## **Greening Your Library**



CT State Library Association April 20, 2010

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#### **Presentation Outline**

I. The big picture: why green your library?

2. The benefits of greening your Library

3. How to do it

## Why Should You Care about Greening Your Library?

# Global Reasons: You are Part of the Big Picture

- Limited amount of natural resources
  - From 5 to 25 % of freshwater use exceeds supplies

- Environmental threats endanger human health
  - Air pollution impacts respiratory health, aggravates asthma

## Why Should You Care about Greening Your Library?

- □ Global Reasons: Big Picture Continued...
- Climate change, aka "global warming"
  - CO2 released when we burn fossil fuel—coal, oil, natural gas
  - CO2 is at highest level in 1,000,000 years—and rising quickly;
  - □ Hartford to experience almost 80 days of over 90 degree weather by end of the century. (Currently, an average of 12 days/year above 90 degrees)
  - Heat was leading weather-related killer in US, 6 of 10 recent years (between 1993 and 2003)

## Why Should You Care about Greening Your Library?

### Local Reasons: Benefits to your Library

- Healthier place for staff and patrons
- Opportunity to be Community Leader, Set the Example
- Good for town adds to other Greening efforts town is doing
- Patrons may be wanting this
- Unique position green your facility AND educate patrons
- Opportunity for savings especially in times of budget restrictions
  - Reduced energy, water and waste disposal bills
- Greening is here to stay, not just a trend or fad

### What do we mean by a "Green Library"?

- Building Design and how it Operates
- □ Reduce Waste "reduce, reuse, recycle"
- Conserving Energy / Efficiency
- Purchase Products that are More Environmentally Friendly
- Improve Air Quality
- Provide education to staff and patrons

## Steps to Becoming a Green Library

- □ Form a "green team"
  - Include staff from a variety of departments and job titles
  - Include building manager, cleaning staff
  - Meet regularly
  - Communicate activities and successes to everyone
- Develop a brief environmental mission statement
  - State general goals
- Do some research and make a plan

#### Find out:

- --what do you purchase?
- --what do you produce for others?
- --where are you generating solid waste?
- --what are your landscaping practices?
- --where can you conserve energy?

### **Stating Broad Goals**

Work toward Sustainability - Maintaining a style of living and conducting business in a way that does not use up or degrade natural resources, allowing future generations to enjoy them.

Reduce GHG & Commit to Goals of CT Climate
 Change Action Plan - Reducing Greenhouse
 Gases to 1990 levels by 2010, 10% below that
 by 2020, eventually 75 % cut

### What We Will Focus On Today

□ Environmental Topics, e.g. recycling & energy

Examples of what's worked at DEP

Resources to Get You Started

## Solid Waste & Recycling: Just the facts

- Each CT resident generates over 5.5 pounds of trash each day
- Costs towns \$65 per ton of trash disposed at CT incinerators
- □ Paper is 3/4 of the waste stream that a typical office generates—so plenty of opportunity for waste reduction!
- Current state recycling rate is 25 %
- State goal is to increase recycling to 58%
- Recycling helps address climate change, reduce greenhouse gases
- Re-using or recycling a product uses less energy, can cut costs

### Recycling is the Law

- 1. Glass & metal food and beverage containers
- 2. Corrugated cardboard
- Newspaper
- White office paper (residences exempt)
- Scrap Metal
- Ni-Cd rechargeable batteries (from electronics)
- 7. Waste oil
- 8. Lead acid batteries (from vehicles)
- Leaves
- 10. Grass Clippings

Remember to "close the loop"!

### Basics of Recycling ...

#### Do you recycle the basics?

- White office paper
- Corrugated cardboard
- Bottles and Cans

### **Got This?**







## Beyond the Basics of Recycling

What else can we recycle ...?

## Other Paper - Newspaper, Magazines, Catalogues





## Tyvek and Disk Recycling





#### **Electronic Waste**

Use DAS state contract to properly recycle "e-waste".



