



# Warren Wilson College Sustainable Practices Guide 2010 - 2011

Sustainability is woven into the fabric of Warren Wilson. It is grounded in our rich history of place and purpose, embedded by generations of community members who have modeled our fundamental commitment to connect values to action. The practice of sustainability flows from the College's mission, which serves as our compass for responsible citizenship, and from our unique liberal arts model of engaged learning - the Triad of academics, work and service. We are committed to adopting best practices campus-wide that demonstrate the College's sustainability commitment - our framework for responsible decision making:

*We acknowledge that a complex web of economic, social, cultural, spiritual and environmental factors determine the well-being of our community.*

*We recognize our power as individuals, and in community, to influence these complex, interdependent relationships.*

*We strive to make responsible decisions that take into account the multiple dimensions of sustainability in order to ensure quality of life now and for the generations to come.*

The Sustainable Practices Guide recommends actions that support Warren Wilson's core values and formal pledges including the American College and University Presidents Climate Commitment (visit [www.warren-wilson.edu/~ELC/New\\_ELC\\_Website\\_/ClimateActionPlan.php](http://www.warren-wilson.edu/~ELC/New_ELC_Website_/ClimateActionPlan.php)); the Strategic Plan (visit [www.warren-wilson.edu/info/plan/index.php](http://www.warren-wilson.edu/info/plan/index.php)), and the commitments approved through shared governance (visit [www.warren-wilson.edu/environmental/sustainability/commitments.php](http://www.warren-wilson.edu/environmental/sustainability/commitments.php)).

The Sustainability Working Group is grateful to the Campus Greening Crew for developing the Green Office Guide – the precursor to this document.

**The campus community is encouraged to amend this living document with additional best practices. Email your suggestions to [mflood@warren-wilson.edu](mailto:mflood@warren-wilson.edu).**

# Contents

|  |        |
|--|--------|
| Make A Commitment .....                | pg. 3  |
| Adopt Sustainable Practices .....      | pg. 3  |
| Practices .....                        |        |
| Appliances .....                       | pg. 4  |
| Cleaning and Maintenance .....         | pg. 4  |
| Computers, Printers, and Copiers ..... | pg. 4  |
| Events .....                           | pg. 5  |
| Advertising/Printed Material .....     | pg. 5  |
| Energy Use .....                       | pg. 5  |
| Food .....                             | pg. 5  |
| Gifts/Handouts .....                   | pg. 6  |
| Waste .....                            | pg. 6  |
| General Office Practices .....         | pg. 6  |
| HVAC .....                             | pg. 7  |
| Lighting and Electronic Devices .....  | pg. 7  |
| Office Supplies .....                  | pg. 7  |
| Paper .....                            | pg. 8  |
| Purchasing .....                       | pg. 9  |
| Purchasing Pattern Language .....      | pg. 9  |
| Reduce, Reuse, Recycle .....           | pg. 10 |
| Resources for Innovation .....         | pg. 10 |
| Transportation .....                   | pg. 11 |
| Sustainable Vehicle Policy .....       | pg. 11 |
| Economic Considerations .....          | pg. 11 |
| Environmental Considerations .....     | pg. 12 |
| Social Considerations.....             | pg. 12 |
| Water .....                            | pg. 12 |
| What Next? .....                       | pg. 13 |
| Additional Resources .....             | pg. 13 |

