Creating a Green Plan for Your Library

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What is Sustainability?
Economically Viable

Socially Acceptable

Environmentally Friendly
Why Is It Important?
CLIMATE SUMMIT

WHAT IF IT'S A BIG HOAX AND WE CREATE A BETTER WORLD FOR NOTHING?

- ENERGY INDEPENDENCE
- PRESERVE RAINFORESTS
- SUSTAINABILITY
- GREEN JOBS
- LIVABLE CITIES
- RENEWABLES
- CLEAN WATER, AIR
- HEALTHY CHILDREN
- ETC. ETC.
“Pollution is nothing but the resources we are not harvesting. We allow them to disperse because we've been ignorant of their value.”
– R. Buckminster Fuller
Developing a Sustainability Plan
Sustainability planning at a glance

- Form a green team
- Calculate your current environmental footprint
  - Gather baseline information about your impact
- Identify your long-term sustainability goals and the data you need to measure progress
- Figure out what you’re already doing right
- Develop an action plan based on your long-term goals
- Track your progress, publicize your results, and keep improving
How do I form a green team?

- Identify personnel in your library that are familiar with major operations and services
  - Operations/facilities
  - Purchasing
- Include people who are enthusiastic about promoting environmentally responsible practices in the workplace
- Be creative
  - Ask for volunteers
  - Look for people at all levels and responsibilities
- Correlate the number of people on the team to the size of your staff
- Choose a coordinator
- Team must have authority to set goals and implement actions to achieve those goals
Which library activities impact the environment?

- Building operations and maintenance
  - HVAC
  - Building materials
  - Cleaning products
  - Pest management
- Office operations
  - Printing
  - Copying
  - Weeding
  - Technical processing
  - Circulation functions
  - Paper use
  - Electronics use
- Landscaping
  - Watering
  - Planting
  - Mowing
- Purchasing
  - Computers/Electronics
  - Supplies
- Food service
  - Meeting rooms
  - Library café
  - Staff break area
- Building renovation
How do you inventory your library’s impact?

- Energy use
  - HVAC
  - Lighting
  - Computers
- Waste generation
  - Office paper
  - Food waste
  - Old computers
- Resource consumption
  - Water
  - Paper
- Purchased products that contain hazardous materials
  - Pesticides
  - Cleaning products
  - Computers
What is the cost of the library’s impact?

- Evaluate both quantity and cost
- Energy & water consumption
  - Utility bills → costs and quantities
- Total waste generated
  - Bills from waste hauler
  - Building walk-through when trash cans are full
  - Waste audit
    - Visual inspection of waste cans
    - Sample and weigh the building’s wastes (AKA dumpster diving)
- Hazardous chemicals used
  - Cleaners, pesticides, etc.
## Draw Yourself a Picture

<table>
<thead>
<tr>
<th>Operations</th>
<th>Activities</th>
<th>Resources used</th>
<th>Waste generated</th>
<th>Hazardous chemicals</th>
<th>Environmental impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building maintenance</td>
<td>Interior cleaning</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>-- Indoor air quality</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-- Worker exposure</td>
</tr>
<tr>
<td></td>
<td>Lighting</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>-- Electricity use</td>
</tr>
<tr>
<td></td>
<td>HVAC</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>-- Gas use</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-- End of life disposal</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-- Air emissions</td>
</tr>
<tr>
<td>Office operations</td>
<td>Printing/copying</td>
<td>x</td>
<td>x</td>
<td></td>
<td>-- Disposal of waste paper</td>
</tr>
<tr>
<td></td>
<td>Office equipment</td>
<td>x</td>
<td>x</td>
<td></td>
<td>-- Paper use</td>
</tr>
<tr>
<td></td>
<td>Weeding</td>
<td></td>
<td></td>
<td></td>
<td>-- End of life disposal</td>
</tr>
</tbody>
</table>
What do you want to accomplish?

