

Action Plan for Promoting Sustainability in Extension Offices

UF | IFAS Extension
UNIVERSITY of FLORIDA



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Foreword

This document is based, in part, on a publication by the University of Florida's Office of Sustainability titled *Turning Over a New Leaf: A Guide to Greening UF*. Students in UF's Design, Construction and Planning fall 2013 course, Practicum in Sustainability and the Built Environment, updated the content and added materials to create a more Extension Office oriented document for use throughout Florida.

The students were able to accomplish this task through the time and efforts of the Marion County Extension Office faculty, staff and volunteers who so kindly allowed the students to tour their offices and grounds and answer every question imaginable, and then some. Special thanks are extended to Marion County Extension Director, Mr. David Holmes, and to Ms. Cynthia Steinke, Marion County Administrative Staff Assistant, who both responded to inquiries and requests for information long after the class visit.

The University of Florida's Institute of Food and Agricultural Sciences (UF/IFAS) is a federal, state, and county partnership dedicated to developing knowledge in agriculture, human and natural resources, and the life sciences and to making that knowledge accessible to sustain and enhance the quality of human life. The mission of the Office of Sustainability is to make the University of Florida – in its operations, education, research, and outreach – a model of sustainability, integrating the goals of ecological restoration, economic development, and social equity.

At UF, green teams work with the Office of Sustainability to support their mission, and encourage the collaborative efforts of faculty, students, and staff to generate knowledge, acquire skills, develop values, and initiate practices that contribute to a sustainable, high quality of life on campus, in the state of Florida, and across the globe. Extension office personnel and volunteers can further extend these green teams by working in counties throughout the state. The students who worked on this document hope that a few faculty, staff members, and volunteers, working within each County Extension Office throughout Florida, will take on this challenge to create and promote a greener and more sustainable Gator Nation.

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Table of Contents

Introduction.....	4
Energy Conservation.....	5
Water Conservation	9
Transportation.....	13
Purchasing.....	16
Waste Reduction.....	19
Human Health and Food.....	24
Communication and Engagement.....	28
 Appendix	
Useful Websites and Frequently Called Numbers.....	33

Excel Spreadsheet

(in separate file: Action_Plan_for_Promoting_Sustainability_Data_Log_Feb_2014)

Introduction

Extension faculty and staff should act as a model for sustainable behavior for the clients they serve, as well as for the local community. This document is to help you become aware of actions you can take in your Extension Office to become more resource efficient as well as save money. Check each box as you complete the action or activity. After going through the list, unchecked boxes will serve as visual cues for areas that need action.

By highlighting through signage and outreach, we can draw attention to the sustainable practices we engage in. Whether your office is in an IFAS building or a county-owned building, employees can make significant contributions to office sustainability. Twenty percent of energy and water efficiency is generally achievable through behavior change alone. Think about your office electric bill. A savings of 20% can really be a financial incentive to make some sustainable changes. While making small behavior changes, consider enacting new policies and procedures related to sustainability, as many of these recommendations can be related to a policy change.

Form a small committee involving both faculty and staff to meet and review the action items within this document. As suggested by the EPA (http://www.epa.gov/osbp/pdfs/smart_steps_greening_guide_042101.pdf) and listed below, this group should work with the rest of their office to set SMART goals (specific, measurable, attainable, relevant, and time-bound). Then, select and prioritize goals that will help your office reach your objectives. Finally, define responsibilities. Use the tables (tracking charts) at the end of each section of this document as templates to record your Extension office's specific goals for each action area within this document.

A clear set of goals can turn the vision you develop into reality. The right goals will help determine the future direction of your Extension office, and motivate employees and volunteers. So, how do you choose the right goals? For starters, make sure your goals are SMART:

Specific. Perhaps you envision a carbon neutral office. This is a specific long-term goal. To reach it, you will also need to set specific short-term goals. An initial short-term goal could be to measure your greenhouse gas (GHG) emissions to determine a starting point, and a subsequent goal might be to reduce the office's carbon footprint by 10% a year.

Measurable. If you can't measure your goal, it is hard to know when it has been reached or how to evaluate your efforts. Consider the difference between a goal to be a green office and a goal to use 100% renewable energy. Without a precise definition, it is hard to measure "greenness," but the source of your energy is easy to measure.

Attainable. Your goals need to be ambitious enough to make a difference but not impossible to achieve. The right balance will motivate employees and volunteers without discouraging them. You may want to be a zero-emissions office within one year, but it is probably impractical. A more realistic goal is to cut emissions by 20 percent in the first year with zero-emissions as a long-term goal.

Relevant. Your goals need to relate to what you are trying to achieve. Make sure that your goals will meaningfully reduce your environmental impact and align with your vision.

Time-bound. Goals need to have a defined timeframe. A deadline provides incentive to take action and move forward. Choose realistic timelines for your goals, and include milestones and periodic assessments to measure your progress and stay motivated.

Note: If you have suggestions for future editions of this document, please email them to Kathleen Ruppert (kr@ufl.edu). Also contact Kathleen if interested in offering the Sustainable FloridiansSM Program in your community. The mission of the Sustainable FloridiansSM program is to guide Floridians on how to take individual responsibility for protecting Earth's limited resources. Through a discussion-to-action format, the program educates participants about making wise use of resources, making households and communities more resilient and financially sound, and understanding the impact of individual lifestyle choices.

Energy Conservation

Energy use in buildings is Florida's number one producer of carbon emissions, and the majority of our energy comes from fossil fuel sources, such as coal and natural gas. All of us use energy at work—from lights to computers, photocopiers and printers. There are lots of ways that you and members of your office can help reduce both our utility bills and our collective carbon footprint each year.

Some efforts are already underway at the main campus in Gainesville. In 2007, President J. Bernard Machen was the first to sign the American College and University President's Climate Commitment. A working group at UF is creating an action plan for carbon neutrality by 2025. A complete audit of UF's on campus carbon footprint can be viewed at: <http://acupcc.aashe.org/ghg-report.php?id=199>.