## Make a Commitment

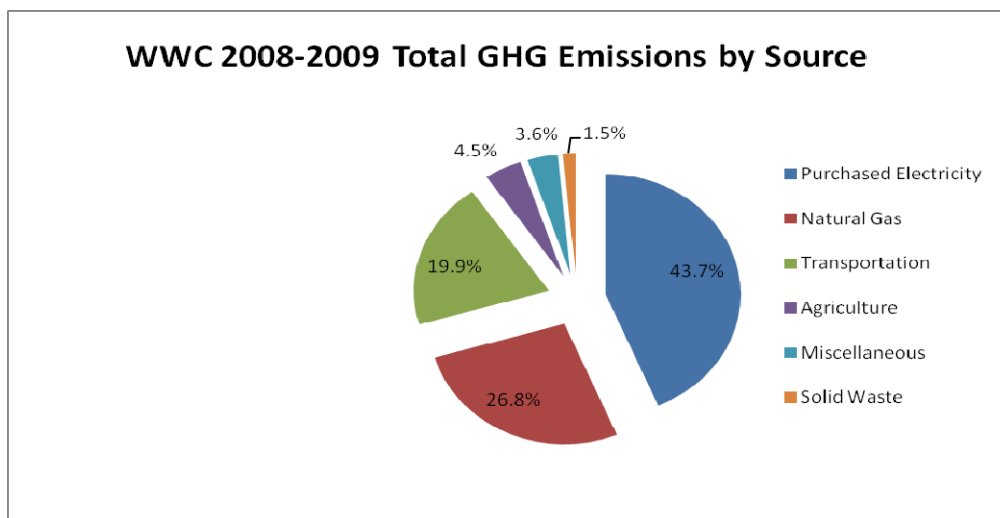
Warren Wilson's formal sustainability commitments provide the framework for campus practices. Draw from these pledges to develop your own commitment. This reflection will deepen your connection to community and place. As an office, a residence hall or floor, a department, or crew, develop a written commitment that describes how your group will support the principles of sustainability. Articulate specific actions your group will take. If your office or crew already has a formal commitment to goals and behaviors, amend it to include these sustainability principles. Consider launching your commitment in the following ways:

- Review Warren Wilson's sustainability principles and commitments and determine where your group will focus its efforts.
- Discuss potential commitment statements for your group and develop one that everyone can commit to.
- Determine what specific actions your group will take to actualize the commitment and add these to your statement.
- Contact the Campus Greening Crew ([scross@warren-wilson.edu](mailto:scross@warren-wilson.edu)) for help with commitments, to request an office or departmental "Sustainability Audit," or other support.
- Document your steps and monitor the impacts, such as changes in resource use (energy use, paper use, staff time), expenditures, and group morale.
- Celebrate your progress!

## Adopt Sustainable Practices

Help Warren Wilson live into its sustainability pledges and become a more environmentally responsible, socially just, and economically viable institution. Start small and build upon success. Even simple acts can dramatically contribute to a more sustainable community.

Recent examples of student-initiated actions funded by Campus Greening Seed Grants are the compost cob shed's living roof, the rain catchment system for the Garden, and low-flow shower head installations. The Library's recent campus-wide campaign to reduce paper consumption is another example of initiative-taking that has the potential to dramatically influence the campus footprint.



# Practices

## Appliances

- Purchase ENERGY STAR appliances and electronics. **Warren Wilson Policy directs that we purchase ENERGY STAR replacements for appliances and electronics whenever that choice is an option.** New energy-efficient models may cost more initially, but they have a lower operating cost over their lifetime. The ENERGY STAR label identifies products that use 20-40% less energy.
- Share Appliances. Refrigerators, coffeepots and microwaves use a lot of energy, so consider using communal refrigerators instead of multiple small fridges and other appliances. Use the smallest appliance you need for the job.

*Americans account for 5 percent of the world's population and consume more than 21.7 percent of the world primary energy.<sup>1</sup>*

## Cleaning and Maintenance

- Improve indoor air quality by reducing the use of volatile organic compounds (VOCs) and other harmful or toxic chemicals found in cleaning supplies, paints, etc.
- Ensure that all chemicals used in the cleaning of your office are GreenSeal certified (available through Building Services).

## Computers, Printers, and Copiers

- Talk to Computing Services to be sure your computers are set for optimum performance and efficiency.<sup>2</sup> The monitor is the single most energy-consuming component of your computer system. If you are going to be away from your computer for thirty minutes or more, enable the “sleep mode” feature on your computer. This will configure your computer to “hibernate” automatically after about 30 minutes of inactivity and turn the computer off in a way that doesn’t require you to reload everything when you switch it back on. Allowing your computer to hibernate saves energy and is more time-efficient than shutting down and restarting your computer from scratch. In Windows, the power management settings are found on your control panel. For Mac’s, go to the Apple menu and select "Sleep."
- Whenever possible, replace your old desk top with an energy efficient laptop computer.
  - Laptops use 50 - 80% less the energy than desktop computers.<sup>3</sup>
  - When buying a laptop, look for systems that use 3.3-volt components (processor, memory and LCD). These systems use 40 to 50% less energy than 5.0-volt systems and are usually equipped with a lighter battery.<sup>4</sup>
  - For personal equipment, recycle your old computer, computer battery, and other office electronics (see page 11 for information).
- Network printers to use as few as possible. Prefer recyclable toner cartridges.