- Establish both short and long term goals
- Rethink your practices and make yourself stretch
- Be realistic
- Ask yourself how you can do things in a more efficient way
  - Evaluate your activities by considering their environmental impact
- Make your goals specific and measurable
  - “We will reduce energy use by 30%”
How do you measure it?

- Sustainability indicators are measurements that help you track your improving environmental footprint
- Examples
  - Energy and water consumption
  - Total waste generated
  - Percentage of solid waste recycled
  - Average post-consumer recycled content of paper purchases
  - Purchases of products with hazardous materials
What are you already doing?

- Create a baseline so you can measure your progress
  - Energy use ➔ How much electricity and gas are you using?
  - Waste ➔ How much are you throwing away? What and how much are you recycling?
  - Purchasing ➔ Are you buying green products?
- Identify the environmental benefits of your current practices
- Discuss barriers to implementing current practices and ways you have overcome them
How do you develop ideas for new projects?

- Compare what you’re already doing with your long-term goals
- Develop a list of potential projects
  - Include both large and small
    - If you do a major building remodel...
    - If you had to implement something tomorrow
  - Research what other libraries are doing
  - Look at best practices for government agencies
  - Brainstorm & use your resources
    - Ask for suggestions from your staff, your board, and your patrons
Which project should you do first?

- Prioritize your list
- Things to consider
  - Will the project have environmental benefits?
  - Are the benefits significant?
  - Will the project result in cost savings over the life of the action/product? If yes, how much?
    - Calculate simple payback (Total cost of project/annual savings = number of years until payback)
  - Is the time frame and ease of implementation manageable?
  - Do you have control over the action?
  - Is the issue of significant concern to your staff and/or patrons?
  - Does the action have high visibility and/or educational value?
- Finalize the list by giving highest priority to things that have the most yes answers
How do you get it done?

- Break each project down into discrete tasks with measurable goals, when practical
- Assign staff/team members that will be responsible for completing each task
- Assign a deadline for completing each task
- WRITE IT DOWN!
<table>
<thead>
<tr>
<th>Sustainability goal</th>
<th>Measure of success</th>
<th>Specific tasks</th>
<th>Assigned staff</th>
<th>Deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decrease building energy use by 30%</td>
<td>Lower energy bills</td>
<td>Solicit ideas from staff</td>
<td>Green team leader</td>
<td>July 2010</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Change to CFL light bulbs</td>
<td>Maintenance</td>
<td>August 2010</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Shut down/sleep public access computers at night</td>
<td>IT</td>
<td>September 2010</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Set thermostats to reduce energy use during hours library is closed</td>
<td>Maintenance</td>
<td>August 2010</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Encourage staff to turn off lights when leaving break room</td>
<td>Green team</td>
<td>July 2010</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Publicize cost savings to board &amp; public</td>
<td>Director</td>
<td>December 2010</td>
</tr>
</tbody>
</table>
How do you keep it going?

- Look for opportunities to integrate sustainability into routine decision-making functions like strategic planning and budgeting
  - Ensure that sustainability is an ongoing part of your library’s business, regardless of individual or group commitment
- Identify key decision points and investigate opportunities to consider sustainability
  - When products are purchased
  - When projects are approved in budget meetings
  - When planning for building renovation or construction
How do you get buy-in from your staff & the public?

- Educate staff
  - Free or low cost workshops
  - In-service training
- Post reminders (recycle paper, bring your lunch, ride your bike, turn off lights). Change them up to keep them fresh.
- Keep it fun. Reward people for good ideas and for modeling sustainable practices.
- Integrate sustainability into library programming.
- Provide updates on the progress of your initiatives to your staff, your board, and your patrons.
- Let your staff, board, and patrons review your draft sustainability plans.
- Encourage new ideas.
What else can you do?