## **Inkjet Cartridges**



## **Battery Recycling**



## Beyond the Basics of Recycling

#### Do you ALSO recycle ...?

- Other Paper Newspapers, Magazines & Catalogues
- Toner cartridges from printers, photocopiers, faxes
- Tyvek envelopes
- Batteries
- Techno-trash, E-Waste computers, CDs, cables, diskettes
- Wood pallets, scrap metal

### Reduce What Gets Thrown Away as Trash

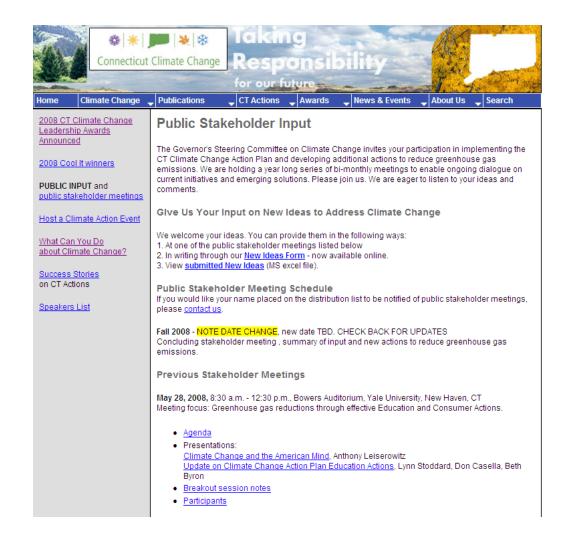
- Re-use office supplies and purchase reusable
- Reduce paper use through e-communication & doublesiding
- Increase recycling through signage
- Provide reusables in staff break rooms
- Eliminate oversized individual trash cans and replace with mini-trash bins and community ones

## Create a Re-Supply Center

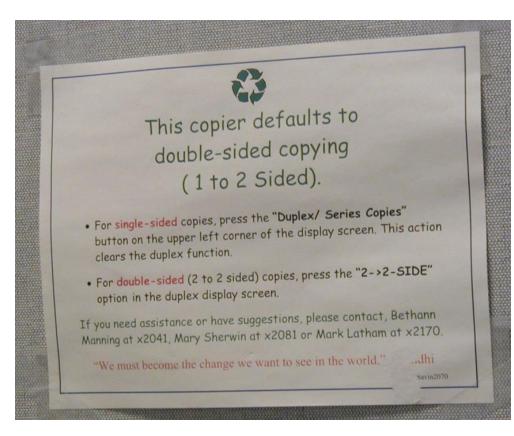




## Use e-mail and intranet/internet rather than Printed Handouts



## Default to double-sided!

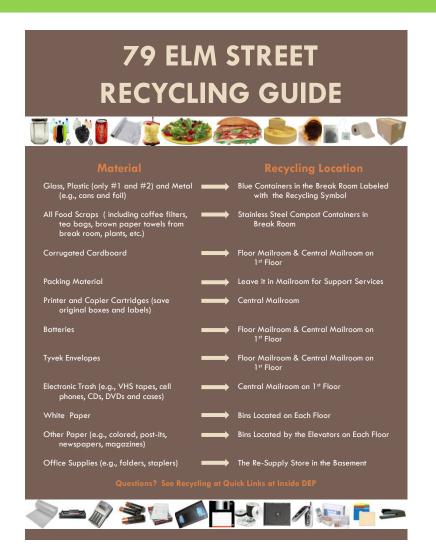




## Beef up Recycling

Display recycling information for employees and visitors

□ Put info on your website



## "Say Goodbye to Your Oversized Trash Can and Hello to the New"



The Evolution of the waste can



### Join the State Electronics Challenge

 Consider joining the <u>State Electronics Challenge</u> - a program for state and local governments and agencies to

- purchase greener electronic products,
- reduce the impacts of electronic products during use
- manage obsolete electronics in an environmentally safe and healthy way.