---

<sup>1</sup> <http://interestingenergyfacts.blogspot.com/2008/11/us-energy-facts.html>

<sup>2</sup> <http://www.nrdc.org/greenliving/>

<sup>3</sup> [http://www.eu-energystar.org/en/en\\_022p.shtml](http://www.eu-energystar.org/en/en_022p.shtml)

<sup>4</sup> [http://www.eartheasy.com/live\\_energyeffic\\_appl.htm](http://www.eartheasy.com/live_energyeffic_appl.htm)

- Shut down printers and copiers for extended periods of inactivity. Most laser printers and copiers on campus will go into a power saving mode during periods of inactivity, but you can power down inkjets and older laser printers at night or if you are going to be away from your desk for an extended period of time.

## Events

### Advertising/Printed Material

- Go paperless whenever possible. Invite participants, receive rsvp's, post event information, provide downloadable versions of programs, handouts, and itineraries at a website created for your event.
- Announce in your materials that you are holding a green event. Publish your guidelines.
- Ensure that program guides, handouts, and other written materials are limited and, when needed, printed on 100% post consumer, FSC certified paper, double sided, with a vegetable-based ink.
- Produce banners on recyclable materials.
- Encourage your participants to be "sustainability" attendees, to support your commitment here on campus, and adopt it in their own lives.
- If there are conference attendees who will be staying on campus, recommend good practices to them - turn off lights when they leave the room, conserve water, use public transportation to and from campus, car pool, etc. Accomplish this with signage.
- For reoccurring or annual events, avoid printing dates and slogans on signs, posters, and banners so that they may be easily reused.

### Energy Use

- If you hold your event during the day, only use as much lighting as you need.
- Check to make sure your light fixtures have either CFL or LED lights.
- Warren Wilson's carbon footprint from events is already offset with our purchase of 100% Renewable Energy Credits for electric use each year.
- Calculate the carbon footprint of the event travel for the speakers and purchase carbon offsets via [nativeenergy.com](http://nativeenergy.com) or another reliable source to offset their CO<sub>2</sub> emissions; suggest to attendees that they, too, purchase offsets for their travel.
- If you encourage participants to offset their carbon footprint for the event, include this information at the event website. Recommend a site like [nativeenergy.com](http://nativeenergy.com) for offsets.
- Encourage the use of alternative transportation while on campus. Use signage on campus to facilitate foot or bike travel from one location to another. Provide information about public transportation in the area including bus routes and schedules. Encourage carpooling to the event.
- Make sure the room temperature for your event is comfortable.
- Develop an audio/video tape of your event and post it at your website so that people who choose not to travel may view the speakers afterwards.

### Food

- Provide locally grown/produced foods whenever possible.
- Use organic foods whenever possible.
- Select fair trade coffees and teas.
- Serve foods that are not individually packaged.

- Serve drinks, including water, in pitchers or other containers, not cans and bottles. If sodas are to be served, opt for large bottles whenever possible.
- Use washable dishes, cutlery, and glasses/cups. If this is not possible, use biodegradable dishes, cutlery and glassware.
- Use cloth tablecloths and napkins if possible. If not, use paper products made from recycled paper.
- Do not use individually wrapped condiments (eg sugar/sugar alternative packets, salt/pepper packets, individual creamers).
- Use bowls and shakers that can be reused.
- Omit plastic coffee stirrers and straws. Try pasta instead!
- Use sustainable centerpieces - such as potted plants, local/pesticide-free flowers, seasonal, cut tree branches, beeswax candles, or fruits that guests can take home.
- Avoid using disposable, non-biodegradable packaging, such as plastic wrap. Aluminum foil is preferred as it can be washed and recycled.
- If food provided is locally sourced, whenever possible place small cards in front of the food indicating the source.
- Work with local caterers, like Sodexo, who know how to select green event foods.
- Educate your public. Make an announcement at the meal about the commitment to green practices and the sources for the food.

### **Gifts/Handouts**

- Be sure your gifts or favors reflect your sustainability ethic. Provide locally made gifts of sustainable materials. Herbal soaps and salves, books from local presses with local authors, photos that communicate sense of local place are good options. If using all cotton t-shirts or other manufactured favors, purchase them from sources using verifiable fair labor practices.
- Use Warren Wilson-made products when appropriate.