- Tell your board, your staff, and your public
  - Include on your web site and your annual report
  - Translate dollars saved into metrics they understand (x number of DVDs added to the collection).
- Apply for an Illinois Governor’s Sustainability Award
- Don’t put your plan in a drawer and forget about it
  - Evaluate and revise based on what works and what doesn’t
- Ask for assistance
  - ISTC → [http://www.istc.illinois.edu](http://www.istc.illinois.edu)
  - Smart Energy Design Assistance Center → [http://smartenergy.arch.uiuc.edu/](http://smartenergy.arch.uiuc.edu/)
Think ahead to avoid derailment
Open the door to other opportunities
Your Activities Impact the Environment

- How you use energy and water
- How you get to and from work
- What you buy
- What you throw away
Lighting accounts for 40% of building energy use
Switch to more energy efficient lights and ballasts
Do you really think we'll save any money with those new **EFFICIENT** lightbulbs?

I dunno. Did we turn off the lights?
Replace exit signs
Office equipment accounts for 5% of energy use in office buildings. Computers account for 10%.
Cost of running a desktop computer 24/7/365 = $236.56/year (per computer system)
Cost of running a desktop computer 8 hours/day, 5 days/week = $56.16/year (per computer system)
You save $180.40 per computer/year when you shut it down at the end of each day.
Replacing CRT monitors with LCDs saves an additional $17.27/year (per monitor), assuming you shut your computer down when you leave at the end of the day.
69%-97% of total computer energy use occurs during idle time – Natural Resources Defense Council
## ENERGY STAR Computer Power Management Savings Calculator

**Instructions:** Use this simple calculator to estimate typical savings from ENERGY STAR qualified computers and/or power management features. (required fields in red)

### ENERGY STAR Qualified Computers and Monitors

<table>
<thead>
<tr>
<th>Computer Type</th>
<th>Desktop</th>
<th>Notebook</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Computers used and/or to be used in place of standard computers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) LCD monitors used and/or to be used in place of CRT monitors</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Power Management Features

<table>
<thead>
<tr>
<th>Feature Description</th>
<th>Desktop</th>
<th>Notebook</th>
</tr>
</thead>
<tbody>
<tr>
<td>c) &quot;Standby&quot; or &quot;hibernate&quot; mode when inactive (i.e., CPU, hard drive, etc. go to sleep)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d) &quot;Monitor shut down&quot; mode when inactive (i.e., monitor/display goes to sleep)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Assumptions

<table>
<thead>
<tr>
<th>Assumption Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>e) Enter cost of electricity OR select the state in which the computers are operated, and choose commercial or residential service</td>
<td>$0.088 Illinois Commercial</td>
</tr>
<tr>
<td>f) Roughly what percentage of your computers are currently turned off each night and during weekends, holidays and vacations by users?**</td>
<td>36%</td>
</tr>
</tbody>
</table>

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**Notes about defaults and assumptions in the Quick Calculator:**

1. Assumes standard monitor is a CRT monitor and an ENERGY STAR qualified monitor is an LCD monitor.
2. All other assumptions can be seen by clicking the red "Adjust" tabs below.

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After completing this page, click the green "Results" tab below to view your estimated savings OR click the red "Adjust" tabs below to perform customized calculations of energy savings specific to your environment.
Occupancy sensors aren't just for turning off the lights.
Program your thermostats
Other Opportunities

- Ask for technical assistance
- Install high-efficiency water heater
- Check hot water temperature, reset if appropriate
- For new construction, expansion, renovation, consult contractors/designers with energy efficiency expertise – insulate beyond code
- Premium efficiency electric motors
- Purchase energy efficient appliances for cafeterias and break rooms
- Track energy use history
Don't break the bank
Green Spring Short Term Offer

Public Sector Electric Efficiency

The Illinois Energy Office announces a significant short-term increase in electric efficiency rebates for public projects located in ComEd and Ameren Illinois Utilities electric service territories. The enhanced rebates will allow schools and governments in Illinois to implement cost-saving electric efficiency improvements. These improvements will save energy, reduce utility bills, and create Illinois jobs.

Incentives:

- **Incentive Bonus** – Illinois public universities, and state and federal facilities are eligible for a 15% Incentive Bonus on top of the normal DCEO rebates for energy efficiency projects.

