

"Greening Your Business"

You're running a small- or mid-sized business, and you want to do it right. That means bringing your environmental performance in line for a healthier bottom line. But how to start working sustainably? Or, having started, how to follow through?

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(source: GreenBiz.com

http://www.greenbiz.com/toolbox/essentials_third.cfm?LinkAdvID=15205)

1. Taking the First Step

You're running a small- or mid-sized business, and you want to do it right. That means bringing your environmental performance in line for a healthier bottom line. But how to start working sustainably? Or, having started, how to follow through?

Here are a few fundamentals:

Comply with state, local, and federal environmental, health, and safety regulations. This gives your beyond-compliance efforts a solid foundation. You may gain additional benefits: Some governmental programs offer reduced oversight and paperwork of companies that are in full compliance.

Understand how your business affects the environment, from the things you buy to your relationships with customers and suppliers, to the full life-cycle of your products and services. At each step of the way, there are opportunities to make choices that can help you align environmental responsibility with business success.

Begin to make changes where they can be done profitably — or at least in a way that will not decrease profits and productivity for more than a short period. It's important to keep in mind that it isn't possible to do everything right; gradual, incremental progress is a worthy goal.

There are dozens of ways companies of all sizes can reduce their environmental footprints, save money, earn consumer trust and stakeholder confidence, comply with government regulations, be ready to snag new market opportunities, and boost efficiency and productivity.

This seminar will give you some suggestions on getting started, with links to additional resources.

2. Laying the Groundwork

Make sure you're obeying the law. Staying on top of federal and state environmental, health, and safety requirements is an essential first step toward greening your business. In many cases, this means obtaining applicable operating permits, providing safety training to employees, testing and repairing equipment regularly, and taking the necessary steps to protect the environment and employees from toxic emissions. Understand federal and local agency rules that affect your business. To prepare for inspections or audits, keep detailed records of the measures your business has taken to ensure compliance. Many programs provide free compliance assistance to small businesses.

For more information:

Compliance Assistance Centers

Small Business Assistance Program

OSHA Consultation Service

Understanding the Hazardous Waste Rules -- A Handbook for Small Business

Measure and track your waste. Watch what your company consumes — energy, supplies, raw materials — and what it wastes — packaging, raw materials, energy, emissions. Try to measure and quantify this waste: How much do you spend to purchase, handle, store, and dispose of the wasted material? Your audit may be as simple as counting or weighing the trash bags your company disposes of on a weekly or monthly basis, or checking energy utility bills. Or it may involve bringing in professionals to assess your company and recommend ways to reduce energy, redesign products or distribution systems, and other efforts to reduce waste and save money.

For more information:

Re-Think Your Bottom Line

Waste at Work: Prevention Strategies for the Bottom Line

How to Inventory Your Wastes for Environmental Compliance

Concise Self-Assessment Guide to Environmentally Sustainable Commerce

Eco-efficiency: A Guide to Reporting Company Performance

Write an environmental vision statement. It's easier to get behind a vision when all your players know what the company stands for. This foundation will show customers, stakeholders, and your community that your business is invested in the environment. With your team, set an environmental vision statement and goals that all your employees understand, and your managers will uphold. At minimum, such statements commonly affirm a company's intentions to respect the environment in the design, production, and distribution of its products and services; commit the company to being in full compliance with all laws, and to go beyond compliance whenever possible; and make your environmental policies transparent.

Need a model environmental mission statement? These companies did it right:

The Body Shop
Herman Miller

Rally the troops. Employee participation is essential to a successful environmental initiative. Bring together a team of employees to promote environmentalism in the workplace. These troops can head up the recycled-product purchasing effort, educate co-workers on environmental issues, and track environmental accounting for their department. Consider creating incentives such as rewards and recognition for employees who drive your company's environmental efforts. Name a periodic "green champion" in order to single out employees' environmental actions.

