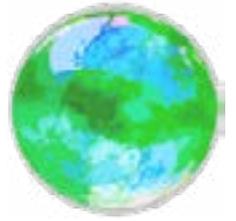
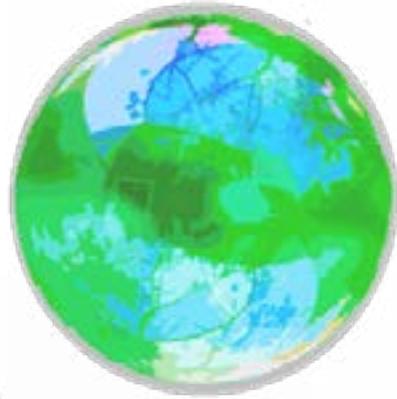


Fifth Edition



COLONNADES NEIGHBORHOOD

Sustainable Living Guide

ELON UNIVERSITY

Office of Sustainability

Sustainability is a part of residential life at Elon. The three Colonnades residence halls completed in 2011 are the first residential buildings on campus to be built according to the LEED® 2009 requirements. More importantly, all Colonnades neighborhood residents 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,



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Colonnades+ LEED®

Elon's Green Building Policy (2009) specifies new buildings exceeding 8,000 square feet will pursue LEED certification. The three residence halls in the Colonnades Neighborhood completed in 2011 are each about 33,500 square feet and are LEED Gold certified. This demonstrates Elon's commitment to sustainable design and construction practices.

What is LEED®?

LEED stands for Leadership in Energy and Environmental Design.

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.

The three 2011 residence halls are LEED Gold certified.

The two 2007 residence halls are not LEED certified, but they do have sustainable features.

The three residence halls in the Colonnades Neighborhood completed in 2011 followed the LEED 2009 requirements. LEED 2009 is unique because it includes a regional priority category.

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 2011 Residence Halls

- Increased overall energy efficiency of each residence by at least 34%
- 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, shower heads 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 2007 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

LEED is an internationally recognized benchmark for design, construction and operation of high-performance green buildings. (www.usgbc.org)



POWER

On average, the Colonnades residence halls consume 17,747 kWh per month during the school year. This equates to 165,454 pounds of CO₂ each school year. This is the equivalent emissions of burning over 8,200 gallons of gasoline. Help reduce this amount by following the simple tips provided here.



Energy Saving Tips

- Switch your light bulbs to CFLs
- When not in use, turn off lights and appliances, such as televisions, speakers and computers
- Unplug cell phones, computer chargers and appliances 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
- When daylight is sufficient, do not use lights

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 Web site elon.edu/physicalplant for an educational video on the appropriate settings for your thermostat.

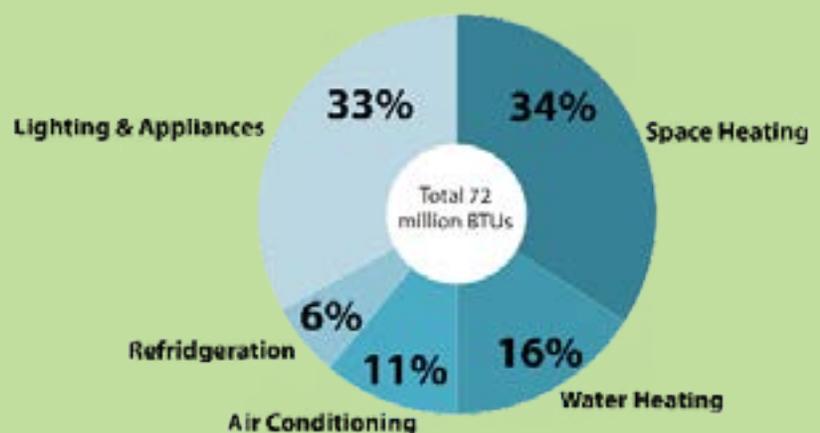
Benefits of CFLs

- A compact fluorescent light bulb 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.

Phantom Loads

Items that are plugged in still use energy even when they are powered off. The energy that is still being used while an appliance or charging cord is powered off but still plugged into the outlet is called a *phantom load*.

2009 Average Energy Consumption of Homes in North Carolina



Source: eia.gov Residential Energy Survey



WASTE MANAGEMENT

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 hard copy
- Set printing property settings to print double-sided (duplex)
- Purchase quality goods that will not go out of style or break quickly

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

Recycle

- Paper (all kinds & colors)
- Magazines
- Newspaper
- Cardboard
- Plastic #1- #7
- Glass
- Aluminum and Steel/
Tin cans
- Batteries
- Printer Cartridges
- Small Electronics

What is it recycled into?



Polar fleece, tote bags, furniture, carpet



Laundry detergent bottles, oil bottles, pens, recycling containers



Where do you recycle oddities?

