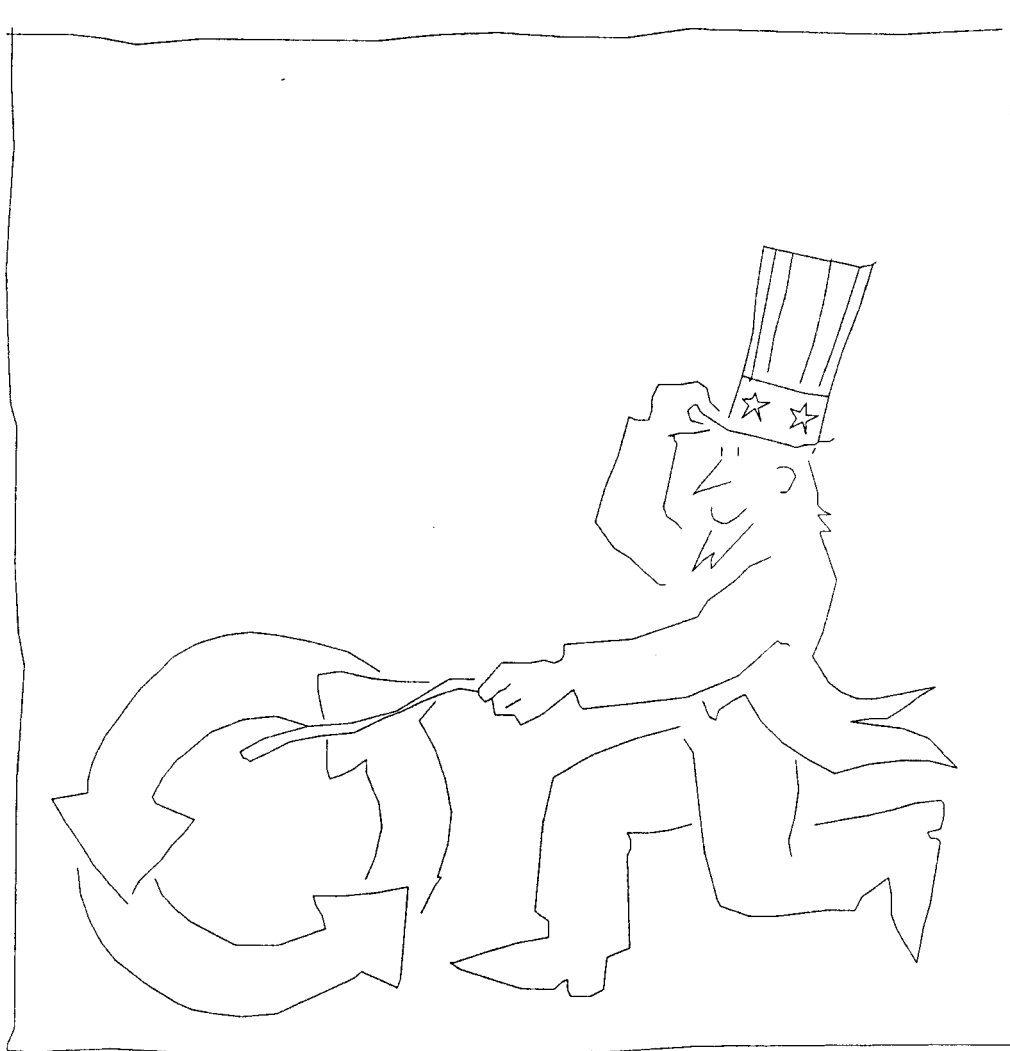


Greening Your Workplace

An *Environmental Citizenship* Guide for Florida Businesses



Florida Department of Environmental Protection

Office of Environmental Education



Introduction

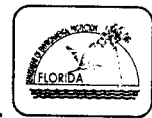
What needs to be done

More and more Florida businesses are finding that keeping a green workplace makes sense. It is an idea that seems to be here to stay, both because it makes sense financially and because it is good for our environment. For many businesses, the easiest way to begin is to start an office recycling program. But important as recycling is, there is more to creating a sustainable workplace than waste recycling. It involves analyzing the waste you produce, reducing your output of waste, and *then* recycling what is left. It also means constantly looking for new and better ways to improve efficiency and conserve energy, water and resources used by your business.

A successful green workplace will track its use of materials -- whether in water, energy, paper, chemicals, or office supplies. It will find ways to use less of each of them, then it will assess the amount and kinds of leftover materials that are being recycled and try to find new uses for them -- *then*, it will recycle more whenever possible. Documenting waste reduction and the money you save helps management see that it all is worth while.