Where appropriate in the Extension office, tracking energy usage is important to both see the effect of behavior change as well as to increase responsibility. Work with your fiscal/financial/utility person to track monthly kWh use for the last two years or so in order to account for weather differences. You can use the Excel spreadsheet (in a separate file titled: *Action_Plan_for_Promoting_Sustainability_Data_Log_Feb_2014*) for this purpose and add to it as time progresses. Employees and managers, who are tracking savings, can then have a success story to share with administration.

Your first step is to conduct an office/environment inventory. Essentially, go around and determine what is plugged in, then discuss with the relevant person if it is necessary to have that device/appliance plugged in. Also, collaborate with faculty, staff, and volunteers to identify energy conservation measures that are appropriate for your office.

1. Electronics

- Initiate an end-of-day shut-off program for computers and peripherals (e.g., copy machines), to minimize unnecessary energy usage. Follow up with a new policy to have compliance.
- Employ energy-saving settings for your computers and peripherals so they hibernate or shut off automatically during periods of inactivity.
- Use a power strip to cut power to all electronics/appliances (e.g., printers, fans, desk lamps) at the end of the day. Find examples of “smart” power strips at: <http://www.energyfederation.org/consumer/default.php/cPath/4186>
- Unplug devices that drain energy when not in use (e.g., battery chargers, coffee pots, desktop printers). See <http://standby.lbl.gov> for more information on standby power, sometimes referred to as “phantom load” or “vampire power.”

2. Office Equipment and Appliances

- Purchase ENERGY STAR® energy-efficient appliances for office kitchens. See http://www.energystar.gov/index.cfm?c=products.pr_find_es_products for listings.

- When replacing office equipment, look for ENERGY STAR printers, fax machines, copiers, etc. See http://www.energystar.gov/index.cfm?c=products.pr_find_es_products for listings.
- Share, or where applicable, network office equipment such as printers and fax machines, to reduce unnecessary energy usage.
- Consolidate foods that must be kept cold into one centrally-located refrigerator and make sure that refrigerator is located in air-conditioned space.

3. Lighting

- Turn off lights in copy rooms, kitchens, conference rooms, and closets when the spaces are unoccupied, or install motion sensor lighting.
- Initiate a “last to leave” policy which ensures that lights are shut off at the end of the workday.
- Take advantage of natural daylight. Use daylight sensors or turn off lights when adequate sunlight is available. For information on what types of lighting controls are suitable for indoor and outdoor use visit: <http://energy.gov/energysaver/articles/lighting-controls>
- Replace incandescent light bulbs with CFL or LED bulbs. (Ensure fixture controls such as dimmers will work with the bulbs you choose.) Check out the ENERGY STAR website for information on energy-efficient bulbs: http://www.energystar.gov/index.cfm?fuseaction=find_a_product.showProductGroup&pgw_code=LB
- When purchasing new dimmers, choose the type that can work with both CFL and LED bulbs. <http://energy.gov/energysaver/articles/lighting-controls>
- When choosing light fixtures, check out the ENERGY STAR website for information on energy-efficient choices http://www.energystar.gov/certified-products/detail/light_fixtures

4. Heating and Cooling (if you have the opportunity to provide suggestions)

- In winter, set office thermostats between 65° and 68°F during business hours, and 60° to 65° F during unoccupied hours—if applicable, as this would not pertain to some offices in S. Florida.
- In summer, set thermostats between 78° and 80° F during business hours, and above 80° F during unoccupied hours.
- If purchasing window air-conditioning units, compare units with high Energy Efficiency Ratios (EERs). Refer to this site for information on energy-efficient window A/C units: http://www.energystar.gov/certified-products/detail/air_conditioning_room?fuseaction=find_a_product.showProductGroup&pgw_code=AC. To properly size the unit for the room, visit <http://www.cooloff.org>

- If replacing a central air-conditioning/heating unit, purchase one with a high Seasonal Energy Efficiency Ratio (SEER). Refer to this site for information on energy-efficient units: http://www.energystar.gov/index.cfm?fuseaction=find_a_product.showProductGroup&pgw_code=CA
- When replacing either window A/C units or central air-conditioning/heating units, consider mini-split systems (also commonly referred to as ductless systems) as an alternative. See http://www.energystar.gov/certified-products/detail/ductless_heating_cooling?fuseaction=find_a_product.showProductGroup&pgw_code=MS for more information on this technology and links to efficient units.
- Use ceiling fans to cool room occupants rather than lowering the A/C temperature. Ensure that they are turned off when no one is in the room: ceiling fans cool *people*, not rooms. See http://www.energystar.gov/certified-products/detail/fans_ceiling?fuseaction=find_a_product.showProductGroup&pgw_code=CF for sizing guidance and to locate energy-efficient models.
- If possible, replace greenhouse-heating systems with solar water heaters, or time planting/growing seasons so that heating the greenhouse is not necessary. For information on how to install solar-heating systems visit: <http://aes.missouri.edu/bradford/education/solar-greenhouse/solar-greenhouse.php>

5. Windows (if you have the opportunity to provide suggestions)

- As needed, replace windows on the west and east sides of your building with designated “ENERGY STAR for the South” windows. Use this website to determine the type of window appropriate for your building: http://www.energystar.gov/index.cfm?c=windows_doors.pr_buying_installing (Note that north- and south-facing windows are still important but, in most of Florida, not as critical as west- and east-facing windows.)
- When installing windows in new construction, or replacing existing windows, consider increased energy savings and comfort by using the Window Selection Tool at the Efficient Windows Collaborative website: <http://www.efficientwindows.org/tools.php>
- Use window shades to reduce heat transfer through windows. For information on energy-saving window treatments visit: <http://energy.gov/energysaver/articles/energy-efficient-window-treatments>

Energy Conservation Tracking Charts

Goal 1:

Timeframe	Who	Metric

Activities for Goal 1	Timeframe	Who	Metric
1.			
2.			
3.			
4.			
5.			

Goal 2:

Timeframe	Who	Metric

Activities for Goal 2	Timeframe	Who	Metric
1.			
2.			
3.			
4.			
5.			