For more information:
Ten Keys for Educating and Engaging Employees

Examples of companies with green teams:
Bank of America's associate programs
Starbucks green team

3. Reducing Waste

Reduce office waste. Use fewer products and use fewer raw materials in the front office and administrative operations. Start with cutting back on paper: Establish a company-wide policy of photocopying on both sides of the paper, using the blank side of printed material for creating draft documents, and e-mailing reports instead of making printed copies. Use outdated forms and letterheads for in-house memos; post general memos in central locations; and encourage saving documents on disk rather than paper. You'll save money immediately.

For more information:

Green Guide on Trimming Office Waste

Waste Prevention Information Exchange

Business Guide to Waste Reduction and Recycling

Waste at Work: Prevention Strategies for the Bottom Line

Create a reuse and recycling culture. Set up a workplace recycling system for paper, plastics, aluminum, and glass. Remember that wasted materials are wasted money. Innovate: Examine manufacturing processes for opportunities to increase materials-use efficiency; rethink product packaging; consider composting food waste; and research recycling programs for unwanted electronic equipment. Encourage employees to reduce, reuse, and recycle.

For more information:

Commercial/Office Recycling Factsheet

Electronics Recycling Consumer Education Initiative

Business Recycling Cost Model

Green your purchasing. Specify your commitment to seek out environmentally preferable products. Identify opportunities to purchase recycled, refurbished, or reconditioned products where they compete favorably in price, performance, and quality with new ones. Whenever possible, use specific criteria — for example, paper purchases must contain at least 50% post-consumer recycled material. Work with your regular suppliers to identify their willingness to comply with your policy. Seek out alternative suppliers and let employees and suppliers know you expect materials and products to meet environmental standards.

For more information:

GreenBiz Essential on Buying Recycled

U.S. Environmental Protection Agency's Comprehensive Procurement Guidelines

Buy Recycled Guidebook

Rent or lease equipment instead of buying. Consider leasing copiers, computers, and other equipment from manufacturers that will take back and properly recycle their goods at their "end of life." Make it easy on yourself — let the lessor repair and properly dispose of the equipment. You also could buy equipment used and refurbished. Consider renting equipment that is used only occasionally. Alternatively, consider sharing seldom-used machines or equipment with other businesses in your area.

For more information:

Guide to Environmentally Preferable Computer Purchasing

Leasing: A Step Toward Producer Responsibility

○ **REDUCE**

In Connecticut, every person generates approximately 4.2 pounds of trash a day! That translates to about three quarters of a ton each year, per person. That means over 5 billion pounds of waste are made each year just in Connecticut!

Waste prevention or source reduction refers to the practice of decreasing the amount of garbage generated. Consuming and throwing away less garbage is one way we can manage solid waste. Source reduction is a way to actually prevent the making of trash in the first place!

There are different ways a consumer can make less trash.

One way is to **purchase durable, long lasting goods**. Seeking products that have **little packaging** decreases the amount of trash made. Buying fewer items, **avoiding single-use items** or avoiding buying things we don't need are all ways to reduce our trash. **Using less hazardous items** for cleaning, lawn care and other purposes is another component of source reduction.

TIP: To get off junk mail lists, go to http://phillupdbag.com/reduce_junk.php

○ **REUSE**

We encourage everyone to **use a product more than once**, since it extends the life of the product and **helps reduce waste (and saves you money)**. Reusing items by repairing them, donating them to charitable organizations and other community groups, or even selling articles is preferable to single use products. Otherwise, it can end up in the trash and add to the volume! Some of the ways you can reuse items rather than throw them away are as follows:

* Use coffee mugs and real glass instead of plastic or styrofoam

- * Refill bottles, especially water and sports bottles
- * Donate clothing, equipment, furniture and other items to charitable organizations
- * Use empty plastic containers for leftovers

Use “found” items for arts and crafts projects (we do this for our make-and-take craft projects at our education centers)

TIP: Join Windsor Freecycle to give away usable items you don't need!