### **Waste**

- Have appropriate recycling receptacles in place (cans/bottles/mixed paper/trash/compost). Ensure that catering staff or vendors comply with your efforts to make it a sustainable event by using the appropriate trash/recycling receptacles.
- Collect and reuse plastic name tag holders.
- Compost food waste if possible.
- Provide biodegradable containers for participants to take left-over food with them.

## **General Office Practices**

- Set an example for sustainable practices and be a positive force for change.
- Celebrate progress.
- Keep the workplace healthy: wash your hands; stay away if contagious.
- Eliminate toxins or allergens from the air from scented products, air fresheners, etc.
- Reduce or eliminate paper use for hand drying (bring your own bandana!).

## HVAC

- Set heating and cooling temperatures correctly to keep the space comfortable and energy efficient. If temperatures are not comfortable, call FMTS. Opening windows when heating and cooling systems are running creates a significant increase in energy usage.
- If you are using a space heater in an old building, check with FMTS and make sure the unit is energy efficient and safe.
- Dress for the indoor temperature.

## Lighting and Electronic Devices

- Contact the Electric Crew and ask to switch all office light bulbs from incandescent or halogen to CFLs or LED's.
  - Electric current works in an incandescent or halogen lamp to heat up a metal filament in the light bulb. Only 10% of the electricity consumed generates light-the rest ends up as waste heat.
  - CFLs use 1/4th the electricity of incandescent bulbs and last up to ten times as long. For information about safe disposal of CFLs (bring them to Recycling) and special procedures for clean-up should they break, see [http://www.energystar.gov/ia/partners/promotions/change\\_light/downloads/Fact\\_Sheet\\_Mercury.pdf](http://www.energystar.gov/ia/partners/promotions/change_light/downloads/Fact_Sheet_Mercury.pdf)
- Turn off the lights. Switch off lights when you're not using them. Most building electricity use is from lighting. Talk to Public Safety about the advisability of turning off your interior building lights at night.
- Use power strips. Group electronics together and plug them into power strips so that only the power strips are plugged directly into the wall. At the end of the day, simply turn the power strip off to avoid **phantom loads**. Phantom load refers to the energy that is consumed by products left plugged into the wall when not in use. Almost all electronic devices (including battery chargers for cell phones, laptops, MP3 players, etc) use nearly 75% of their total kw consumption when they are off but left plugged into the wall! The EPA estimates that 6% of US electricity demand is from these phantom loads.
- Make use of the sun. Sunlight is the cheapest and most energy efficient light and heat source. Open those blinds and work by daylight when possible.
  - During warmer months use blinds to focus sunlight onto the ceiling where it will provide light without adding excess heat.
  - During colder months, let the sun shine in. Even on a cold winter day, sun streaming into a room can raise the temperature several degrees and provide ample light.
  - Arrange your work station close to a window to maximize available daylight.

*If every American home replaced just one light bulb with an ENERGY STAR qualified bulb, we would save enough energy to light more than 3 million homes for a year, save more than \$600 million in annual energy costs, and prevent greenhouse gases equivalent to the emissions of more than 800,000 cars.<sup>5</sup>*

## Office Supplies

- Use manual pencil sharpeners.
- Avoid disposable pens and pencils: seek refillables.

---

<sup>5</sup> [http://www.energystar.gov/index.cfm?c=cfls.pr\\_cfls](http://www.energystar.gov/index.cfm?c=cfls.pr_cfls)

- Avoid toxic permanent markers.
- Buy rewritable cd's and dvd's (and always recycle those you discard) and recycle when discarding.
- Scrutinize "green" products for point of origin, excess packaging, etc.

## Paper

By using less paper, increasing the recycled content of purchased paper, and reusing and recycling used paper, precious resources such as trees, water and electricity are conserved, money is saved, and solid waste is decreased. At Warren Wilson, the College Press stocks 100% recycled paper and is committed to responsible paper purchases.

### Reduce paper use

- Use e-mail instead of paper and fax to send memos.
- Use email, MOODLE, or your M:drive to circulate internal documents.
- Print less: don't print more copies than you need.
- Adjust margin settings in word processing programs so that margins are smaller and more words fit on one page thus reducing the amount of paper needed.
- Work and comment on drafts electronically using "Track Changes" function.
- Reduce amount of periodical subscriptions that your office receives by mail; create a sharing/circulating system for those who read the same periodical and are currently ordering duplicates to the office; check and see if the Library is a subscriber and seek access to their copy.
- Reduce the amount of unwanted mail your office receives. The National Waste Prevention Coalition provides a postcard to have your name removed from unwanted mailing lists: <http://www.metrokc.gov>.
- Buy in bulk and large quantities whenever possible to avoid excess packaging and reduce delivery trips.