Water Conservation

Our water supply—primarily the aquifer system in Florida—is refilled/recharged by rainwater. Surface water and rainwater enter the aquifer every day. What ends up on the ground, in the parking lot and on the fields around the office—from litter to leaky car oil—drains into creeks, streams and lakes. This can have a significant impact on the quality of our drinking water. Groundwater moves slowly, so it may take years for a pollutant from the surface to be detected in the aquifer. Being mindful of our surroundings can help our water quality. Refer to the link:

<http://waterquality.ifas.ufl.edu/Water%20primer/Underground%20water/Underground.htm>

Most municipalities have a water treatment plant that processes millions of gallons every day. To ensure that all water systems are working properly, best practices should be used on a daily basis.

Where appropriate in the Extension office, tracking water usage is important both to see the effect of behavior change as well as to increase responsible actions. Work with your fiscal/financial/utility person to track monthly water use for the last two years or so in order to account for weather differences. You can use the Excel spreadsheet (in a separate file titled:

Action_Plan_for_Promoting_Sustainability_Data_Log_Feb_2014) for this purpose and add to it as time progresses. Employees and managers, who are tracking savings, can then have a success story to share with administration.

Your first step is to conduct an office/environment inventory. Essentially, go around and determine where water is used, then discuss with the relevant person in control of that fixture or apparatus as to whether or not it is functioning properly. Also, collaborate with faculty, staff, and volunteers to identify water conservation and pollution prevention measures that are appropriate for your office. The document http://www.floridaenergy.ufl.edu/wp-content/uploads/FESC_Wise_Water_Use_for_Floridians_final_2011_06_24docx.pdf offers a good starting point for discussion.

1. Indoor

- Make sure that faucets are turned off all the way and promptly report leaky faucets and toilets to maintenance personnel during the day. Know the emergency number for after-hours maintenance personnel as well. Post the number for maintenance in every restroom or near every fixture.
- Purchase a reusable pitcher and reusable cups for your office space to use at meetings.
- Install motion sensor faucets on the sinks in the restrooms.
- Consider installing low-flow or dual-flush toilets in order to minimize flushing water. Here is some information on how dual-flush toilets work: <http://home.howstuffworks.com/dual-flush-toilet.htm>
- When purchasing new toilets or fixtures, look for products that are WaterSense labeled <http://www.epa.gov/watersense>
- In addition, when purchasing new toilets, look for products having a high MaP-UNAR Rating. Learn more about these ratings at <http://www.cuwcc.org/resource-center/products/toilet->

[fixtures/MaP-UNAR.aspx](#). Also, consider making sure that some of the toilets in your Extension Office meet ADA requirements.

- Retrofit your water fountain with a fixture to make filling cups and containers easier. For additional information refer to: <http://www.globalindustrial.com/c/plumbing/drinking-fountains/water-refilling-stations>
- Use water filters and a reusable container or cup rather than purchasing bottled water. Refer to <http://edis.ifas.ufl.edu/fy1138>

2. Outdoor

- Report irrigation system problems, e.g., broken or leaking sprinkler heads or pipes, or sprinkler systems running for an excessive amount of time or at the wrong time, to the maintenance department or facility manager. Post the phone numbers for maintenance during regular work hours and after-hours maintenance in a readily visible area.
- In order to minimize evapotranspiration, water plants in the morning before the sun rises: http://livinggreen.ifas.ufl.edu/water/lawn_care_and_irrigation.html
- Use reclaimed water for irrigation whenever possible,: <http://edis.ifas.ufl.edu/hs1157>
- When cleaning animal stalls, divert water runoff away from storm drains.
- Recycle as much water/condensation from the air conditioner as possible: http://www.ehow.com/how_5794571_recycle-air-conditioning-water-condensation.html
- If gutters are already installed on the roof, collect all rainwater in a rainwater cistern. Refer to this link for cistern design and use information: <http://edis.ifas.ufl.edu/ae029>. For an example of a large system, see http://leon.ifas.ufl.edu/environ/files/2012/04/Cisterns-Br_ochure_Green-Home-Makeover_APR-2013.pdf.
- Check the temperature setting of the water heater and, if needed, reset to the recommended temperature of 120 degrees Fahrenheit http://ahca.myflorida.com/mchq/Field_Ops/Protocols/General/Files/Hot_Water_Protocol.pdf
- If your office is planning a new landscape, implement Florida-Friendly landscaping practices <http://fyn.ifas.ufl.edu>
- Don't throw *anything* into storm drains. These lead directly to creeks/lakes, and ultimately, to our aquifer.
- If you commute to the office by car or truck, check your vehicle regularly for fluid leaks. Leaking oil or coolant can contaminate both surface and ground water.
- Refer to <http://floridawaterstar.com> for standards and guidelines for achieving Florida Water Star Program certification.

Did you know that almost 100% of UF's on-campus irrigation water is reclaimed from the campus wastewater treatment facility? Because UF is a heavy user of potable water, the campus recovers thousands of gallons of reclaimed water each day. Regardless of where we live or work, we all need to treat water as a precious resource. The University of Florida's main campus is an example, showing how an immense amount of water can be reclaimed if the system is designed properly. When given the opportunity, Extension offices around the state can also utilize this resource effectively.

ADDITIONAL RESOURCES:

<http://wateruseitwisely.com/tips/category/office>

http://solutionsforyourlife.ufl.edu/sustainable_living

Water Conservation Tracking Charts

Goal 1:

Timeframe	Who	Metric

Activities for Goal 1	Timeframe	Who	Metric
1.			
2.			
3.			
4.			
5.			

Goal 2:

Timeframe	Who	Metric

Activities for Goal 2	Timeframe	Who	Metric
1.			
2.			
3.			
4.			
5.			

Transportation

Our commuting to, from, and around work contributes significantly to the global carbon footprint. However, Extension can make great strides in reducing the need for single-occupancy vehicle travel.

Where appropriate in the Extension office, tracking mileage and fuel usage is important to both see the effect of behavior change as well as to increase responsibility. Work with your fiscal/financial/motor pool person to track monthly data. You can use the Excel spreadsheet (in a separate file titled: [Action_Plan_for_Promoting_Sustainability_Data_Log_Feb_2014](#)) for this purpose and add to it as time progresses. Employees and managers, who are tracking savings, can then have a success story to share with administration.