- **Special Incentive Rate** – Illinois public schools, community colleges and units of local government are eligible for a Special Incentive Rate that is double the current rebate levels.

Applicants are encouraged to apply for these special DCEO energy efficiency incentives by this Earth Day, April 22. Projects must be completed by May 31, 2010.

To apply for the Have a GREEN SPRING rebates:

- Read the Addendum to Public Sector Electric Efficiency Guidelines for details on this special offer.

- Fill out the normal Public Sector Electric Efficiency Program application forms and submit them to illinois.energy@illinois.gov.

- DCEO staff will determine eligibility and the amount of the bonus rebate.

- The application forms are available at:
  - Guidelines, Application, Worksheets (as a pdf)
  - Application and Standard Incentive Forms in Excel format. (Use these spreadsheets to fill in the Application from Appendix A and Standard Incentive Worksheets from Appendix B: Lighting, HVAC, Motors,
Saving money with smart ideas for your business

Smart Ideas is about improving the value you receive from your electric energy dollars and in the process, saving money and protecting the environment. Whatever your business, we have incentives to help you.

**Custom Projects**
Examine customized incentives that encourage customers like you to implement energy-efficiency measures.

**Prescriptive Projects**
See how prescriptive incentives can help with efficiency equipment upgrades and other improvements.

**New Construction**
Explore ComEd services and incentives that can support a facility expansion or new construction project.

**Retro-Commissioning**
Discover a new energy efficiency service that provides valuable expert building analysis at no cost.

**Load Response**
Learn the benefits of a program with financial incentives for reducing your electric usage.

**Small Business**
See how our Smart Ideas for Your Business program is designed to support your success.

**All Electric Upgrade**
Benefit from this energy-efficiency initiative if you have both electric space heating and electric water heating.
DSIRE is a comprehensive source of information on state, local, utility, and federal incentives that promote renewable energy and energy efficiency. Choose one or both databases to search:

- Renewable Energy
- Energy Efficiency

Federal Incentives

US Territory Incentives

Last Updated: 05/15/08
Welcome to Illinois Clean Energy Community Foundation

The Illinois Clean Energy Community Foundation invests in clean energy development and land preservation efforts, working with communities and citizens to improve environmental quality in Illinois. The Foundation supports programs and projects that will improve energy efficiency, develop renewable energy resources and preserve and enhance natural areas and wildlife habitats throughout the state.

The Foundation's programs have grown steadily since it awarded its first sets of grants in 2001. Over the last seven years, the Foundation has awarded 2859 grants, totaling $151 million to Illinois nonprofit organizations, schools, municipalities and other local government agencies. The grants support activity in all of our 102 counties in the state of Illinois.

2009 Grant Deadlines

Competitive Cycles
January 20, 2009
July 20, 2009

* Child Care Lighting Upgrades
February 16, 2009

* College & University Lighting Upgrades
February 16, 2009

Historic Courthouse Lighting Upgrades
March 17, 2009

Public Safety Facilities Lighting Upgrades
March 17, 2009

K-12 School Solar PV System Upgrades
March 27, 2009

2009 Lighting Upgrades

Green Building Design & Commissioning Program Guidelines
Water costs more than you think
WaterSense has a fan page! Become a fan today >

DID YOU KNOW?
WaterSense labeled showerheads are tested and certified to ensure performance.

Save water and protect the environment by choosing WaterSense labeled products in your home and business and taking simple steps to save water each day.

Learn more about WaterSense and what you can do to help make every drop count.
What is the real cost of driving to work?
Beware of greenwashing
Be a Smart Consumer

- Environmental claims should be specific
  - Look for specific amounts (recycled content, a certain percentage less packaging, etc.)
- Some claims are too vague to be meaningful
  - “eco-friendly”, “environmentally friendly”
- Degradable products don't save landfill space
  - Anything degradable put into a landfill degrades very slowly
  - Composting turns degradable material into usable compost
- Symbols can be useful
  - Recycling symbol
  - Green certification symbols ➔ Energy Star, Green Seal, EPEAT, WaterSense
Office furniture systems, components, and seating, building materials, carpet, flooring, paint

Cleaners, electric chillers, paint, floor care, paper, hand soaps, windows, doors

Toilets, showerheads, faucets, landscape irrigation services

Wood and paper products

Low emitting interior building materials, furnishings, and finish systems.