It's best to know where you are starting from, so that improvements and savings can be tracked. Depending on the size of your organization and the level of involvement by management -- and if management is involved, chances of success with your green workplace program are much improved -- identification of your starting point might involve only a review; or, for more complex organizations, it may mean a formal study and audit conducted by facility managers or an outside consultant. Once a starting point is established, it is time to set goals.

If you find there are areas where your greening doesn't appear to be working (your recycling yields are declining, you are using more resources than before the effort began) react. Study each part of your operation to find the problem. Employees may only need positive feedback, or



some extra training. Or, there may be equipment or organizational problems. Acting immediately will help you turn things around before old, wasteful habits return.

The 3 Rs

Reduce -- Wherever possible it is best to use as little of a product, chemical, or raw material (including water) as possible so as to cut waste and save energy.

Reuse -- If a product has been used and not consumed, use it again as long as it functions.

Recycle -- Whatever cannot be reused should be recycled.

A Green Team needs Green Leaders

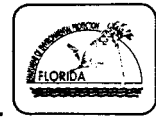
Use your management improvement programs to educate your managers about waste reduction and recycling. Include waste minimization and recycling goals in your managers' performance measures. Introduce an element of competition -- pitting offices and units against one another for monthly or annual green awards. And publicize success. Provide positive feedback. People always are more motivated if they know the cumulative effect of the many small changes they are making. Build on success; use revenue from profitable programs -- such as recycling of fine white paper -- to finance less profitable programs. Or, set some of it aside to reward employees or work groups for performance. Make environmentally responsible management a part of the everyday way your organization does business.



✓ A Green Workplace Checklist

Having a green workplace means that you must make the most efficient possible use of the resources you have available, and reducing waste and eliminating preventable adverse effects on the environment. But what about the bottom line? Businesses that have implemented waste reduction and minimization programs report that reducing consumption and waste almost always is reflected in financial savings for the company. In nearly all cases, the initial expenditures (if any) required to implement waste-saving measures will be quickly offset by the savings.

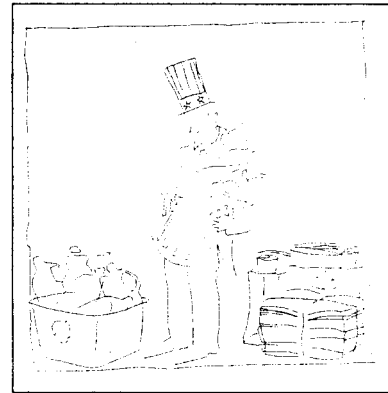
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✓ **The 'Paper-less' Office** - Paper wins the race hands down for the material that turns up most often in the average company's wastebaskets. In fact, fine paper -- stationary, book paper, photocopier paper, and computer paper -- can account for 80% of the waste paper in an office. A little forethought can eliminate a lot of the paper that otherwise would be thrown away.

Using (or reusing) paper better

- ☒ Produce only two-sided documents and copies to cut consumption of paper by up to 50%.
- ☒ Try reducing the size of copies, so two pages can fit on one page.
- ☒ Develop a multipurpose business form that eliminates the use of duplicate forms and forms for individual tasks.
- ☒ Collect paper that has been used on one side and reuse it within the workplace -- for fax messages and fax cover pages, for drafts of documents, and for notepads. X out the old side.
- ☒ Let a print shop cut and bind the scrap paper into scratch notepads, or phone message pads.
- ☒ Use letter and memo formats that maximize the use of space on the page; narrow margins are an example, as is less white space under the letterhead.
- ☒ Purchase lighter weight paper -- 18 pound, rather than 20 pound -- for stationary, paper faxes, and copiers.
- ☒ Reduce the amount of paper that is easily available on the supply shelves. Psychologically, when people see ream after ream of paper, they assume that paper is plentiful and cheap and tend to waste it.