## State Electronics Challenge

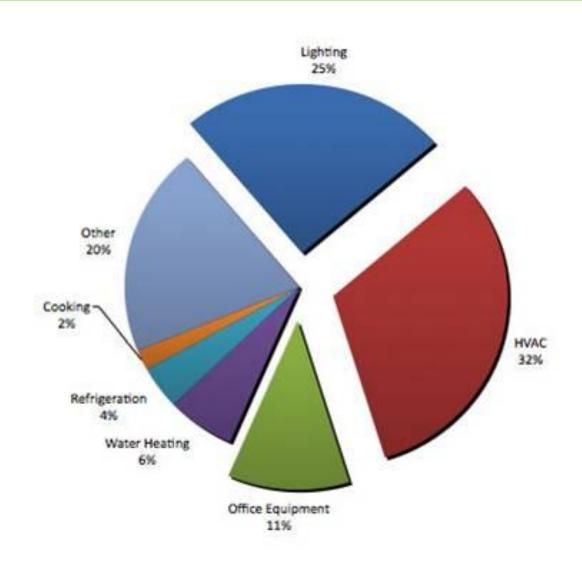
- In 2008, DEP purchased almost 2, 000 ENERGY STAR computer products, resulting in:
  - $\blacksquare$  Energy savings = to powering 71 homes annually.
  - Greenhouse gas emissions reductions = to removing 89 cars off the road.
- Proper Disposal of old computers resulted in:
  - 15 metric tons diverted from the trash = to waste from 8 households.
  - 142 pounds of toxic materials, like lead and mercury, prevented from entering the environment.

### **Energy Use: Just the Facts**

The energy to run buildings in the US:

- Costs about \$70 billion a year!
- Contributes to climate change, smog, and acid rain from electric power generation
- Lighting alone accounts for almost 30% in US offices and commercial buildings

## Breakdown of energy usage, commercial buildings



### **Reducing Energy Use - Lighting**

- Energy Efficient Lighting (T8s, CFLs, LEDs)
- Room Occupancy Sensors







### Reducing Energy Use – EnergySTAR

 Buy EnergySTAR equipment such as copiers, printers, fax, refrigerators, microwaves and EPEAT rated computers



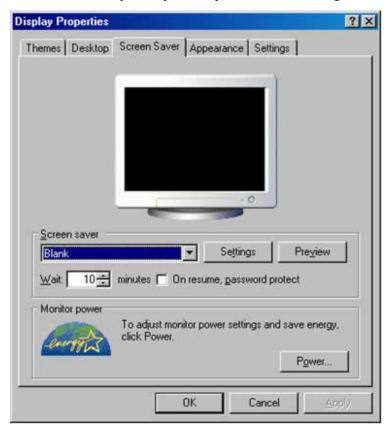






### Reducing Energy Use - Equipment

- Turn off equipment at the end of the day
- Use Energy Saving Features (sleep)
- Develop a policy on shutting down computers and copiers when Library is closed.



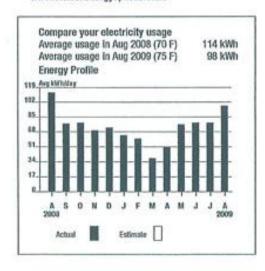


### Reducing Energy Use - Equipment

- Energy efficient lighting , occupancy sensors
- Buy EnergySTAR equipment (copiers, printers, fax, refrigerators, microwaves), EPEAT rated computers
- Turn off equipment at the end of the day
- Develop a policy on shutting down computers and copiers when Library is closed.
- Thermostat settings 68 degrees in winter / 78 degrees in summer;
   night time settings
- Hold a CFL Lighting Fair at Work!
  - Contact TechniArt, Adam Tardif 860.693.2450, adam.techniart@snet.net
- Building Mechanical Upgrades Facility Manager

## **Measuring Matters**

Sign up to Support Clean Energy, Visit www.ctcleanenergyoptions.com.



rate payment charge.

