals to our outside environment. The EPA states that indoor air pollutants can be 100 times higher than outdoor pollutants. Breathe easy and stay healthy with green cleaning.

- Look for the labels and seals above to help you decide which products are best to use.
- Purchase cleaning products that feature concepts such as biodegradable, non-toxic, chlorine bleach-free, etc.
- Buy washable cloths rather than using disposable wipe cloths or paper towels.



Need to save money? Make your own cleaning products.

- All purpose cleaner: ½ cup of vinegar, ½ cup of baking soda and 8 cups of water
- Carpet cleaner: Equal parts of vinegar and warm water and 1 tsp. of soap to remove stains and odors
- Toilet Bowl Cleaner: ¼ cup of baking soda and ½ cup of vinegar
- Learn more at: <http://www.ecocycle.org/hazwaste/recipes.cfm>
- Use old t-shirts, boxers and wash cloths as cleaning cloths



Purchasing

Make careful and thoughtful consumer choices. Support recycled clothing, buy from local vintage or thrift stores. Don't be fooled by ambiguous terms on labels and packaging such as 100% natural; it's not always true. Try to buy items that will be long-lasting rather than one-time use or go out of style quickly; purchase for quality. See www.climatecounts.org for a comprehensive list of the companies that are taking strides to reduce climate change and their environmental impact.



Energy Star



USDA Certified Organic



Fair Trade Certified



Forest Stewardship Council



Made from Recycled Materials



Animal-Free Testing

Environmental Impact of Bags

- Paper and plastic grocery bags both have their consequences, so avoid them all together when possible.
- Remember to bring a reusable bag with you or leave a collapsible bag in your school bag or purse.

Be thoughtful when creating organization souvenir t-shirt orders. Think about reducing the frequency of t-shirt orders; frequent t-shirt orders have large environmental impacts. If orders are necessary, consider local and more sustainable t-shirt options.

Food

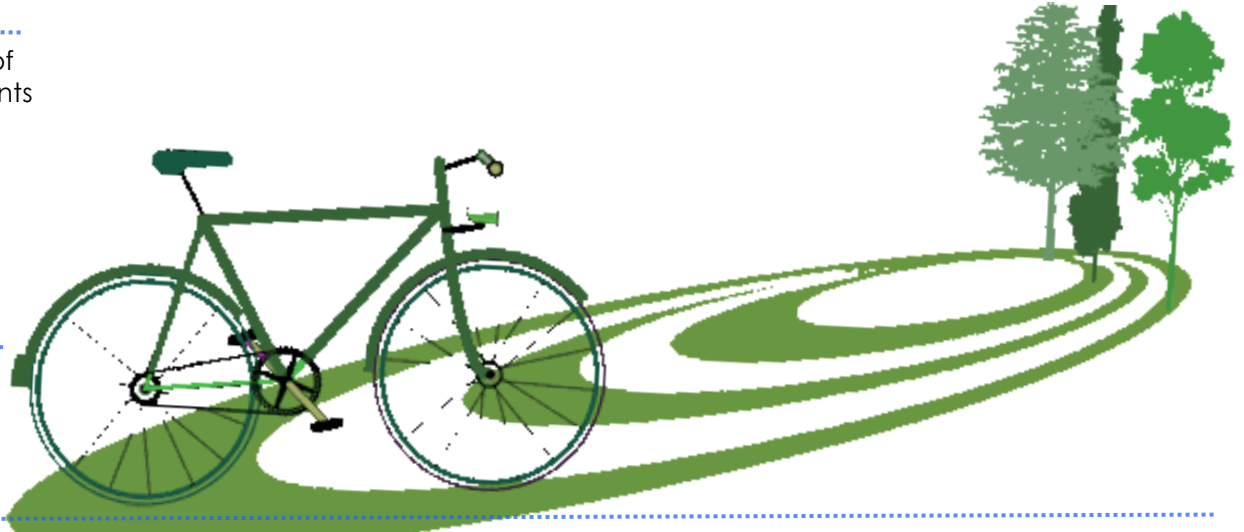
Food for Thought

- Try to buy local in North Carolina but keep in mind that driving to the farmer's market might be farther and expend more energy than the nearest coop or grocery store.
- Combine your trip or carpool with a friend to the farmer's market. Go to www.localharvest.org for nearby markets.
- Look for the organic label but remember that some farmers choose not to pay the certification fees but are still practicing organic. Don't be afraid to ask a farmer about his or her practices.
- Buy Fair Trade whenever possible, it ensures that the farmers are paid a fair price for their product. While market prices go up and down, the farmers receive a more consistent price for their product always hovering above the average market price.
- Buy seasonally. This reduces the environmental footprint of food grown out of season and the need for transportation. View a seasonal food chart compiled by the NC Department of Agriculture at www.ncagr.gov/markets/chart.htm.
- Be thoughtful when choosing to eat out at restaurants. Go to www.eatwellguide.org for ideas of nearby sustainable restaurants, bakeries and more.