There are many affordable alternative transportation options for clients, staff, and faculty. It requires engagement from all entities of Extension to encourage participation amongst staff and clients.

Whenever possible, foster awareness and use of more sustainable transportation options (i.e., higher occupancy or non-motorized vehicles) to and from work, as well as for visits to clients and training programs.

1. Bicycling

- Bicycling to work is not only better for the environment but also for your health.
- If possible, provide showers and locker rooms to encourage more people to ride to work.
- Consider working with teachers and 4-H-ers in offering a Florida Traffic and Bicycle Safety Education Program <http://www.saferoutesinfo.org/program-tools/florida-traffic-and-bicycle-safety-education-program-ftbsep>
- Provide a secure location, protected from the elements, for people to lock up their bicycles during the day.

Cycling is associated with improved cardiovascular fitness and a decreased risk of heart disease. Studies also show that moderate activity, such as cycling, can strengthen the immune system and increase resistance to illness

http://www.betterhealth.vic.gov.au/bhcv2/bhcarticles.nsf/pages/Cycling_health_benefits. For ideas on how to increase bicycling for daily travel see http://activelivingresearch.org/files/ALR_Brief_DailyBikeTravel_May2013.pdf

2. Carpooling

- Carpooling is an easy way to minimize the environmental impacts that result from commuting to work. Carpooling reduces the number of cars on the road and sharing a ride with one other person cuts greenhouse gas emissions in half.

- Provide ways for staff to find people to carpool with by allowing them to post on a company bulletin board or website. Look into Zimride <http://www.zimride.com/ufl> – a private ridesharing network for the University of Florida.
- Consider working with other departments in your county, such as transportation and planning, to organize a One Less Car event like <http://www.sustainable.ufl.edu/onelesscar>

According to Environment Canada, air pollution caused by vehicular travel is linked to a number of health concerns including respiratory diseases, cardiovascular disease, allergies and neurological effects. By carpooling, you help reduce these health risks for yourself and everyone else. Research also suggests that carpooling is less stressful than commuting alone! For more information, visit: <http://www.commuterservicesfl.com/carpooling>

3. Compact Driving and Trip Chaining

- “Compact driving” is simply grouping trips to minimize the total miles driven. Setting up trips for clients on certain days will minimize the number of times staff members drive per week.
- When planning a trip, organize any work-related shopping or pit stops so that you won’t have to retrace your route.
- When several agents plan to travel to the same location or event, carpool to minimize the number of vehicles.
- Check the walk score of your office and home at <http://www.walkscore.com>. If you are thinking about moving to another location, take the walk score into consideration when making your decision.

More than one-quarter of US car trips are one mile or less, and 13.7 percent are a half-mile or less. For most of us, these are walkable distances. Your good health is a gift – if you can, walk! Find a backpack or briefcase on wheels to help you tote your work items and laptop. For shopping trips, invest in a sturdy shopping bag or collapsible crate on wheels.

ADDITIONAL RESOURCES:

http://www.protection.uottawa.ca/en/Carpool_benefits.html
<http://www.goskyride.com/GetIntoCycling/ShowArticle/Bike-health-four-awesome-benefits-of-cycling?retURL=/GetIntoCycling/CategoryList/30/1>

Transportation Tracking Charts

Goal 1:

Timeframe	Who	Metric

Activities for Goal 1	Timeframe	Who	Metric
1.			
2.			
3.			
4.			
5.			

Goal 2:

Timeframe	Who	Metric

Activities for Goal 2	Timeframe	Who	Metric
1.			
2.			
3.			
4.			
5.			

Purchasing

Making purchases is an opportunity for individuals, industries, businesses, schools, and organizations to meet their needs in the most energy- and water-efficient method possible. Good purchasing decisions made with sustainability in mind benefit society and the environment.

Your first step may be to develop a purchasing policy in which you partner with the county purchasing unit or develop one for the Extension office. See EPA's Environmentally Preferable Purchasing website (<http://www.epa.gov/epp>) and UF's sustainable purchasing directive on this website (<http://www.purchasing.ufl.edu/departments/directives-procedures.asp#sustainable>) for ideas. Some purchasing categories to consider include:

1. General

- Always consider sharing, renting, or leasing as an alternative to buying new equipment. Work with your county to develop a mechanism for knowing where, when, and what items are available—perhaps something similar to what the main campus of UF has available at <http://www.surplus.ufl.edu>
- To help your Extension Office identify the best long-term value, use a life-cycle analysis (LCA) (also referred to as life-cycle assessment), rather than automatically choosing goods with the lowest purchase price. Here is an example of one LCA website that is free for non-commercial use: <http://www.eiolca.net>

2. Energy

- Consider energy-efficient products and look for certification labels such as:
 - ENERGY STAR® – <http://www.energystar.gov>)
 - EnergyGuide – <http://www.consumer.ftc.gov/articles/0072-shopping-home-appliances-use-energyguide-label>
 - Consortium for Energy Efficiency – <http://www.cee1.org/content/cee-program-resources>
- Purchase more efficient light bulbs, such as CFLs and LEDs, rather than incandescent bulbs. Choose the correct product for the fixture (i.e., dimmable, 3-way, etc.). Look for the ENERGY STAR label.
- Install motion sensors for lighting throughout the office building and photo-sensors for outdoors. See <http://energy.gov/energysaver/articles/lighting-controls> for more information.
- Purchase “smart” power strips and plug in devices such as computers, fans, lamps, printers, etc.
- For more information and some great tips on saving energy when using technological devices, visit http://www.energystar.gov/index.cfm?c=power_mgt.pr_power_mgt_more_tips
- Install windows with National Fenestration Rating Council certification <http://www.nfrc.org>. Windows should meet ENERGY STAR requirements for the Southern Climate Zone, especially if located on the west or east sides of the building.

3. Water

- Replace bathroom and kitchen faucets with Water Sense-labeled products. For a list of such products, visit http://www.epa.gov/WaterSense/about_us/watersense_label.html
- Consider these criteria when installing new toilets:
 - Ultra High Efficiency toilets (U-HET)
 - Maximum Performance Testing toilets (MaP) (<http://www.map-testing.com>)
 - Toilets that have a dual-flushing system with a low-volume flush
- Design and install a drip irrigation system to reduce water consumption when watering the landscape or garden.