For service at:

123 VALLEY RD, NEW HAVEN CT 06519-1764

Service reference: 246813579

Billing cycle: 12

Your meter reading for meter # 987654321

For billing period: Jul 20 - Aug 18 (29 days)

Next read date on or about: Sep 17, 2009

Actual reading on Aug 18, 2009 Actual reading on Jul 20, 2009

36458 -33623

Actual usage

= 2,835

Supplier Services Detail STANDARD SERVICE Generation Srvc Chrg\*\*\*

2835.00KWH x \$0.124120

\$351,88

**Total Supplier Services** 

\$351.88

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Please delach this stab and return it with your check made payable to CL&P. Save a stamp by paying online at www.ehp.com. Please consider adding a \$1 for Operation Fact to your payment.



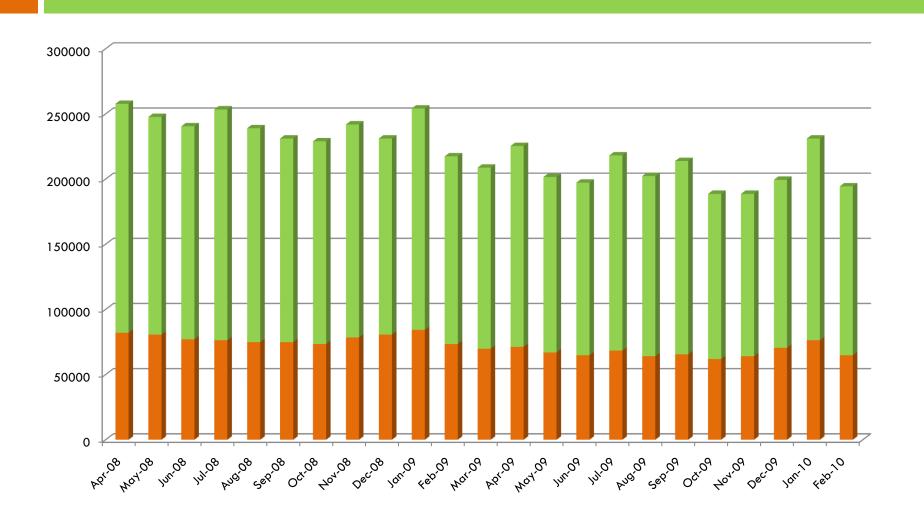
Account Number 12345678910

Statement date Aug 18, 2009

Total amount now due \$522.50

Amount Enclosed

## Measure electricity usage and plot data



## Buying Green: Environmentally Preferable Products

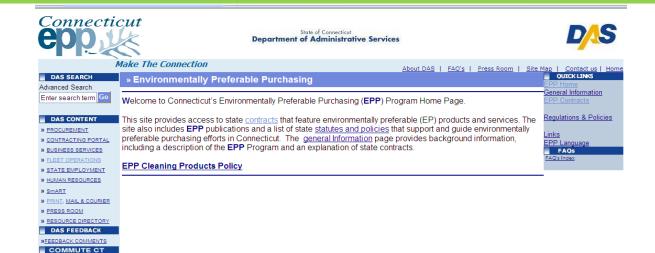
Many everyday products contain toxic substances or are made of non-renewable resources.

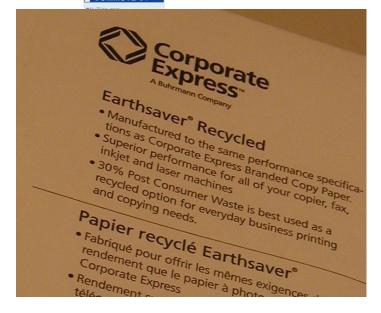
Choose products which contain less harmful components