### Reuse

- Have a labeled and conveniently located tray next to the printer where one-sided paper can be collected and the other side can be printed on for drafts, informal documents, or used for note-taking.
- If possible, designate a paper drawer in the printer to use this one sided paper.
- Print double-sided pages.
- Reuse oversized envelopes and cardboard boxes.

### Recycle

Always recycle paper products - doing so saves trees and energy (it is less resource and energy intensive for paper manufacturers to make paper from paper than from trees).

### Paper Purchasing

- Buy paper with the highest percentage of post consumer recycled content as possible – aim for 100%, don't settle for less than 30%. Whenever possible use FSC certified, 100% "post-consumer recycled" (PCR) content paper "processed chlorine free" (PCF). The chlorine bleaching process releases dioxins into the environment which are extremely dangerous to all life forms.
- Once you succeed in reducing the amount of overall paper consumed by your office, buying 100% post consumer recycled content paper may not cost anymore than your current paper costs.

*One ton of paper from recycled pulp saves 17 trees, 3 cubic yards of landfill space, 7,000 gallons of water, 4,200 kw hours (enough to heat a home for half year), 390 gallons of oil, and prevents 60 pounds of air pollutants. It creates 74% less air pollutants, 35% less water pollutants, and 75% less process energy than producing paper from virgin fibers. (www.sustain.ucla.edu)*

## **Purchasing**

Staff Forum approved a pattern language for Purchasing in 2000 that provides a blueprint for best practices:

### **Purchasing Pattern Language**

Purchasing decisions are made by many individuals, all of whom must take into account the impact on the environment as well as the economic impact when making buying choices. The purchasers should have an understanding of the advantages of environmentally friendly and socially sound purchasing practices. Socially and environmentally conscious purchasing practices take research and reflection, so it is also necessary to encourage purchasers to seek new and better materials and business relationships. Bringing the impact on the environment into purchasing decisions must become an attitude used by all those making these decisions.

The College is interested in buying materials that promote the health and sustainability of our biosphere. When making purchasing decisions the following principles should be incorporated:

- Reuse existing materials
- Purchase recycled or remanufactured materials that have lower impact on the environment in their production, packaging, use, and, ultimately, their disposal than new materials
- Purchase locally provided materials and services where available, with preference given to locally owned and operated businesses
- Purchase long lived products made from renewable resources
- Avoid toxic materials where choices are available, e.g.; inks, paints high in volatile compounds, carpets high in noxious odors and chemicals, cleaning solutions containing hazardous or environmentally harmful components
- It is College policy that ENERGY STAR products will be purchased wherever the choice exists

Preference should be given to resource-efficient products, i.e., products that use the least or conserve the most energy, water, gas, and other nonrenewable or environmentally costly resources.

Gifts and donations should be subject to the same standards as purchased products.

Warren Wilson College understands the impact of doing business with companies with socially unethical business practices. Therefore, Warren Wilson College will seek to avoid purchasing from companies that have a history of discrimination based upon race, age, gender, sexual orientation, religion or physical handicap or who have demonstrated unfair labor practices. Warren Wilson College will also seek to avoid purchases with companies that use child labor or do not provide a living wage.

All persons charged with making purchasing decisions should keep these principles in mind and seek assistance in choosing vendors who meet them.

## Reduce, Reuse, Recycle

Waste is energy, water and landfill - intensive. Responsible waste stream management starts with curbing the consumption appetite and then being a discriminating purchaser. All products are not made equally: some are designed to be effectively reused or recycled while others are designed for the landfill. Warren Wilson has one of the nation's most effective recycling centers so if you're not sure what to do, ask!