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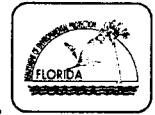
Electronic paper

- Use electronic mail for notes and memos.
- Rather than printing copies of a memo for each employee, circulate them through the office, or post them on a bulletin board.
- Create a special on-line bulletin board, or 'Intranet,' for company- and employee-related material -- those important memos you circulate to everyone, kudos, and announcements for the office picnic.
- Edit documents on your computer screen, rather than printing out a copy. (NOTE: Since errors are more likely with on-screen editing, read drafts carefully; simply using the spelling checker is not enough.)
- Send review (and final) copies via electronic mail.
- Program your computer printer to print only the desired text -- not additional blank sheets, as so many do.
- Don't print out your e-mail. Keep it on your computer.
- Use voice messaging to cut down on paper messages.
- Consider the use of electronic funds transfer for your office payroll (then cut down on the size of the tax information sheet employees receive each payday), and investigate the use of electronic purchasing as well.
- Review magazine and newsletter subscriptions and circulation lists to ensure that they are accurate and still appropriate. Share copies rather than subscribing several times. Set up a library and reading room, and keep magazines and newsletters there. If a publication is available on line (by e-mail or on the World Wide Web) subscribe or read it electronically.

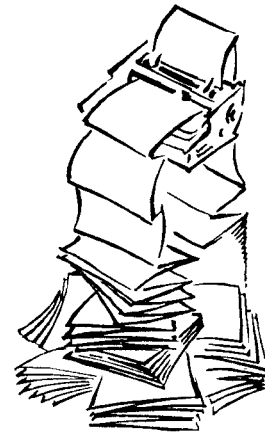
Did you know . . .

A Pinellas Park firm revamped what had been a once-through parts-washing operation into a system that reused the wash water four times -- then twice more after contaminants were removed.

These changes resulted in an **80% reduction** in water use, a **\$6,000 savings** by reducing the amount of wash-water sludge that needed to be disposed of, and a **\$1,000 savings** from the reduced use of water.



- ☒ Reduce fax-related paper waste at both ends by using a fax cover sheet that is reusable -- such as a laminated sheet and a dry ink pen that is easily erased. Or, print the cover on the back side of previously used paper. Or, use a rubber stamp to print a blank on the corner of the first page, then fill in the blanks. Or, design a fax cover page with space for a short message -- which often is all that is needed.
- ☒ Better yet, *eliminate* fax cover sheets. Most letters and memos already include the name of the recipient, and your fax probably stamps your name and phone number at the top of each sheet.



Other paper-related ideas

- ☒ Recycle all paper -- fine paper as well as lower quality material such as newsprint and foolscap.
 - ☒ Support -- or help create if they don't exist -- recycling programs in your community.
 - ☒ Reuse manila file folders -- then reuse them again.
 - ☒ Reuse interoffice mail envelopes until they're worn out. Print blank name-and-address sheets and paste them over the used-up name-and-address spaces on the old envelope.
 - ☒ Let people know that you work in a green workplace: put a reminder -- 'Printed on paper with XX% post-consumer recycled content' -- on every document you print.
- ✓ **Buying and Using Green Office Supplies** - If recycling and waste reduction is to work, we need to purchase more things that use or are made of reusable, recyclable, and recycled materials. Many manufacturers of office supplies are climbing aboard the green wagon.
- ☒ Buy reusable and durable supplies, such as rechargeable batteries, ink pens that use refills, and mechanical pencils or pencils made from recycled materials.
 - ☒ Look for products -- paper, envelopes, file folders, writing pads, paper towels, pens, paper clips (plastic or metal) plastic-covered notebooks, etc. -- with the maximum amount of post-consumer recycled content available.

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- Let vendors know you want affordable supplies that contain a significant amount of post-consumer recycled content, then shop around until you find it.
- To help *make* them available, recycle metals and plastics as well as paper in your workplace.
- Return plastic ring or spiral bindings to the print shop for reuse, or reuse them yourself.
- Send used laser printer toner cartridges to be recycled -- then buy and use recycled laser toner cartridges.
- In the case of paper products, buy unbleached, non-de-inked products whenever

Did You Know?

Recycling can pay off: By placing color-coded barrels throughout the workplace, companies can make it easy for employees to recycle. A Canadian company saves \$14,000 a year and cuts its garbage disposal by 75%. Use different colors for aluminum (metal), paper, and plastic

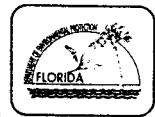
possible. This applies to all paper office products, including envelopes, copy paper, forms, and stationery.

- Buy products with the least amount of wasteful packaging: bulk coffee, rather than individually portioned packages, or bulk paper clips.
- Erase or reformat used computer diskettes
(including the disks you receive in the mail with those free offers for Internet service).

✓ **Green Equipment and Facilities** - Office furniture, office equipment, and even office buildings can be green.