<http://groups.yahoo.com/group/Windsor-Freecycle/>

○ RECYCLE

State legislature passed the mandatory recycling laws which required recycling of 25% of the state's solid waste stream by January 1, 1991. Nine items were designated for mandatory recycling: **glass food & beverage containers, used motor oil, vehicle (lead-acid) batteries, scrap metal, corrugated cardboard, newspaper, metal food & beverage containers, leaves, white office paper** (private residences exempt). In 1996, **nickel-cadmium batteries** were added and in October 1998, **grass clippings** were also banned from solid waste disposal facilities.

Many municipalities have added additional items to their programs including: plastic resins #1 & #2, magazines and junk mail and even textiles.

Solid waste which is not recycled or composted is incinerated at one of 6 waste-to-energy facilities. The energy produced is sold to electric utility companies.

Source: www.ct.gov

Recycling materials refers to using items again after they are reprocessed. Items that can be recycled include glass food and beverage containers, aluminum and steel cans, newspaper, corrugated cardboard, magazines, plastics #1 & #2, white paper for businesses, grass clippings, leaves, nickel cadmium and lead-acid batteries, used motor oil.

Connecticut's Mandatory Recycling Act went into effect on Jan. 1, 1991. Recyclables are collected, sorted and processed. After baling the materials, they are sent to facilities that process them into new products. **Buying products made from recycling materials will help to “close the loop” of recycling!**

Recycling has many benefits. The more we recycle the less garbage ends up in the landfills and resource recovery or trash to energy plants. **Less energy is used** to process the materials, valuable resources are saved and therefore, **costs are decreased**. Recycling also **prevents emissions** of many greenhouse gases and water pollutants.

Another form of recycling is **composting**. A compost pile is comprised of leaves, grass clippings and other organic matter such as fruits and vegetables. Eventually, this pile decomposes into humus or compost. This may be used to provide nutrients to the soil, reduce the need for fertilizers, protect the soil from erosion and keep organic wastes from having to be landfilled or incinerated.

Windsor Landfill recycles:

- #1 Plastic, #2 Plastic
- Milk & Juice Cartons – (No, per Windsor Landfill)
- Glass Jars and Bottles
- Aluminum Cans
- Steel Cans
- Newspaper and Magazines
- Corrugated Cardboard (3' x 5' x 15" bundles)
- Mixed Paper
- Boxboard (added per Windsor Landfill)

ALSO RECYCLABLE:

PRINTER CARTRIDGES – at the Windsor Chamber of Commerce

PACKING PEANUTS (and BUBBLE WRAP) – Peanut hotline 800-828-2214

ALMOST ANYTHING – through Windsor Freecycle

To prepare items for recycling:

* Place **NEWSPAPERS** in a brown paper shopping bag or tie them in a bundle with cotton or fiber twine.

* If your town collects **MIXED PAPER** -- junk mail, printer paper, magazines and catalogs -- place that material in the bag or bundle with your newspapers. Punch out clear plastic or glassine windows from envelopes. Shred any paper with personal information

* To recycle **BOXBOARD** (sometimes referred to as chipboard), such as shoe boxes, cereal boxes and pasta boxes, remove plastic or wax-paper liners from cereal boxes and remove plastic windows from pasta boxes. Flatten these items and include them in the same bag or bundle as your newspapers and mixed paper. Do not include wax- or plastic-coated cardboard.

* Cut **CORRUGATED CARDBOARD** into small sections and bundle with cotton or fiber twine.

* Rinse **GLASS, ALUMINUM, STEEL AND PLASTIC CANS, JARS AND TRAYS**. Labels don't need to be removed. Do not include containers of motor oil, antifreeze or other automotive fluids, paint cans or medicine bottles.

* Rinse **ASEPTIC PACKAGES** such as juice boxes and milk cartons and remove straws if any.

○ WHAT BECOMES OF OUR RECYCLABLES?

The materials you place in your recycling bin each week come back to us as new products.

- Aluminum cans and glass become new cans and new glass.
- Office paper becomes fluffy tissues
- Plastic containers are turned into carpeting, fleece and building materials

Tip: When you shop, make sure you look for the “recycled” symbol on items you buy. Buying recycled products saves precious natural resources.