Electronics, lighting

Office furniture systems, components, and seating, building materials, carpet, flooring, paint
Ecolabels can help you find green products. This site helps companies and consumers use them. You can browse, search or learn more about ecolabels below.

Ecolabelling.org helps you to

1. **Build a Green Purchasing Strategy for Your Business.**
   Find out how your company can use ecolabels.

2. **Buy Green Products.**
   The companies advertising on this site use ecolabels to assure you their products are green.

3. **Sell Your Green Products on this Site.**
   Use ecolabels to ensure consumers trust your green marketing.

There are so many certifications, accreditations and seals of approval out there it's hard to tell what's what. The idea is that the site lays out all the known labels in one place....

TShirt & Sons
Attributes of green products

- Recycled content
- Recyclability
- Potential for disassembly
- Durability
- Reusability
- Take-back

- Bio-based
- Energy efficient
- Water efficient
- Reconditioned or remanufactured
- Other positive environmental effects
Five Guiding Principles for Green Purchasing

- Consider environmental factors in addition to price and performance.
- Emphasize pollution prevention early in the purchasing process.
- Examine multiple environmental attributes throughout a product's or service's life cycle.
- Compare relative environmental impacts when selecting products and services.
- Collect and base purchasing decisions on accurate and meaningful information about environmental performance.
Getting started

- Review purchase specifications and contracts to see if they contain environmental performance standards or requirements
- Ask your existing suppliers about green alternatives so you can try them
- Consider how to make your product or service green and what you'll need to purchase differently to make it happen.
- Choose a suitable green products listing and use it when making purchases
- Request vendors to provide supplies in reusable packaging that can be used for your products or returned to the supplier.
- Purchase appropriately sized lots to minimize waste.
  - Purchase bulk where feasible but in small quantities for shelf life/dated materials.
- Change your office purchasing policies
  - Recycled office consumable products
  - Energy Star certified office equipment
  - Reusable utensils, plates and cups for meetings
- Buy and use less toxic cleaners or hire those who do
- Rethink your giveaway items
Developing a Green Purchasing Plan

- Make a statement of intent
- Put someone in charge
- Work with departments (and suppliers) one-on-one. Set reasonable expectations and reward small accomplishments.
- Start where you are. Ask existing suppliers for environmentally preferable products.
- Look for products that save money and meet other performance needs.
- Test the new products over a few months to assess efficiency, quality, and user friendliness.
- Network and share information
- Collect data and publicize
Next Steps

- Perform a product life cycle cost analysis
  - Consider the costs of operations and maintenance, worker exposure, and waste disposal
- Green your service contracts
- Lease equipment
- Buy green office supplies
- Develop a coordinated purchasing system
  - Allows purchasers to apply standard criteria for evaluating and purchasing products
  - Leverage volumes with a supplier
  - Provide better inventory control so products are not over-purchased, a situation resulting in many products expiring on the shelf
- Buy renewable energy
- Rethink demos
  - Do not accept hazardous products for trial runs if the manufacturer or manufacturer’s representative will not take back the product or provide you with prepaid disposal options.
- Get to know your suppliers
  - Questions to ask
    - Are you manufacturing your products in the most environmentally responsible way?
    - Do you have formal energy-conservation programs?
    - Do you have formal water-conservation programs?
    - Do you design your products for ease of recycling or take-back after the product’s useful life?
    - Do you know our special requirements?
- Learn from government programs
- Consider products certified by third parties
Products With Significant Impact

- Paper products
- Electronics
- Janitorial supplies
The average office worker uses 10,000 sheets of copy paper each year (Minnesota Pollution Control Agency)
Consider This