4. Other Tips

- Purchase cleaning products with non-toxic chemicals and environmentally-friendly certified labels, such as:
 - Green Seal Environmental Standard – <http://www.greenseal.org/FindGreenSealProductsandServices/Products.aspx>
 - Design for the Environment – <http://www.epa.gov/dfe/pubs/about/index.htm>
 - Environmentally Preferred Purchasing – <http://www.epa.gov/epp>
 - Green Guard – <http://www.greenguard.org/en/CertificationPrograms.aspx>
- Purchase “green printers” that use soy- and vegetable-based inks, which are safer and more environmentally friendly <http://www.greenerprinter.com/grp/jsp/inks.jsp>
- Purchase office equipment—such as computers, printers and fax machines—that are certified Hazardous Substance Free, that is, free of harmful chemicals <http://www.hsf.us>
- Purchase electronic products with the Carbon Free label <http://www.carbonfund.org/offset/product-certification>
- Minimize packaging, or choose packaging that contains recycled content. See the Sustainable Packaging Coalition website <http://www.sustainablepackaging.org>
- When buying a vehicle, choose one that is fuel-efficient <http://www.fueleconomy.gov>
Thoroughly research the make and model to find the one that will best fit your needs and available fuel source.
- Consider the rights of workers. For resources on purchasing products which are produced in safe and fair working conditions, visit these websites: <http://svtc.org>, <http://www.workersrights.org>, <http://www.verite.org>

Purchasing Tracking Charts

Goal 1:

Timeframe	Who	Metric

Activities for Goal 1	Timeframe	Who	Metric
1.			
2.			
3.			
4.			
5.			

Goal 2:

Timeframe	Who	Metric

Activities for Goal 2	Timeframe	Who	Metric
1.			
2.			
3.			
4.			
5.			

Waste Reduction

Through waste reduction and recycling initiatives, UF's main campus in Gainesville achieves a waste recovery rate of nearly 35%, and recycles over 5,500 tons of material annually. You can help reduce waste by remembering that all four "R's" in the **Reduce, Reuse, Recycle, Re-buy** chain are important. All of us need not only to recycle, but also to think about how we can lower our consumption of disposable goods, reuse or share items, and purchase items with recycled content.

Identify waste streams, and institute reduction/recycling efforts that are appropriate to your office.

1. Paper

- Request removal from mailing lists for any unwanted hard copy catalogs, newsletters, magazines, and "junk" mail: http://www.directmail.com/directory/mail_preference/Default.aspx. You can also use your cell phone and a program called PaperKarma (<http://www.paperkarma.com>) to take a photo of the mailing label of the unwanted article and they will contact the company directly to remove you from that specific mailing list.
- Avoid overproduction of marketing and publicity material by reviewing distribution lists and regularly updating databases.
- Think Before You Ink: <http://ufcn.urel.ufl.edu/ink>
- When feasible, use email and publish electronically, rather than printing. Edit drafts electronically rather than printing. Use digital filing and imaging systems when feasible. If you need help learning new computer software, visit the online tutorials at Lynda.com, found under "teaching tools" at <http://lss.at.ufl.edu>
- Use networked printers when possible, reducing the need for personal printers. Encourage judicious printing.
- Adjust fax machines to minimize paper waste (e.g., eliminate cover pages, unwanted headers, and report sheets) and use scrap paper for sending/receiving faxes. Some fax machines can even be set to fax to email and vice-versa, eliminating paper altogether.
- Print double-sided. Use scrap paper for drafts and re-use envelopes to circulate internal communications.
- Print in color only when absolutely necessary. Be certain that your computer's printer default setting is set to print in black-and-white.
- Recycle. Every building should have a paper collection area for newspaper, office paper, and junk mail, as part of a total recycling effort.
- If you do not have a recycling bin, or are unsure as to what services you need, refer to the County Recycling Coordinator for the State of Florida through the Department of Environmental Protection at http://www.dep.state.fl.us/waste/categories/recycling/pages/contact_counties.htm

“Zero Waste is a philosophy and a design principle for the 21st Century. It includes ‘recycling’ but goes beyond recycling by taking a ‘whole system’ approach to the vast flow of resources and waste through human society. Zero Waste maximizes recycling, minimizes waste, reduces consumption and ensures that products are made to be reused, repaired or recycled back into nature or the marketplace.”

<http://www.grn.org/page/what-zero-waste>

2. Cans and Bottles

- Work with your county’s Waste Collection Office to ensure that your department has indoor recycling bins for all recyclables. Working with these departments will ensure that your recycling bins are appropriately placed and regularly serviced.
- If your office does not currently have a recycling program, refer to the County Recycling Coordinator for the State of Florida through the Department of Environmental Protection at http://www.dep.state.fl.us/waste/categories/recycling/pages/contact_counties.htm
- If there is no recycling pick-up at your office, ask the cleaning staff or volunteers to periodically transport the office’s recyclable materials to the county’s recycling site.

3. Ink & toner cartridges

- Refill/recycle printer toner cartridges and buy remanufactured ones. Be certain to first check printer warranty information.
- The Florida Department of Environmental Protection (DEP) maintains a list of companies and organizations that recycle printer and toner cartridges. While these are merely suggestions to consider, most manufacturers will buy back previously used cartridges directly. See the following link for a list of DEP suggestions:
<http://www.dep.state.fl.us/waste/categories/recycling/pages/TonerCartridgeRecycling.htm>

4. Hazardous Waste

- Reduce your production of electronic waste through preventative maintenance on existing equipment and recirculation of used equipment via UF’s “Surplus Property” program (<http://www.surplus.ufl.edu>).
- For electronic equipment which has reached the end of its useful life (including smaller items such as jump drives, phones, and rechargeable batteries), use your local government household hazardous waste websites to identify specifically where you can recycle such items within your community. The following database is maintained by Earth911 and provides the necessary information: <http://www.dep.state.fl.us/waste/categories/hazardous/pages/localgovhhwweb.htm>
- Familiarize yourself with UF’s “Reducing, Re-Using and/or Recycling University of Florida Electronic Equipment” information at <http://www.fa.ufl.edu/directives-and-procedures/asset-management/#reducing> Determine if there is a similar program in your county.