- Furniture** -- Look for used furniture first, then look for furniture that makes use of recycled material, such as wood chips and pressed wood.
- Buy furniture that is durable and easily repaired.
- Equipment** -- Fax machines should use regular paper, rather than special, thermal papers which cannot be recycled.
- To save money, space and energy, investigate the purchase of combination machines -- fax, copier and printer rolled into one.

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- ☒ Be sure new copiers have double-sided capabilities -- and if it can be set to duplex automatically, so much the better.
- ☒ When you purchase new electronic equipment -- faxes, copiers, computers -- look for the U.S. EPA's *Energy Star* label. (For information on the *Energy Star* program, call, toll free: **888-STAR-YES**.)
- ☒ **Lighting and Energy** -- You will save energy and money by switching from incandescent lighting to energy-efficient fluorescent lighting. The compact fluorescent bulbs cost more to start, but save in the long run in terms of energy, money and time spent replacing bulbs. The EPA's *Green Lights* program (**888-STAR-YES**) can provide suggestions for other ways to save on lighting.
- ☒ Of course, you should turn off lights when you leave rooms (or, install motion sensors that will do it for you).
- ☒ Computers, copiers, printers and other electronic equipment that doesn't *need* to be on should be turned off at the end of the day and over weekends.



Did you know? An ink manufacturing company in Tampa, developed an ink recycling operation which saved small printing companies throughout Florida the costs of disposing of waste ink. And, they gained access to less expensive recycled ink. Savings for a typical small printing company: \$3,800 in materials and disposal costs.

healthy and saves energy.

- ☒ Battery-operated equipment should use removable, and rechargeable, batteries.
 - ☒ Encourage employees to use the stairs rather than elevators for short, one- to three-floor climbs. It's
- ✓ **Driving Green** -- Driving a motor vehicle may be the average citizen's most polluting daily activity. It also is one of the average businesses' most energy-intensive activities.

Greening Your Workplace



Vehicle maintenance -- For longer life, better efficiency, and higher energy savings, keep vehicles properly maintained.

Use only a suitable re-refined motor oil, and use the recommended grade of motor fuel.

Have vehicles serviced at a garage that recycles used oil and batteries and is certified to recover CFCs from vehicle air conditioners.

Follow the manufacturer's guidelines for oil changes, tune ups, and tire rotation.

Keep tires properly inflated. Low tires waste gas and increase wear.

Energy -- Where possible vehicles should be equipped to use an alternative fuel or with a dual fuel system to allow the use of propane or natural gas.

Look into electric vehicles for deliveries and short, in-town driving. Recharge overnight. If your office complex is like a campus -- spread over several buildings in one complex -- consider modified electric 'golf' carts for deliveries between buildings.

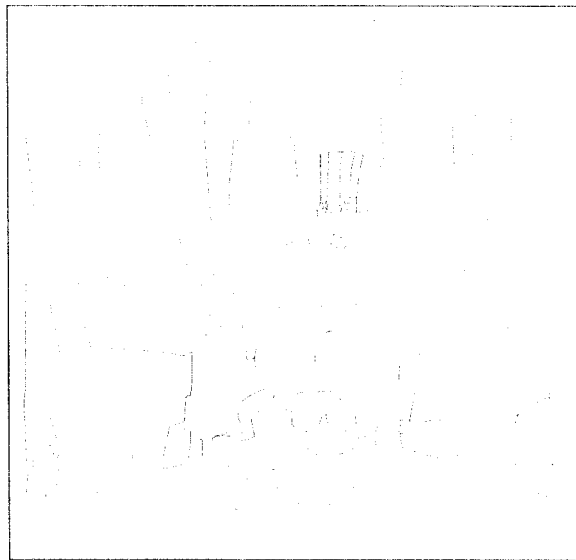
Encourage employees to bike to work, take the bus, use rapid transit where available, or carpool -- then provide showers and changing rooms for bikers, and more flexible

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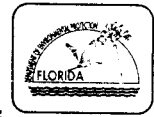
Did you know? An Ocala firm saved \$300,000 a year by implementing a series of small steps -- substituting materials and equipment, and making processes changes -- the incremental effects of which were to reduce emissions of *Volatile Organic Compounds*.

ours to account for bus, train, and carpool schedules.

Investigate the use of employee *telecommuting* -- allowing employees to work at home with a computer that is connected to the office.