- **Purchase price is just the tip of the paper iceberg**
  - For each sheet of paper purchased, companies must also pay for storage, copying, printing, postage, disposal, and recycling.
  - A recent Minnesota study estimates that associated paper costs could be as much as 31 times the purchasing costs (not including labor)
  - Ream of paper that you paid $5 for really could cost up to $155.
- **Citigroup determined that if each employee used double-sided copying to conserve just one sheet of paper each week, the firm would save $700,000 each year**
- **Bank of America cut its paper consumption by 25% in two years by increasing the use of on-line forms and reports, e-mail, double-sided copying, and lighter-weight paper**
- **Paper’s environmental costs**
  - It takes more than 1½ cups of water to make one sheet of paper
  - Over 40% of wood pulp goes toward the production of paper
  - Reducing paper use reduces greenhouse gases: 40 reams of paper is like 1.5 acres of pine forest absorbing carbon for a year
Rethink Your Paper Use

• **Reduce/Reuse**
  • Print only when necessary
  • Go electronic
    • Route memos and newsletters that employees should see, but do not need to keep
    • Use revision features in word processing software
    • Send information electronically
    • Fit more words onto each page (e.g., smaller font, narrower margins).
      • Changing default margins from 1.25” to 1” can reduce the amount of paper you use by up to 8%
      • Use a space-efficient font like Times New Roman
    • Create an electronic filing system for quick, easy retrieval.
  • Use fax post-its rather than a cover sheet
  • Duplex instead of printing on one side
  • Use the back side of single sheets as scratch paper

• **Recycle**
  • Purchase paper with post-consumer recycled content or 30% or higher
  • Start an office paper recycling program if you don't already have one
Special Considerations for Libraries

- Print vs. electronic resources
  - Going electronic with journals saves paper
- Weeding
  - Book sales
  - Book giveaways to community organizations
  - Partner with Better World Books or B-Logistics
  - Sell on Amazon, Half.com, or E-Bay
  - Sell, donate, or recycle CDs and DVDs
  - Crafts with old hardcover books
CLIMATE COUNTDOWN: Tell your Senators how important it is to seize this historic opportunity for jobs, security and clean energy.

Paper Calculator

Welcome to the Paper Calculator
This tool will help you quantify the benefits of better paper choices. The Paper Calculator shows the environmental impacts of different papers across their full lifecycle.

Why do paper choices matter?
By using less paper, increasing recycled content, and making other improvements, you can save wood, water and energy, and cut pollution and solid waste.

See the environmental benefits
Create an easy-to-read report, to help your company, community, non-profit or other organization make better paper choices and measure the environmental results.
Earth friendly electronics isn't an oxymoron.
Buy Greener Electronics

- Buy with energy in mind → Energy Star
- Buy used
  - Fifty percent of computers being recycled are in good working order. They are discarded to make way for the latest technology (Silicon Valley Toxics Coalition, 2001).
  - Look on Freecyle, Ebay, Craigslist, or at your local computer dealer
- Look for EPEAT
  - Sets environmental criteria for computers
- Buy less toxic
  - Greenpeace Guide to Greener Electronics
Of the 2.25 million tons of TVs, cell phones and computer products disposed of in the United States in 2007, 18% (414,000 tons) was collected for recycling and 82% (1.84 million tons) was thrown away, primarily in landfills. (U.S. EPA, 2007)
Electronic devices are a complex mixture of several hundred materials.

Many of these contain toxic heavy metals such as lead, mercury, cadmium and beryllium and hazardous chemicals, such as brominated flame retardants.