○ RECOVER

Source reduction and recycling are important parts of managing our solid waste, but even with our best efforts we'll still need means of getting rid of trash. CRRA recovers the energy in our trash by burning it **to generate electricity**, and since our fourth trash-to-energy plant came on-line in 1992 we have saved over 32 million barrels of oil. In addition, the WTE process reduces the volume of material destined for landfills by 90 percent. So recovering the energy in our trash accomplishes a number of goals:

- * It reduces our dependence on imported oil.
- * It provides a virtually endless supply of fuel for power generation.
- * It dramatically extends the life of our landfills.

○ CRRA TRASH MUSEUM IN HARTFORD

Visitors to the CRRA Trash Museum, located at 211 Murphy Road, Hartford, may tour the 6,500 square feet of educational exhibits beginning at the Temple of Trash. Learn about the problems of old-fashioned methods of disposal, such as the “town dump”. From problems, the tour moves to solutions, including explanations of source reduction, recycling, resource recovery and landfills. During the tour, there is an opportunity to watch the Container Processing Facility in operation. From the mezzanine viewing area, visitors can follow bottles, cans, plastic containers, paper and cardboard from the tipping floor, through CRRA's new state-of-the-art processing equipment and see them crushed or baled. Prepared recyclables are then shipped to markets and made into new products. Back in the museum, a mural by Higganum artist Ted Esselstyn depicts the history of trash management from pre-historic times to today.

The CRRA has a mascot: Phillip D. Bag - created to help education kids and parents about junk mail recycling <http://phillupdbag.com/>

Source: www.crra.org

4. Energy Efficiency

Conduct an energy audit. An audit can be free or relatively inexpensive, but can yield considerable energy and financial savings. Contact your energy utility or an energy services company to arrange an energy audit. They're usually offered for free. Consider using energy service companies, which can arrange to make upgrades at no net cost to your company; they earn their money on utility rebates and in sharing a portion of your monthly energy savings.

For more information:

U.S. DOE Industrial Assessment Centers Program

Lower your energy needs. Encourage employees and maintenance crews to turn off lights, computers, and other devices when they are not in use, especially after hours and on weekends. Consider installing timers to cut the power after hours.

For more information:

Energy Star Small Business Program

Commercial Building Owners and Operators Program

Hands-on Solutions to Improve Your Profits and Productivity

Build it Right: Cleaner Energy for Better Buildings

GreenBiz Essential on Energy Efficiency

Equip with efficiency. Buy energy-efficient equipment. According to the Energy Cost Savings Council, the average building owner can cut energy costs up to 60% by replacing outdated, inefficient electrical equipment with new, high-tech electro-technologies, a potential savings of \$1 per square foot.

Use energy-efficient lighting. There are thousands of lighting products available, many of which offer significant energy savings and improved lighting. Examples include occupancy sensors for frequently vacant rooms; ballast upgrades and reflectors for fluorescent fixtures; compact fluorescent lights in place of incandescent bulbs; timers to turn off lighting; and energy-efficient exit signs. Many of these can pay for themselves in as little as a few months.

For more information:

Energy Cost Savings Council

DOE Toolbook for Financing Energy Efficiency and Pollution Prevention Technologies

U.S. Environmental Protection Agency Energy Star program

Research and Development for Building Equipment and Appliances

Calculate Your Possible Energy Lighting Savings

National Lighting Product Information Program

Choose Green Report: Energy-Efficient Indoor Lighting

Be smart with heating and cooling. Is your building properly insulated? Are the windows double-paned? Are there air leaks? By maintaining your heating and cooling systems, you can reduce your heating and cooling bills. A poorly maintained heating, ventilation, and air-conditioning system uses more energy and wastes money. Systems that are checked annually and kept in good condition use less energy and last longer.

