Sustainability Planning for Libraries

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What is Sustainability?

Economically Viable
Socially Acceptable
Environmentally Friendly

Why Is It Important?

“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
Gather Data & Develop a Plan

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

Evaluate Your Impact
- What library operations impact the environment?
  - Start with broad categories and identify specific processes within those categories
  - Examples:
    - Building operations & maintenance
    - Office operations
    - Landscaping
    - Purchasing
    - Food service
    - Building renovations
- Don't look for solutions, just identify impact

Create a Baseline
- Energy and water use
  - Where are you using energy and water?
  - How much are you using?
  - How much does it cost?
  - Look at past data and utility bills
- Waste
  - What and how much are you throwing away?
  - Do a waste audit
  - Code waste into broad categories
  - What and how much are you recycling?
  - Are all recyclables making it into the recycling bins? Purchasing
  - Are you buying green products?
  - What products are you buying that contain hazardous chemicals?
  - Identify the environmental benefits of your current practices
  - Discuss barriers to implementing current practices and ways you have overcome them

Draw Yourself a Picture

<table>
<thead>
<tr>
<th>Operations</th>
<th>Activities</th>
<th>Resource needed</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 x</td>
<td>x x</td>
<td>- Indoor air quality</td>
<td>- Office expenses</td>
</tr>
<tr>
<td></td>
<td>Lighting</td>
<td>x x</td>
<td>x x</td>
<td>- Electricity use</td>
<td>- End of life disposal</td>
</tr>
<tr>
<td>HVAC</td>
<td>x x</td>
<td></td>
<td>x x</td>
<td>- Gas use</td>
<td>- Air emissions</td>
</tr>
<tr>
<td>Office Operations</td>
<td>Paper recycling</td>
<td>x</td>
<td>x x</td>
<td>- Disposal of waste paper</td>
<td>- Paper use</td>
</tr>
<tr>
<td>Office equipment</td>
<td>x x</td>
<td></td>
<td>x x</td>
<td>- Energy use</td>
<td>- Air emissions</td>
</tr>
<tr>
<td>Working</td>
<td>x x</td>
<td></td>
<td></td>
<td>- End of life disposal</td>
<td></td>
</tr>
</tbody>
</table>
Set goals and indicators

- 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%"

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 project/product? If you, 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

Develop project ideas

- 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

Getting 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!

Bring your staff and public on board

- Ongoing process in tandem with previous steps
- 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
Keep It Going
• Make sustainability part of your routine decision making process
• 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

Next steps
• 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
    • Smart Energy Design Assistance Center → http://smartenergyarch.uiuc.edu

Look for Opportunities

Energy use
Lighting
• Replace incandescent bulbs with CFLs or LEDs
• Replace T12 fluorescents with T8s
• Turn off the lights
• Install motion detectors in break room, meeting rooms, bathrooms
• Adjust the backlighting on your vending machines
• Upgrade your EXIT signs
Program your thermostats
• Shut down or program the power management settings on your staff workstations and public access computers
• Ask for technical assistance
  • ISTC
  • Smart Energy Design Assistance Center
• Apply for grants
  • DCEO Public Sector Energy Efficiency Program
  • ComEd/Ameren incentives
  • Illinois Clean Energy Community Foundation

Water costs more than you think

WaterSense
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

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
Desktop and laptop computers, thin clients, workstations and computer monitors

Case Studies: Paper and Electronics
Some Paper Facts

- Purchase price is just the tip of the paper iceberg
  - For each ton of paper purchased, companies must also pay for storage, copying, printing, postage, disposal, and recycling.
  - A recent forest products study estimated that associated paper costs could be as much as 30 times the purchase costs (not including labor).
  - Teams of paper that you paid for can really add up to ten.
- Citigroup determined that if each employee used double-sided copying to conserve just one sheet of paper each week, the firm would save $300,000 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 lightweight paper.
- Paper’s environmental costs
  - It takes more than 3.5 cups of water to make one sheet of paper.
  - Over 60% 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).
  - Change default margins from 1½ to 1 in can reduce the amount of paper you use by up to 40%.
  - Use a more efficient font like Times New Roman.
  - Create an electronic filing system for quick, easy retrieval.
  - Use facsimile 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.

Suggestions for Weeded Material

- 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.

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 Freecycle, eBay, Craigslist, or at your local computer dealer.
- Look for EPEAT
- Buy less toxic
  - Greenpeace Guide to Greener Electronics

Think Before You Trash

- 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.
Become a Community 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?

Setting an example is not the main means of influencing others; it is the only means. -- Albert Einstein
Sustainability Planning for Libraries

Selected Resources

Compiled by Laura L. Barnes, Librarian/Information Specialist (lbarnes@istc.illinois.edu)
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ISTC Resources

Environmental News Bits
http://lib.wmrec.uiuc.edu/enb/

Great Lakes Regional Pollution Prevention Roundtable (GLRPPR)
http://www.glrppr.org

Sustainability Planning for Libraries (presentation slides)
http://hdl.handle.net/2142/15417

Illinois Sustainable Technology Center
http://www.istc.illinois.edu

Illinois Governor’s Sustainability Awards
http://istc.illinois.edu/info/govs_awards.cfm

Laura L. Barnes’ Delicious Bookmarks > Green Libraries
http://delicious.com/tsmom1219/ltls_green_libraries

Selected Resources for Greening the Library
http://www.istc.illinois.edu/info/library_docs/other_pubs/selected-resources-for-greening-the-library.pdf

Sustainability Planning


Earth 911
http://earth911.com/

EcoLabelling.org
http://ecolabelling.org/

Energy Star
http://www.energystar.gov/

Energy Star Computer Power Management Savings Calculator
http://www.energystar.gov/ia/products/power_mgt/LowCarbonITSavingsCalc.xls

EPEAT
http://www.epeat.net/

Green Cleaning Pollution Prevention Calculator
http://www.fedcenter.gov/janitor/


Illinois Clean Energy Community Foundation
http://www.illinoiscleanenergy.org/

Illinois Department of Commerce and Economic Opportunity Public Sector Energy Efficiency

Smart Energy Design Assistance Center
http://smartenergy.arch.uiuc.edu/

WaterSense
http://www.epa.gov/watersense/

Where to Go For More Information

Become a Paper-Less Office
http://www.reduce.org/paper/

Database of State Incentives for Renewables and Efficiency (DSIRE)
http://www.dsireusa.org/