Don't throw your electronics away

- Manufacturer and retailer take back programs
- Donate to schools, community organizations, or vocational programs
- TechSoup Refurbished Computer Initiative Program
Each year, 6 billion pounds of chemicals and 4.5 billion pounds of paper products (representing about 25 to 50 million trees) are used to clean commercial buildings – Ashkin Group
Why Convert to Green Cleaners

- Helps you meet green purchasing goals
- Promotes a healthier working environment
- Improves safety for janitorial workers
- Reduces your organization's environmental footprint
- Helps create a more sizable market for cost effective high performance green products
EPA Guidelines for Green Cleaners

- Minimizes exposure to concentrates
- No ozone depleting substances
- Reduced/recyclable packaging
- Recycled content in packaging
- Reduced bioconcentration factor
- Reduced flammability
- Reduced or no added dyes, except when added for safety purposes
- Reduced or no added fragrances
- Reduced or no skin irritants
- Reduced or no volatile organic compounds (VOCs)
Green Seal Standard for Industrial and Institutional Cleaners (GS-37)
- Standard covers all purpose, bathroom, and glass cleaners.
- Establishes criteria for 13 factors, such as toxic compounds, carcinogens, skin and eye irritants, and combustibility.
- More than 5 dozen products certified to standard

EPA Database of Environmental Information for Products and Services

Greening Your Purchase of Cleaning Products: A Guide For Federal Purchasers
Purchasing is only part of the green cleaning picture.
Green Cleaning Practices

- Keep dirt out of the building
  - Durable welcome mat encourages visitors to wipe their feet
- Minimize product use
- Match the product with the need
  - Don't use a strong cleaner on a mild stain
- Choose cleaning equipment that is durable, energy efficient, and quiet
- Train your staff to use products properly
Make Your Library a Sustainability Leader
Local Initiatives

- Establish relationships with local environmental groups and partner with them for library projects.
- Start a tool lending library, a local seed repository for heirloom plants, or be a local drop-off for batteries, electronics, or sneaker recycling.
- Publicize the library’s sustainability projects.
Programming Ideas

- Environmental film festival
- Sustainability book club
- Making art from found items
- Have an art show displaying art from recycled materials
- Series of green lifestyle or green business speakers
- Display your sustainability books and DVDs
- Other ideas?
Need more information?
EPA National Dialogue on Environmental Information

During the month of May, the EPA Office of Environmental Information (OEI) is hosting a national dialogue on environmental information, inviting all of its stakeholders to comment on what we’d like to see from EPA in terms of information — sources, formats, etc.

I've worked with EPA on the issue of environmental information for many, many years — I have not seen them as receptive to new ideas as they seem to be recently, at any time before. Take a few moments to participate in the conversation, and especially to speak up for the need for improved P2 related information, which is barely registering in the comments people have made to date.

Sector Resources

GLRRPPR’s Sector Resources gives you direct access to pollution prevention resources, funding opportunities, and events in a particular industry sector or topic.

- Mercury
- Sustainable Development
- Construction & Demolition
- Energy Efficiency
- More Sector Resources...

Topic Hubs

Topic Hubs provide an in depth look at pollution prevention in a specific topic or industrial sector.

- Pollution Prevention for Arts Education
- Integrated Pest Management for Schools
- Printing – Flexography
- Printing – Lithography
- Regulatory Integration
- More Topic Hubs...

Daily environmental news

Most recent GLRRPPR Blog post

Topical resource lists, including links to documents, experts, and events
Environmental News Bits is also on Twitter (click the link to the left to follow EMB there). I often retweet interesting stories there without posting them here. Now you can see them here too. Page down to read the latest blog posts.

Twitter / EnvironBits

Environmental News Bits

- Follow EMB on Twitter

- Environmental News Bits

Twitter updates from EnvironBits / EnvironBits.