- Many of our Extension Offices generate significant yet unique waste streams and we must work diligently and creatively to help turn our waste into inputs for other processes. Here are a few great examples from different departments on campus:
 - The University of Florida’s O’Connell Center generates a large number of wooden pallets, which previously went to the recycling bullpen. Recently, they began contracting with a local pallet company that was interested in reusing the pallets. Reuse is always a better, less energy-intensive option than recycling, and through this effort the O’Connell Center reduced their waste footprint and saved the university money. Along these same lines, the O’Connell Employee Relations Office also turns stacks of scrap paper into scratch pads for office staff to use.
 - Another great example of taking a creative and unique approach to tackling UF’s waste reduction goals comes from the Student Health Care Center’s “Medication Disposal Program.” On the main campus, anyone (students, faculty, staff and community members) can bring in their expired or unused medications and deposit them into a waste drum. In order to assure anonymity, there are no questions asked about where the medications came from or who is doing the dumping. For more information about the program, visit: <http://shcc.ufl.edu/services/primary-care/pharmacy>. Many locations around the state accept unused and/or expired medications as well: <http://www.dep.state.fl.us/waste/categories/medications/pages/disposal.htm>
- Keep a pesticide spill kit readily available and follow the directions if spillage occurs. For more information on assembling and deploying a spill kit, see <http://edis.ifas.ufl.edu/pi196>
- Clean up gasoline, diesel fuel, or oil spills immediately. See <http://edis.ifas.ufl.edu/ss474>

5. Other Waste Streams

- For assistance with planning sustainable departmental events, read the Office of Sustainability’s “Sustainable Event Planning Guide” <http://sustainable.ufl.edu/wp-content/uploads/2013/11/Sustainable-Event-Certification-App-and-Guide.11.19.13.pdf> and if your event has 25 or more participants, get it certified.
- Use reusable containers for your personal food and beverages.
- Offer water and other beverages for sale in re-usable/refillable containers that include the UF/IFAS branding rather than single-use plastic bottles.
- During animal shows encourage vendors to properly dispose of animal waste, to ensure it will be used for fertilizer and doesn’t pollute groundwater or surface water.
- Donate unneeded, reusable supplies to non-profit organizations like Tools for Schools http://www.alachuacounty.us/DEPTS/PW/WASTE/TOOLSFOR_SCHOOLS/Pages/ToolsforSchools.aspx or ask the local school board where to take the supplies. Magazines suitable for elementary students are also welcome; they are used to teach the alphabet or object recognition, as well as in art projects such as collages.

- Encourage both adults and youth to collect waste usable by TerraCycle to upcycle and recycle into other products <http://www.terracycle.com/en-US>
- Try reducing the number of personal trash cans in shared work spaces. Instead, strategically place larger trash cans in a convenient location and pair these with recycling bins. This arrangement not only encourages recycling, it also reduces the workload for cleaning staff and reduces the number of plastic garbage bags being sent to the landfill.
- For events and shows, ensure recycling bins are located in any large meeting areas.
- Designate an outside space for composting organic waste and encourage those in the office to participate.
- For two years UF's Health Science Center on campus has used biocompostable dinnerware for their annual holiday party. Last year they did a 50/50 combination to see if there were any issues or complaints, but all was well. Now the department uses 100% bio-cutlery. They purchase their biocompostables through World Centric (<http://www.worldcentric.org>) but there are several suppliers available. You can purchase biocompostables for about \$0.40 per flatware set. Using recycled-content paper products is another great option when disposables are necessary. But for a lasting fix, why not purchase stainless steel flatware and keep reusing it for years to come? Search online restaurant supply stores for flatware.
- Purchase "green cleaning" products for the maintenance staff. See <http://www.epa.gov/epp/pubs/cleaning.htm> for more information.
- Set up guidelines for outside vendors to ensure the use of green cleaning products for animal maintenance and stall clean-up.

Nearly every process, either natural or man-made, has the potential to create waste, and thus requires management. It is essential that we understand the processes behind waste management in order to properly treat, reduce, reuse, and recycle, to better the health of our natural environment as well as our quality of life. And remember, the *ultimate* waste management method is not to produce waste in the first place!

Waste Reduction Tracking Charts

Goal 1:

Timeframe	Who	Metric

Activities for Goal 1	Timeframe	Who	Metric
1.			
2.			
3.			
4.			
5.			

Goal 2:

Timeframe	Who	Metric

Activities for Goal 2	Timeframe	Who	Metric
1.			
2.			
3.			
4.			
5.			

Human Health and Food

The third interdependent element of sustainability—the first two are sound environmental and economic stewardship—is human well-being. Each Extension Office is a living community, and the health and well-being of all its members is a fundamental component of the community’s prosperity. We must all do our part to ensure that the office is safe and healthy. UF’s Health and Wellness Committee has compiled a number of related resources online at <http://www.healthplan.ufl.edu/wellness/default.asp>

Simple efforts can be taken to improve health in the office as well as in everyday life.

1. Health & Exercise

- Be sure that you and your co-workers are working safely. Use the workplace safety resources provided by UF’s Environmental Health & Safety, such as the information on ergonomics http://www.ehs.ufl.edu/programs/hazard_ergo/ergo, and other workplace safety information: (http://www.ehs.ufl.edu/training/safety_orientation).
- Take health walks on lunch breaks, work in the garden, park your vehicle far from your office building and walk the remaining distance, or if able, opt for active transportation to work, such as biking.

The Task Force for Community Preventive Services has found that health promotion activities tailored to an individual’s specific needs increases the likelihood of them beginning an exercise program and increases the frequency of exercise. Individualized programs have resulted in a 35% increase in the amount of time individuals spend in physical activity (<http://www.thecommunityguide.org/pa/behavioral-social/individuallyadapted.html>).