- Learn what can and cannot be recycled at WARREN WILSON. Post guidelines near recycling bins as reminders for the community and for visitors (visit <http://www.warren-wilson.edu/~recycle/howto.php> for the full list). Warren Wilson recycles more than you might assume: glass, plastic (#1 and #2), paper, cardboard, steel, aluminum, packing peanuts, tires, floppy disks, CDs, DVDs, tapes, and cases, batteries, electronics, cell phones, fluorescent lights, printer cartridges, appliances, pallets, old text books, and more.
- Have your office or residence hall conduct a "Garbology" study where all the trash and recycling is kept for one week and then weighed at the end of the week. The Recycling Crew can conduct this study for you or assist you in conducting it. This is the only way to effectively know the amount of waste and recycling generated by your group before it is combined with your building's waste and then the campus waste stream.
- Distribute clearly labeled recycling bins to work stations and beside printers to encourage recycling. (contact the Recycling Crew for assistance).
- When buying products, choose the option with the least packaging. Almost 1/3 of waste generated in the US is packaging. If packaging can be reused (peanuts, envelopes, boxes) re-use or recycle them.
- Recycle old computers and electronics (cell phones, TV's, printers, PDA's)
  - Bring your used College computers to Computing Services (located in Bannerman). They will reuse the computer if possible, or pass it on to Recycling.
  - Take all other College electronics to Recycling.
- To recycle your personal or home electronics, take them to Blue Ridge Computer Recycling ([www.brcrecycling.com](http://www.brcrecycling.com)) yourself. (Recycling is unable to accept personal electronics because they are charged a fee for each item.)

*In the US, 4.39 pounds of trash per day and up to 56 tons of trash per year are created by the average person<sup>6</sup>.  
Almost 1/3 of the waste generated in the US is packaging.<sup>7</sup>*

## Resources for Innovation

- Improve campus practices with a Campus Greening Seed Grants:  
[www.warren-wilson.edu/environmental/grants.php](http://www.warren-wilson.edu/environmental/grants.php)
- Develop a new initiative to curb campus energy use: Presidents Climate Action Fund: [www.warren-wilson.edu/~elc/sustainability/incentives.php](http://www.warren-wilson.edu/~elc/sustainability/incentives.php)
- Utilize recyclables from the Campus Free Store.

---

<sup>6</sup> <http://www.cleanair.org/Waste/wasteFacts.html>

<sup>7</sup> Ibid

## Transportation

- If you live close enough, walking or biking is the best option for travel to campus.
- Carpool to campus.
- Use Warren Wilson's Zimride Rideboard. This online tool we share with UNC – Asheville will link you up with people to carpool with for regular commutes or one-time longer distance trips. Access it at [www.warren-wilson.edu/internal/rideboard/](http://www.warren-wilson.edu/internal/rideboard/).
- Take the Asheville bus. Warren Wilson subsidizes travel on the bus and all faculty, students and staff may ride downtown for free.
- Track your office transportation footprint. How many miles does your unit travel by car or plane; how much gas do you use; how often do you drive around campus when you could walk. What are the total miles for car or plane, and the total cost?
- Commit to practices that honor Warren Wilson's Sustainable Vehicle Policy to meet your transportation needs.
- Travel wisely: Whenever possible choose lodging that honors sustainable practices; use public transportation whenever possible; if you must rent a car, team up with others whenever possible; choose local, sustainable meals as you can.

### **Warren Wilson Sustainable Vehicle Policy (approved 2008)**

A sustainable vehicle policy is one which balances the economic, environmental and social implications of vehicle purchasing, maintenance and usage decisions.

#### **Economic Considerations**

Economic considerations should be based on a full cost analysis rather than simply the initial purchase or lease price. Minimizing the economic cost of College vehicles will depend upon a range of factors.

##### ***Purchase or lease consideration***

The decision to purchase or lease a vehicle requires consideration of a number of factors including fleet discounts or special deals, tax incentives, interest rates, expected length of ownership, and resale value.

##### ***Operating costs***

According to figures produced by the American Automobile Association Vehicle Cost, the annual operating cost of vehicles is largely a function of size. Fuel consumption depends on engine capacity, distance travelled, and the type of travel (city or highway). For every \$.10 rise in gas prices the annual operating costs rise by around \$100 for light vehicles and around \$200 for large vehicles.

##### ***Maintenance and usage practices***

- Minimize vehicle usage.
- Keep car properly serviced (tires correctly inflated, etc.)
- Use the smallest vehicle needed for the job.
- Accelerate and decelerate smoothly.

- Drive at moderate speeds - cars use 25% more fuel at 65 mph than at 50 mph.
- Remove excess weight from car (110 lbs. equates to 2% extra fuel) and minimize aerodynamic drag like roof racks.
- Use air conditioner sparingly. Air conditioners can use about 10% extra fuel when operating. At speeds of over 50 mph, use of air conditioning is better for fuel consumption than an open window.