For more information:

Choose Green Report: Room Air Conditioning

Energy Ideas Clearinghouse

Energy Efficiency: Some HVAC Basics

Keep equipment running smoothly. Your equipment comes with maintenance schedules; follow them rigorously. You'll keep your company's equipment running smoothly and at rated energy efficiency. This means replacing filters, cleaning compressor coils, tuning up burners, lubricating pumps and motors, and keeping your motor fleet tuned and ready for work. As standard operations, recycle your waste oil and solvents, and use biodegradable lubricants and hydraulic fluids. Your equipment will run more efficiently and reliably, and you'll save time, energy, and money.

For more information:

DOE Motor Challenge

Industrial Motor Systems Market Opportunities Assessment

Opportunities for Energy Savings in the Residential and Commercial Sectors with High-Efficiency Electric Motors

Green your energy sources. Contact local power providers to see if they offer electricity from renewable-energy sources such as solar and wind power.

For more information:

Financing Solutions for Renewable Energy Projects

Energy Efficiency and Renewable Energy Network

GreenBiz Essential on Alternative Energy

Clean Energy Basics

5. Water Efficiency

Reduce and conserve water. Locate and fix water leaks routinely. Conduct a water audit to find faucets and toilets that leak and have them fixed as soon as possible. Promote water-efficient landscaping, called xeriscaping. Other outdoor water-saving practices include mulching, timed irrigation, and nighttime irrigation.

Install water-efficient fixtures. Consider low-flow aerators for faucets, and "dams" or other devices for toilets. On toilets that use a spring-loaded lever instead of a handle, install water-saving diaphragms. When building or remodeling, seek out low-flow appliances and devices.

Reuse water. Collect rain water for irrigating and other non-potable uses. Reuse water in manufacturing and rinsing procedures: recirculate cooling water; eliminate plenum flushes; convert from continuous flow to intermittent flow; improve control of the use of deionized water.

For more information on all water-efficiency topics:

Water Alliance for Voluntary Efficiency

Water Efficiency and Management in Commercial Buildings

GreenBiz Essential on Water Conservation

Water Efficiency Manual for Commercial, Industrial, and Institutional Facilities

Facility Manager's Guide to Water Management

6. Toxics and Hazardous Substances

Find alternatives to toxics. Even an office operation can use toxic substances in the form of computer or copier toner, cleaning supplies, glues, batteries, and other supplies. Evaluate all parts of your company, from the front office to the loading dock to the factory floor, to identify opportunities to reduce the use of toxic substances. Talk with suppliers about alternatives to solvents, paints, cleaners, and other products that may contain toxic substances.

For more information:

GreenBiz Essential on Cleaning Products

U.S. Environmental Protection Agency Cleaning Products Wizard

Dispose of toxics properly. Create a plan to ensure that all employees safely dispose of toxic substances, including batteries, copier toner, paints, motor oil, dyes, and solvents. Check with your city or county office to find hazardous waste disposal facilities in your area.

For more information:

Rechargeable Battery Recycling Corporation

Used Motor Oil Collection and Recycling

Green your printing. Whether you print in-house or contract with outside printers, look into environmentally friendly printing products and processes. Whenever possible, use recycled paper that is bleached without chlorine. Seek out printers that use water-based press cleaners and soy- or other vegetable-based inks. When designing printing projects, avoid elements that reduce recyclability, such as foil stamping, adhesives, and plastic bags.

For more information:

How to Press Printers to Reduce Waste, Emissions, and Costs

Conservatree

Pollution Prevention for the Printing Industry

Printers National Environmental Assistance Center

7. Travel

Encourage alternative transportation. Your people have to travel, but they don't have to pollute. Support an employee vanpool or car pool program, and offer those who don't drive incentives to take mass transit. Also, provide environmentally friendly options for those who drive, such as transit subsidies, preferred parking for carpoolers, and racks or lockers for bicyclists' gear.