Cardboard locations: Anywhere there is a paper recycling bin. Break cardboard down and place it behind or next to the paper recycling bin

Printer Cartridge locations: Colonnades Neighborhood Office; Moseley Center, near the mailroom

Household Battery locations: Belk Library, main stairwell; Moseley Center, near the mailroom

Small Electronics locations: Belk Library, main stairwell; Mooney, stairwell; McEwen Communications, room 105

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

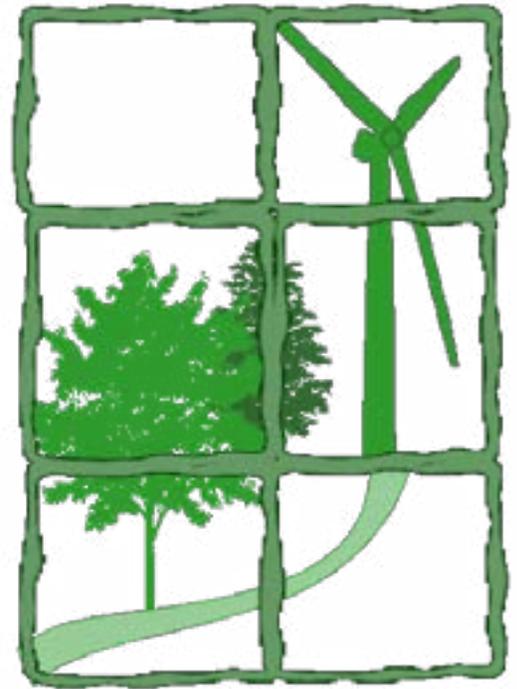
In 2013, the average U.S. citizen generated 4.4 pounds of trash per day; 1.5 pounds of that waste was recycled or composted. (epa.gov)



IN THE RESIDENCE

Bedroom

- Turn off and unplug items when not in use
- Use CFLs in 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 energy
- 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 epa.gov/epawaste/education/lunch.htm 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 by completing a work request via [FIXit](#)
- Take shorter and cooler showers
- Turn off the shower or faucet water while you shave and brush your teeth
- Avoid using the toilet as a waste bin - 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

Lounge

- Unplug devices such as TV, DVD player, stereos, Xbox, Playstation 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

Track your energy

With Building Dashboard, you can monitor most residence hall energy consumption daily, monthly and annually. Compare residences and see how many pounds of carbon are emitted. Visit 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 energystar.gov.

According to the USGS, the average U.S. citizen uses 80 to 100 gallons of water per day. (<http://ga.water.usgs.gov/edu/qa-home-percapita.html>)

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, bio-degradable, chlorine-free, non-petroleum based
- Hang clothes on a drying rack or outside whenever possible
- Clean lint screens from the dryer; a dirty screen can use 30% more energy



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

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
- Use old t-shirts, boxers and wash cloths as cleaning cloths



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 ecocycle.org/hazwaste

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 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 a distant farmers' 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 farmers' market. Go to 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 ncagr.gov/markets/chart.htm.
- Be thoughtful when choosing to eat out at restaurants. Go to eatwellguide.org for ideas of nearby sustainable restaurants, bakeries and more.

TRANSPORTATION

In 2014, a survey of on-campus students at Elon indicated that 57% of those surveyed carpool when they leave campus. 7% said they bike to get around campus.



Walk

Enjoy the fresh air! 89% of on-campus students surveyed in 2014 walk while on campus. Walk as your mode of transportation. This is the perfect opportunity to enjoy Elon's beautiful gardens.

Bike

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

BioBus

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

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 amtrak.com for schedule information.

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 zimride.com/elon to join.

Car Share

Elon's Car Sharing program allows members to "rent" a car when they need one for hourly or daily use. On the Sustainability Web site, see Campus Initiatives, Transportation to become a member.

Long Distance Bus

Heading to Atlanta, Charlotte or Savannah? Check out Greyhound Express Buses which travel to 29 cities in the Southeast region alone. See greyhound.com for schedules and stations.



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 sustainability issues and efforts. Eco-Reps teach lessons for Elon 101 and other classes and also work with Residence Life staff on sustainability-themed programs.

Sierra Club

This group is dedicated to sustainable causes and service in the name of sustainability. Activities include volunteering at local environmental organizations and in the Elon Community Garden, clean-ups and enjoying the wild places of the earth.

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.

Enactus

Enactus focuses on mobilizing university students to make a difference in their communities while developing the skills to become socially responsible business leaders.

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 next to the Powell House, behind the tennis courts.

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 exploring what it means to personally live a more sustainable lifestyle.

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 and donations to make and 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 elon.edu/servicelearning.

Sustainability 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.

Elon University established the Elon University Forest in the fall of 2010, dedicating 56 acres as a land and nature preserve.



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
elon.edu/sustainability/pledge.



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