## **Environmental Considerations**

### ***Vehicle type***

A smaller, more fuel-efficient vehicle that is fit for the purpose will lower the overall environmental impacts of the purchase.

### ***Fuel type***

The type of fuel used influences the environmental impacts of a vehicle. The College's preference is for vehicles with high gas mileage, and low emissions, fueled by either gasoline, battery, or environmentally acceptable alternative fuels.

### ***Greenhouse gas emissions***

Greenhouse gas emissions from WARREN WILSON fleet, faculty, staff and student driving accounts for nearly 13% of Warren Wilson's emissions. Smaller vehicles emit around half the greenhouse gas emissions of larger vehicles thus they are preferred.

### ***Resource use***

Between 5 - 10% of a car's overall consumption of energy and emissions of greenhouse gases is embedded in the car's manufacturing process. The production of large cars consumes more resources.

## **Social Considerations**

### ***Safety***

Vehicle safety must be a major consideration when purchasing a vehicle.

### ***Perception***

The perception created by vehicle choice is an important issue for an institution committed to environmental issues.

### ***Health***

Urban air pollution is largely the result of motor vehicle use and leads to a range of serious health effects. The health impacts of transportation emissions in the US are well-documented. Vehicle selection reflects this concern.

## **Water**

As the regional and the global human population swells, the demand on our water systems is increasing. Conserving water, keeping it clean at the source, and using it efficiently are essential.

- Eliminate bottled water from all campus vending machines, Campus Store, and campus events.

- Make sure that office or residence hall water fixtures are low-flow (contact FMTS if you are unsure).
- If there is a leaky faucet, report it right away. A dripping faucet can waste up to two gallons of water per hour.
- Keep items like ceramic mugs, plates, and real silverware on hand for gatherings. Washing your own reusables uses much less water and energy than used in the production of disposables.
- Eliminate use of bottled jug water. Contact the Plumbing Crew to discuss installing a filter or purchase a Brita-type pitcher filter instead of buying bottled jug water which is costly and increases the overall campus carbon footprint.
- If you feel you must purchase bottled jug water, contact Purchasing to participate in a group order.
- Use on-campus waterless urinals. Each urinal saves an estimated 40,000 gallons of water/year.
- Buy local drinks and food for your office (local means within 100 miles). When local is not possible, purchase fair-trade certified items that ensure social justice and economic equity for food producers.
- Use water from rain catchment systems on campus first, where they exist.

*Approximately 1.5 million barrels of oil- enough to run 100,000 cars for a whole year- are used to make plastic water bottles, while transporting these bottles burns even more oil.<sup>8</sup>*

## What Next?

The Environmental Leadership Center's Campus Greening Crew is ready and willing to help your office or group develop a commitment and put it into practice. Contact Stan Cross, [scross@warren-wilson.edu](mailto:scross@warren-wilson.edu), to schedule an Office Audit or request support.

## Additional Resources

Calculator to aid in quantifying the benefits of making better paper choices:

- [www.edf.org/papercalculator/](http://www.edf.org/papercalculator/)

Climate action information:

- Natural Resources Defense Council [www.nrdc.org](http://www.nrdc.org)
- National Wildlife Federation, Campus Ecology [www.campusecology.org](http://www.campusecology.org)

Green office products and purchasing guides:

- [Office Depot's Green Alternatives](#)
- [www.thegreenoffice.com/content/view/106/127](http://www.thegreenoffice.com/content/view/106/127)

Global impact:

- Global Footprint Network [www.footprintnetwork.org](http://www.footprintnetwork.org)

---

<sup>8</sup> Union of Concerned Scientists, *A World of Reasons to Ditch Bottled Water* TreeHugger.com, 07/09/07

Higher education sustainability and climate change commitments and guides:

- American Association for the Advancement of Sustainability in Higher Education: [www.aashe.org](http://www.aashe.org)
- American College and University Presidents Climate Commitment: [www.presidentsclimatecommitment.org/](http://www.presidentsclimatecommitment.org/)
- AASHE's STARS compilation of best sustainable practices in higher education: <https://stars.aashe.org/>
- National Wildlife Federation Guide: [www.nwf.org/Global-Warming/School-Solutions/Eco-Schools-USA/Become-an-Eco-School/Pathways/Climate-Change/Tips.aspx](http://www.nwf.org/Global-Warming/School-Solutions/Eco-Schools-USA/Become-an-Eco-School/Pathways/Climate-Change/Tips.aspx)