- EnvironBits: Ecolab invited to testify in court and comment on draft wastewater permit for M.I. Dairy-Gary Works: http://bit.ly/23539Gk via @Ecolabnews
- EnvironBits: Please drink responsibly: ST-Sierra Magazine: Beer made with rainwater! http://bit.ly/19er1zn (via @sjggetsit)
- EnvironBits: African Jungle Boom Raises Concerns - Read the full story at Green, Inc. Proprietors of etática, the start once http://bit.ly/12FJySw
- EnvironBits: Web Site Tracks Europe's Clean Energy Growth - Read the full post at green. Inc. The European Commission this week... http://bit.ly/12Tz2wO
- EnvironBits: The Dark Side of LCD Lamps: http://bit.ly/12TDH4x (via @Think1ED)
- EnvironBits: Lester Brown, whose new book, Plan B 3.0: How to save progress http://bit.ly/12Tz2wO via @GreenMoney
- EnvironBits: Recycling your cell phone is about to get much easier, and in some cases profitable: http://bit.ly/12TDH4x via @GreenMoney
- EnvironBits: College Sustainable Design Card OSU: While its your school stand: http://bit.ly/12Tz2wO via @OSUGreen
- EnvironBits: What to Eat and Not: Don't Eat Anything That Took More Energy to Ship Than to Grow: (via @gatesfound) http://bit.ly/12Tz2wO via @GreenMoney
- EnvironBits: tofu: Indonesia's green gold: http://bit.ly/12TDH4x via @gatesfound
- EnvironBits: House, City, also sends HR 3350, Energy & Water Research Integration Act to full house, http://bit.ly/12TDH4x via @ThePhoenice
- EnvironBits: GreenStates Are Changing the Way Architects Design Buildings: http://bit.ly/12Tz2wO via @GreenMoney
- EnvironBits: Top maryland counties are getting more energy http://bit.ly/12TDH4x via @ThePhoenice

Comments (0)

Laura Barnes on Delicious

- Laura Barnes on Delicious

Below are my five most recent bookmarks on Delicious. There's a link at the end if you want to join my network. Page down to read the most recent blog posts.

- NRC's Green Schools Council / NRC's Green Schools Council
- Green Schools & the National School Climate Change
- The Green School teaches kids about the relationship between their schools and environmental and health issues. The site is designed primarily for students in fifth through eighth grade, but also offers information for younger and older students as well as parents and teachers.
- Environmental Education List / School of Environmental Education & the School of Natural Resources
- This reference guide includes links to environmental websites, background and posts information, standards, and reference sources that teachers can use to develop their own environmental education lesson plans. Because the scope of the topic is so broad, this is not meant to be an exhaustive list; rather, it is designed to give you some places to start looking for resources. Information to help you continue your research at your local library is included at the end of the guide.
- Environmental News Bits / Environment News Bits: Business & Green Troms et al. green.scholar.net Pennsylvania State University
- This place to go for green business news and information.
- WebTools: Green Design, Sustainable Technologies and Environmental Oddities / GuestPost: Green Design, Sustainable Technologies and Environmental Oddities
- WebTools is a global source for environmental, educational and inspirational green design and sustainable technology as well as environmental science and natural science.

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* I am now on Twitter on Delicious
* Add me to your network

* * *

October 9, 2009

Farmers use vending machines to sell produce

- Farmers use vending machines to sell produce

In today's world of complex supply chains, international supermarkets and big agribusiness, it has become more and more difficult for small farms to sell their produce directly to local consumers at a reasonable price. But one farm in Germany, Pollard-und-Paul-Hof, thinks they may have found a solution: set up vending machines which distribute produce instead of junk food.

* * *

Opinion: Why environmental groups are wrong about e-waste

- Opinion: Why environmental groups are wrong about e-waste

Environmental groups like the Silicon Valley Toxics Coalition, Friends of the Earth and Greenpeace, among others, have been in the news lately, chiding gadget makers in general and Apple in particular for bad environmental policies. They're bringing attention to the growing mountains of toxic PCs, cell phones, iPods and other electronics in landfills and pushing governments for "green" regulation.

This problem is real, and I applaud these and dozens of other organizations that are working to make a difference. But their prescriptions for consumer action — what they want you and me to do about e-waste — is actually bad for the environment. I'll tell you why in a minute, I'll outline a superior alternative to the recycling they are demanding. But first, let's review the problem.

Comments (0)
Setting an example is not the main means of influencing others; it is the only means. -- Albert Einstein