TRANSPORTATION

In 2010, a survey of on-campus students at Elon indicated that 55% of those surveyed carpool when they leave campus. 12% said they bike to get around campus.



Walk

Enjoy the fresh air! 82% of on-campus students surveyed in 2010 walk while on campus. Walk as your mode of transportation. This is the perfect opportunity to enjoy Elon's beautiful gardens,

Zimride

This program provides an Elon-specific online network to help users find carpool partners. The program is FREE to students, faculty and staff. See www.zimride.com/elon to join.

Bike

Campus Recreation rents bikes to students by the semester for \$25. Cycling Club is a great information hub to learn more about purchasing bikes and maintenance.

Zipcar

This car sharing program allows users to "rent" a car when they need one for hourly or daily use. See www.zipcar.com/elon to become a member.

Bio-Bus

The Elon BioBus runs on B20 fuel which is 20% biofuel. See www.org.elon.edu/transit/biobus/ for schedule and route information. The routes service local apartment complexes and various places off campus.

Long Distance Bus

Looking to go to Boone, NC? The Mountaineer Express travels from Chapel Hill to Boone. Greyhound Buses go to over 40 locations in North Carolina alone. See www.greyhound.com for schedules and stations.

Train

The Amtrak station is located in downtown Burlington and stops at a number of locations including Greensboro, Charlotte, Raleigh, Winston-Salem and more. See www.amtrak.com for schedule information.



GET INVOLVED

Sustainable Organizations On Campus

These are examples of organizations on campus that have activities related to sustainability.

Eco-Reps

This is a peer-education group that promotes awareness of environmental issues and sustainable efforts. Eco-Reps teach lessons for Elon 101 and other classes and also work with Residence Life staff on sustainability-themed programs.

Sierra Student Coalition

This group focuses on environmental awareness and activism. As a student organization they plan educational events such as environmental film festivals, clean-ups and activities during Earth Week.

Students for Peace & Justice

SfPJ is a student run social activism organization that strives to educate and act to create a better world for all.

Elon Volunteers! Green Team

These students focus on environmental service experiences. See Elon Volunteers! for more information, which is housed in the Kernodle Center for Service Learning & Community Engagement.

Project Pericles

Many Periclean Scholars classes focus on sustainability issues and activism.

Elon Community Garden

This garden was initiated by an Environmental Ethics class and is now maintained by students giving them the opportunity to learn about gardening and community food sustainability. The garden is located behind the Truitt Center for Religious & Spiritual Life.

Elon Outdoors

This office is a branch of Campus Recreation, located in Koury Athletic Center, which organizes outdoor trips including hiking, white water rafting, rock climbing and ski trips.

Sustainable Living Learning Community

These students live together in a learning community focused on environmental issues.

Elon's Habitat for Humanity Chapter

Habitat for Humanity focuses on homelessness and poverty housing by pledging to raise funds to build one house in Alamance County each year.

Campus Kitchen

This program utilizes un-served food from the campus dining facilities to deliver meals to those in need in the community.

Contact the Kernodle Center for Service Learning & Community Engagement as a resource for service learning opportunities with sustainability themes for your organization and personal involvement. Visit www.elon.edu/servicelearning

Sustainable Education

The Department of Environmental Studies offers the following degrees:

- Environmental Studies (B.A. and B.S.)
- Environmental and Ecological Science (B.S.)
- Environmental Studies/Environmental Engineering (B.S. with Engineering).

There is also an environmental and sustainability studies minor. A number of departments offer sustainability and environmentally themed courses. The Center for Environmental Studies encourages students to conduct environmentally focused research, coordinate and participate in community outreach, organize conservation projects and publish their research in Visions Magazine.



5 SUSTAINABLE LIVING TIPS TO MAKE A DIFFERENCE

1. Increase your time with friends, commute together to off campus places of interest.
2. Limit the use of disposal cups and plates -- Encourage your friends and guests to "Bring Your Own".
3. Encourage green habits at social events -- recycle and consider composting.
4. Print wisely and reuse -- reduce text size or print duplex to use as few pages as possible; reuse old syllabi, tests and papers to make grocery lists, notes and more.
5. Take the Elon Sustainability Pledge.

Elon University Sustainability Pledge

Take the Sustainability Pledge. Individual action makes a difference! Your pledge can be renewed each semester. Pledge now at www.elon.edu/sustainability/pledge

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