Employee education programs for physical activity include individual counseling after an employee health survey. Individualized programs for behavior change, and personalized counseling by nurses or health educators, are effective in increasing an individual’s physical activity. This counseling and education may include:

- Setting personalized goals and monitoring progress toward achieving them
- Building social support for new behaviors
- Reinforcing behavior change with awards
- Developing new problem-solving approaches to enable the individual to maintain behavior change

Educational materials can be distributed in the workplace through classes, bulletin boards, email messages, electronic newsletters, tweets, web pages, blogs, etc.

Social support programs are also effective at improving participation in physical activity. Examples include office sports teams, walking clubs, and “healthy lunch” cook-off events that develop and maintain commitment to physical activity and healthy eating.

2. Tobacco-Free Extension Offices

- Tobacco-free offices can help improve the health of everyone in the office space. Many college campuses, schools, and beaches in the state of Florida have already become tobacco-free. It would make a profound statement for Extension Offices to follow in these footsteps. For more information, visit <http://www.tobaccofreeflorida.com> and <http://www.tobaccofree.ufl.edu>.

3. Local and Sustainable Restaurants

- The Eat Well Guide shows a list of restaurants, coffee shops, farmer's markets, organizations, stores, co-ops, stores, and online shopping in your area that follow sustainable practices. The Guide can be found at: <http://www.eatwellguide.org/i.php?pd=Home>
- Using Fresh from Florida recipes <http://www.freshfromflorida.com/Recipes> along with listings of seasonally-available fruits and vegetables <http://www.freshfromflorida.com/Divisions-Offices/Marketing-and-Development/Consumer-Services/Buy-Fresh-From-Florida/Crops-in-Season> can help those who prefer to garden and cook at home.

4. Farmer's Markets and CSAs

- Most communities have a local farmer's market <http://www.freshfromflorida.com/Divisions-Offices/Marketing-and-Development/Consumer-Services/Buy-Fresh-From-Florida/Community-Farmers-Markets>, which is a great way to locate fresh food and help support the local economy.
- Partner with your local farmer's market to spread information on edible agriculture, including information on what is harvested during each season.
- Follow these links to find the farmer's market nearest to you: <http://www.farmersmarketonline.com/fm/Florida.htm>, <http://www.freshfromflorida.com/Divisions-Offices/Marketing-and-Development/Consumer-Services/Buy-Fresh-From-Florida/Community-Farmers-Markets> or <http://www.localharvest.org>
- Enroll in Community Supported Agriculture (CSA) shares and/or allow your parking lot to be a pick-up location for local CSAs once or twice a week. Find CSAs through websites such as <http://www.organicconsumers.org/state/greenbiz.cfm?state=FL&type=csa>
- Work with local farmers and vendors to create a county-specific listing of farmer's markets, CSAs, and U-pick operations, and make it available on your county's Extension website.

5. Composting and Gardening

- The US Composting Council offers Composting Training sessions throughout the country and webinars on what is compostable <http://compostingcouncil.org/training>. Ask for help from an Extension Specialist, watch for trainings and webinars near you, or offer your own classes.
- Encourage all Extension faculty, staff and volunteers to participate in community gardening.

- Set aside a lunch area with compost bins nearby, so everyone can bring their own lunch to work and then compost the “compostable remains.”
- Have a seasonal garden-growing contest where employees compete to see who grows the largest or most unusual produce in a season.
- Learn the benefits of community gardening: <http://www.communitygarden.org/learn>

6. Engagement in Human Health & Food:

- Monthly “healthy lunch” potlucks at the office are a great way to try different recipes, eat healthier, save money, and not eat out. Make sure the dietary preferences, food allergies and dietary restrictions of the participants are known.
- Competition: who can produce the cheapest meal with the lowest carbon footprint?
- Start a sustainability reading/discussion group in your office or community, or join an already-existing group.
- Work with your County Extension Director or supervisor and other members of your office to ensure that there is an established method for raising complaints and concerns in your office without fear of reprisal.
- Share information with other extension agents about your schedule, and try to develop alternate transportation arrangements to work, such as carpooling.
- Create an after-work/weekend club for running, bowling, bicycling, or other activity to promote coworker friendships and healthy exercise.

Each of us can contribute to a healthy social and cultural environment in the office. Diversity within the community enriches the professional and educational experience for employees. We learn from those whose experiences, beliefs, and perspectives are different from our own, and opportunities to do so are most accessible in a richly diverse, dynamic intellectual and social environment.

Human Health and Food Tracking Charts

Goal 1:

Timeframe	Who	Metric

Activities for Goal 1	Timeframe	Who	Metric
1.			
2.			
3.			
4.			
5.			

Goal 2:

Timeframe	Who	Metric

Activities for Goal 2	Timeframe	Who	Metric
1.			
2.			
3.			
4.			
5.			

Communication and Engagement

COMMUNICATION

Communication is a very important part of any successful initiative. Lack of communication can cause important ideas to get cut off from people who need to hear them, or would benefit from being in the loop. Ideas can also be misconstrued if poorly communicated. You may have a great idea, but unless you can communicate it properly, you may be unable to see it come to fruition.

Proper communication leads to a more functional work environment where everyone's voice is heard and nobody feels left behind. If you think you have a good idea for improving the efficiency and sustainability of the office—be it to reduce your office's carbon footprint or simply to implement a good cost-cutting measure—step one is bringing it to the attention of your coworkers. Once people are talking about an idea, implementation will be much easier.

Social networking is quickly becoming a very important form of communication for all generations, and getting connected is a surefire way to keep your Extension Office current. An organization that maintains pages on social media sites such as Facebook and Twitter is far better off in this technological age than one that does not.

Children and teenagers are extremely technology savvy and reaching out to them via social media is an easy and effective method of communication. This is both an innovative *and* sustainable approach to improving communication.

Simple steps can be taken to improve communication at your office and in your everyday life.