For more information: Employee Transportation Coordinator Handbook

Green your fleet. Purchase or lease vehicles with the highest-possible fuel economy, or those that use alternative-fuel sources, such as electric, hybrid, or fuel-cell vehicles. Whatever vehicles you use, have them tuned regularly. Keep tire pressures at recommended levels in order to increase fuel efficiency. When having vehicles serviced, make sure mechanics dispose of used oil, brake fluid, and other substances properly.

For more information:
Alternative Fueled Vehicle Fleet Buyer's Guide
Transportation Choices
Pollution Prevention for Auto Repair and Fleet Maintenance
Environmental Compliance Assistance Center
Alternative Fuels Data Center

Make your meetings matter. Try to teleconference, rather than travel to a meeting; if you absolutely need the face time, stay in ecologically sensitive hotels. Another way to offset the eco-ills of business travel: invest in a program that will plant trees to absorb the carbon dioxide created by your trips. Host environmentally aware meetings and events. While you're at it, reduce your travel and conference budget, and impress on clients and stakeholders your widespread commitment to sustainability.

For more information:
Greening Your Company's Business Travel
Trees for Travel
It's Easy Being Green! A Guide to Planning and Conducting Environmentally Aware Meetings and Events

Reduce employees' commutes. Give your employees the option of telecommuting, putting in a reduced workweek, or working variable hours. Studies show such programs improve employee productivity and retention. When appropriate, allow employees to work at home one day a week. Arrange for computer hookups, extra phone lines, or other low-cost technologies to allow employees to plug in to the main office from home.

For more information:
Telecommuting Knowledge Center
Telework Web Guide
Telework/Telecommuting Web Site

8. Product Life-Cycle

Understand your impact. Conducting a life-cycle assessment looks at the "cradle-to-grave" impacts of your products — from the raw materials to their manufacture, sale, use, and disposal. Life-cycle assessments can help you identify opportunities to improve efficiency, reduce waste, improve quality, save money, and provide products that are more environmentally appealing to customers.

For more information:

Environmental Life-Cycle Management: A Guide to Better Business Decisions
Extended Product Responsibility Program

Design for the environment. Sustainable product design is simple. It means you've thought ahead: Your product can be disassembled and recycled easily — it has no toxics, uses few raw materials and packaging materials, has fewer components, and takes less energy, water, and resources to produce than traditional products. Goods designed for the environment also can be less expensive to manufacture, and will keep you ahead of regulations.

For more information:

Design for Environment Toolkit
Design for Environment Guide
GreenBiz Essential on Green Product Design

Reuse manufacturing excesses. Find uses for manufacturing by-products, either in internal processes, or by selling the by-products to another industrial user.

For more information:

How Companies Gain Value from Surplus Assets
Waste Exchange Resource Directory

9. Building Design and Construction

Green your building. Environmentally conscious design and construction can reduce a building's life-cycle costs — the total cost of building, owning, and maintaining the structure. Techniques begin with the building's siting — its relationship to geological and other natural features — and can include all of the building's materials and systems. There are thousands of environmentally preferable building items to choose from, ranging from structural products made from recycled materials to flooring made from nontoxic or renewable materials.

For more information:

Greening the Building and the Bottom Line: Increasing Productivity Through Energy-Efficient Design

GreenBiz Essential on Green Building

Green Building Design and Construction

U.S. Green Building Council

Sustainable Building Technical Manual

Environmental Office Design

10. Reinforcing Success

Seek recognition for your environmental efforts. Apply for corporate environmental awards to benchmark your successful sustainability efforts.

For more information:

GreenBiz.com Awards Directory

National Environmental Performance Track

Offset environmental impacts. Calculate your facility's carbon emissions and work to offset them through tree planting, forest protection efforts, and energy-efficiency projects.

For more information:

GreenBiz Essential on Climate Change

Business and Climate Change

Emissions Marketing Association

Climate Neutral Network

Take advantage of financial incentives. Investigate state and local initiatives that provide financial incentives for environmental efforts. Other programs might offer extensive hands-on assistance for corporate environmental efforts.

For more information:

Financial Incentives for Business to Invest in Renewable Energy Systems

Compliance Incentives for Business