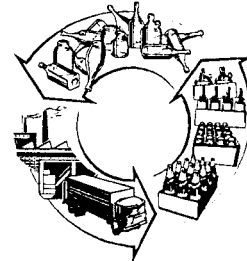


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Teleconference rather than have meetings that require travel. If you *must* drive to a meeting, share rides.

✓ **Being Green at Breaks and at Lunch** -- Even lunchrooms offer opportunities to implement the 3Rs.



Buy paper towels, napkins, and other lunchroom supplies that contain recycled materials.

Buy foods -- ketchup, mustard, butter or margarine, cereals, grains, flour, cooking oils, etc. -- in bulk when appropriate.

Use reusable cloth or steel coffee filters in workplace coffee makers. If that is not possible, use filters that are made from *unbleached* paper.

Use a personal mug for coffee at your desk. Keep additional mugs available for visitors.

Take your coffee mug with you to the lunchroom.

Recycle glass, cans, newspapers, and corrugated cardboard.

Supply marked, color-coded bins for recyclables and place them strategically throughout the workplace.

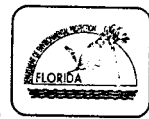
✓ **Greening the Out of Doors** - You can be green *around* the workplace too.

Protecting the environment -- Design landscaping to use less water, fewer pesticides, and lower amounts of fertilizer.

Landscape with native plants. They're adapted to Florida's environment.

Did you know?
Every little bit helps. One company sets up a box by the plant exit on payday. Employees slip their empty pay envelopes into the box as they leave, and the envelopes are reused the next payday.
Electronic deposit saves even more

Greening Your Workplace



- ☒ Don't waste rain. Design your property so that runoff from roofs and pavement will flow into landscaped areas.
- ☒ Landscape to take advantage of stormwater, with ponds and wetlands, then scatter picnic tables around for breaks and lunch hours.
- ☒ Use porous pavement to reduce the amount of stormwater that washes into storm drains.

Did you know? A large panhandle chemical company reduced its air emissions of *cyclohexane* by 90% (from 869,000 pounds per year to 36,000 pounds). Combined with other waste reduction measures, the company's pollution prevention activities have reduced its *toxic air emissions* from 1.02 million pounds each year to some 88,000 pounds. The \$640,000-per-year savings are expected to pay back the \$1.4 million investment in just over two years.

- ☒ Water only when necessary and not on a predetermined schedule -- or automatically.
- ☒ Mulch. It conserves water, enriches the soil, cuts weeds, and protects against erosion.
- ☒ **Energy** -- Trees on the south and west sides of the building should shade roof areas and windows.

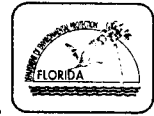
☒ Awnings over windows will keep the sun from overheating rooms in the summer -- and by removing them in the winter you will gain some 'free heat.' (Shades and blinds can serve the same purpose.)



You probably cannot implement *all* of these suggestions. No one expects you to. But even if you try only a few of them, you will be helping Florida, and probably will be saving yourself some money. Some of these recommendations cost a little more to implement than others -- installing low-energy fluorescent bulbs comes to mind -- but you should start to save after only a few months have passed. If you keep good records, you will be able to verify these savings and perhaps help others follow your example.

Most importantly though, you will be helping to protect Florida's environment, and to save increasingly precious energy and resources. You and your Green Business will be *Environmental Citizens* of Florida.

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Other *Environmental Citizenship* Publications from the Department of Environmental Protection

Ecosystem Management Around the Home -- Suggestions for living environmentally at home. Many of these suggestions can be easily moved to the workplace.

You, Your Automobile, and Your Environment -- Information for better management of the average citizens' most polluting daily activity. Many -- if not most -- of these tips and suggestions apply as well to vehicles used at work.

The Environmental Citizenship Handbook -- Just about everything a Florida citizen might want to know about green living. Green tips -- for everyone. (Produced with Keep Florida Beautiful)

Toward Environmental Citizenship -- What **is** *Environmental Citizenship* anyway? A primer.

These publications and other information about recycling and pollution prevention are available from the Department's World Wide Web site (<http://www.dep.state.fl.us>) and from the Office of Environmental Education, Florida Department of Environmental Protection, 3900 Commonwealth Blvd., MS 30, Tallahassee, FL 32399-3000. Telephone: (850) 488-9334.

Credits: Information in this publication was taken from materials prepared by the United States Environmental Protection Agency, Environment Canada, the *Use Less Stuff Report*, and the Environmental Defense Fund, as well as from employees of the Department of Environmental Protection.



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