 Choose products and office supplies made from recycled materials

Use DAS Webpage to find state contracts with EPPs

## Environmental Purchasing: Quick and Easy Ways to Start







# Environmental Purchasing: Green (EPP)Cleaning Products

- Including offices, desks, restrooms
  - CT Law requires them for schools and state agencies
  - GreenSeal and Ecologo





### **Environmental Purchasing: Bigger Items**

- Carpets and floor tiles low VOC emissions from carpet, adhesives and cushion
  - Modular carpet for business
  - Return & Recycle<sup>TM</sup> Program
  - Recycled content, sustainable materials (bamboo, cork, linoleum...)
- □ Furniture refurbished office furniture
- Building renovations and new buildings LEED

### Air Quality: Just the Facts

 In Connecticut, ground level ozone is our worst air quality problem

#### **■**Major sources:

automobiles, trucks, buses

#### **□Other sources:**

gasoline stations, lawn maintenance equipment

# Greening Transportation & Improving Air Quality

- How are library materials transported? Is there a "greener" way?
- Encourage staff to:
  - Carpool, take public transportation, bike or walk when possible. In addition to environmental benefits can also Earn rewards by signing up with NuRide (<u>www.nuride.com</u>)





## Greening Transportation & Improving Air Quality

#### Encourage Patrons to:

□ Bike - Provide secure bike racks



## Greening Transportation & Improving Air Quality

Encourage Patrons to:

www.citransit.com

Take Public Transportation — Provide bus schedules and map of local bus routes





### **Promote Anti-Idling**

- An idling vehicle emits 20 times more pollution than one traveling at 30 miles per hour
- CT idling laws—Post a sign at your library





### **Greening Your Meetings and Events**

- Minimize printed materials go electronic, double-side
- Make recycling bins easily accessible and clearly marked
- Serve coffee, meals in reusable mugs, plates and avoid plastic when using disposables
- Use large dispensers for drinks--avoid individual bottles, cans
- Encourage the use of public transportation, carpools, biking or walking to the event

## **Green Meetings and Events**



## Landscaping

 Towns are eliminating pesticides on pre K-8 school grounds

 Other towns are promoting organic land care and freedom lawns

 DEP promotes native species and avoidance of invasive species in landscaping

# Some Things to Remember About Greening Your Library

- One Step at a Time
- There's a whole lot of truth to the familiar saying, "What gets measured gets managed."
- Carrots work better than sticks
- □ Find champions for recycling, energy, etc.
- Collaborate with peers in other libraries
- Make each project fun; celebrate your successes

### How We Are Greening The DEP

- Formed a green team
- Set-up Composting
- Reduced Paper Use
- Piloted "Other Paper" Recycling
- Commuting by bus, van, carpool, biking
- Native Plant Garden
- ReSupply Center
- State Electronics Challenge
- Energy Conservation
- Green Cleaners
- Greening our Meetings, Events, Parties
- Communication & education

#### How Do You Get Started?

- □ Resources available:
  - CT DEP
    - Pollution Prevention Office: 860-424-3297
      - mary.sherwin@ct.gov
      - connie.mendolia@ct.gov

- Recycling & Source Reduction: 860-424-3022
- Environmental Purchasing at DAS: 860-713-5181

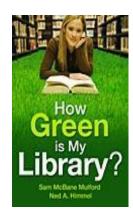
### Resources

Alliance Library System's Green Blog!
 <a href="http://thegreenlibraryblog.blogspot.com/">http://thegreenlibraryblog.blogspot.com/</a>



This blog is designed to help libraries of all sizes and types become more environmentally friendly. Green is gaining in popularity and it is here to stay!

Book: <u>How Green is My Library?</u>
 by Sam McBane Mulford, Ned A. Himmel



Join The Green Library Facebook Group



# Website: How To "Green" Your CT State Agency

http://www.ct.gov/dep/cwp/view.asp?a=2708&q =431352&depNav GID=1763

Your one-stop guide to finding all the resources you'll need to make your Agency a model for protecting the environment and creating a healthier workplace.

#### Check out the DEP website for more ideas