1. Sustainable efforts include everyone. Encourage your clients to take part in these changes as well as your fellow coworkers.
2. Switch over to email for your office's mailing lists. Emailing is faster and more resource-efficient than paper mail.
3. Ensure you have an organized mailing list so that everybody who needs your information can receive and retrieve it when needed. Who among your customers and coworkers doesn't have an email address? Can they acquire one?
4. Organize your email address format to make it easy to find a staffer. A common format is [department][name].
5. Discuss problems that need to be addressed at staff meetings.
6. Get connected! Social networking is an easy method for getting ideas across to as many people as possible.
7. Know your target audience. Who are you marketing to and how can you ensure that your ideas get across to them?
8. The public library is an excellent resource. Your clients can use the local library's free Internet in order to access Extension publications, training opportunities, and other valuable resources. Use this website to find the library branches closest to you: <http://nces.ed.gov/surveys/libraries/librarysearch> Perhaps you can arrange public access to the Internet in your office, using a tablet, laptop, Kindle, or other device dedicated for visitors.
9. For clients with less knowledge of technology, there are various resources on the Internet, such as classes, to enable them to acquire the knowledge they need to come to terms with the modern

technological age: <http://www.myageingparent.com/helping-older-people-get-started-on-computers-in-four-simple-steps>

10. Opt out of needless time wasters at the office or home.

- To stop pre-screened credit card offers, go to <http://www.consumer.ftc.gov/articles/0148-prescreened-credit-and-insurance-offers>
- To stop unsolicited mail, phone calls, and emails, go to <http://www.consumer.ftc.gov/articles/0262-stopping-unsolicited-mail-phone-calls-and-email>
- To be put on Florida's Do Not Call list for telemarketing, go to <http://www.fldnc.com/Home.aspx>

By simply acknowledging the importance of communication, and by understanding the effects that poor or proper communication can have on the office, you can play a role in making your work environment more convenient, enjoyable and efficient.

ADDITIONAL RESOURCES:

<http://socialmediatoday.com/briansolis/1698191/5-important-questions-answered-about-importance-social-business-strategy>

<http://www.greenbook.org/marketing-research/engaging-consumers-via-social-media>

<http://pewinternet.org/Commentary/2012/March/Pew-Internet-Social-Networking-full-detail.aspx>

ENGAGEMENT

Empower faculty, staff and clients to work together towards a set goal. Sustainable behaviors are designed to be adapted for personal life outside of work as well.

1. Training

- It is the role of the County Extension Director to show the importance of practicing more sustainable behaviors. This can be done daily, during the hiring process, and as part of trainings or meetings.
- Incentives are a good way to encourage incorporation of sustainable behaviors in all aspects of your life. For example, sustainable behaviors can be taken into consideration when choosing an Employee of the Month.
- All personnel should participate in team-building or leadership training for further personal development. Volunteers should also be provided with opportunities to participate in team-building exercises.

2. Volunteerism

- As direct representatives of the community, Extension faculty and staff should be engaged with the community outside of work.

- Volunteering will greatly benefit the local community and is a great way to give back to others. See http://www.helpguide.org/life/volunteer_opportunities_benefits_volunteering.htm to learn more about the value of volunteering.

Many studies have demonstrated that helping others kindles happiness. When researchers in Social Science and Medicine at the London School of Economics examined the relationship between volunteering and measures of happiness in a large group of adult Americans, they found the more people volunteered, the happier they were. For more information, visit <http://www.volunteermatch.org> and <http://www.nationalservice.gov/serve-your-community/benefits-volunteering>

3. Relationship Building in and out of the Office

- Encourage faculty and staff to spend time together, to foster closer ties within the workplace. This has been shown to improve happiness, which in turn improves productivity. Togetherness can be promoted in a number of ways: sports, morning stretches, lunch box chatter, etc.
- Consider having Extension Agents host a regular “Lunch with an Agent,” which would allow members of the community to interact with their Extension Agents in a more relaxed setting. Perhaps encourage elected officials to participate.
- Encourage staff to eat lunch in more stimulating environments, such as the outdoors, so they are more refreshed when they return to their office.
- Creative Scheduling
 - A creative schedule should include set “office days,” “client visit days,” and perhaps allow one day to work from home.
 - Creative scheduling will minimize the amount of commuting to work as well as trips to visit clients.
 - Employers generally report a reduction in tardiness and absenteeism for employees on flexible work schedules. This is attributed to the employees’ ability to commute outside of the rush hour and their increased flexibility in scheduling appointments and running errands. For more information, see <http://humanresources.uchicago.edu/fpg/forms/compensation/FlexibleWorkOptionsGuide.pdf> and <http://www.cleanaircampaign.org/Your-Commute/Earn-Cash.-Win-Prizes/Eligible-Commute-Alternatives/Compressed-Work-Weeks/Benefits-of-Alternative-Work-Schedules>

4. Employee of the Month

An Employee of the Month program can reward sustainable behaviors such as carpooling, the use of reusable water bottles, volunteering, and being energy conscientious. All of these behaviors can be incentivized in some form to further encourage them.

People weigh an incentive's value against the difficulty in earning it. Ask too much, and people will dismiss your incentive. Choose rewards that have inherently higher value, and you can inspire higher performance. Rewards that attract peer attention and stand out from regular pay are cited as some of the most motivating. For more information, visit:

http://sustainability.berkeley.edu/os/pages/talkinglouder/docs/Promoting_Sustain_Behavior_Primer.pdf

Here are 10 non-monetary incentives that might encourage people to excel in the Employee of the Month program.

1. Create a quarterly awards banquet where exceptional employees can be properly recognized for their efforts.
2. A handwritten note from the County Extension Director
3. A flexible hours schedule, where employees can work from home
4. A longer lunch break
5. A free day off work, no questions asked
6. A “casual dress” day
7. First choice of which county car to use when going on a work-related trip
8. A one-on-one lunch with the County Extension Director
9. The opportunity to participate in other Extension services during work, such as financial planning or gardening
10. Allow the winner to lead a sustainability-related topic, catered to their interest, at the next staff meeting.

See <http://intelispend.com/employee-rewards-recognition> for additional ideas on incorporating employee incentives.

Communication and Engagement Tracking Charts

Goal 1:

Timeframe	Who	Metric

Activities for Goal 1	Timeframe	Who	Metric
1.			
2.			
3.			
4.			
5.			

Goal 2:

Timeframe	Who	Metric

Activities for Goal 2	Timeframe	Who	Metric
1.			
2.			
3.			
4.			
5.			

