

Sustainability: BALANCE, with a competitive edge

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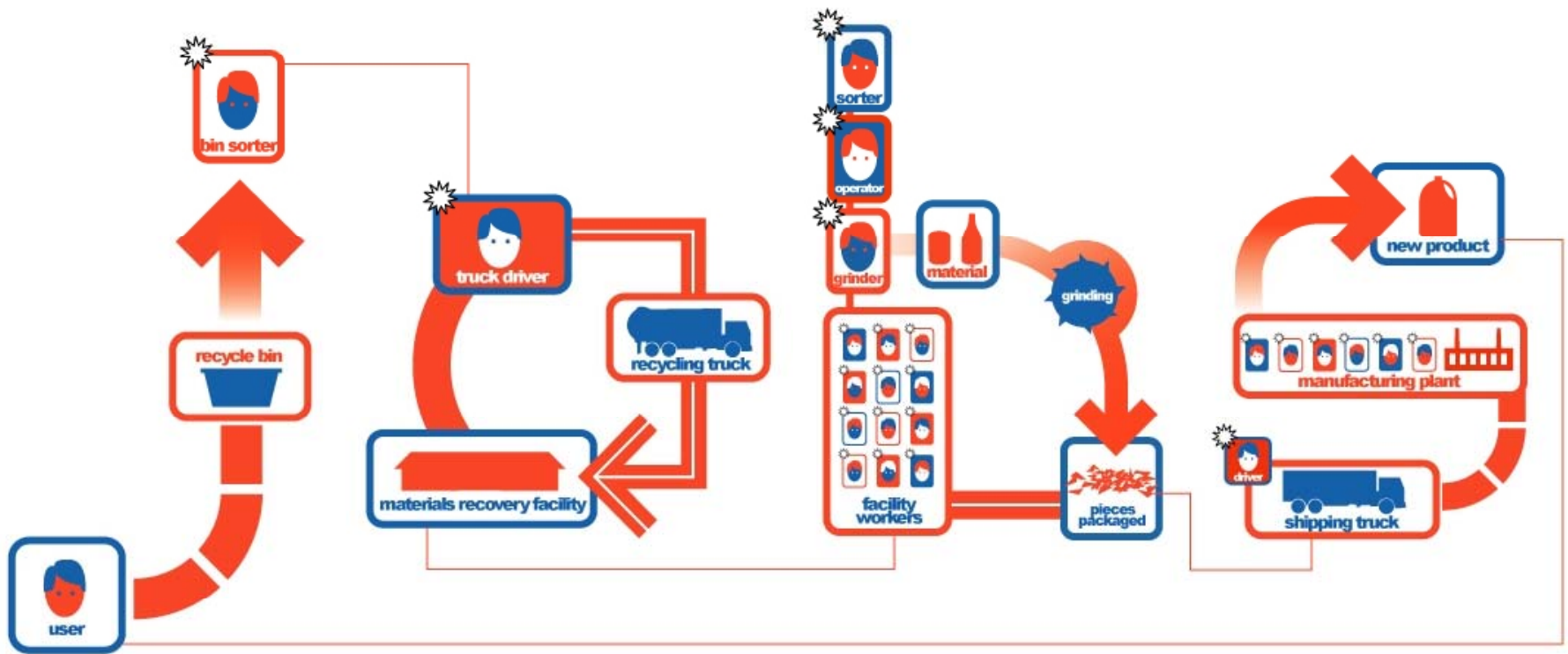
www.p2pays.org

Sustainability Options



NC Environment

- NC Climate Action Plan Advisory Group;
<http://www.ncclimatechange.us/index.cfm>
- Air Quality – areas of nonattainment
- New water norm
- Energy Consumption
- 136 mil tons of waste generated in US buildings/year
- NC threw out close to 12 mil tons in 06-07



recycling supports 14,000 North Carolina jobs
a 20% increase in recycling can create 500 jobs



Definitions

buying • recycled

purchasing products that contain materials diverted from the solid waste stream

environmentally • preferable • procurement

purchasing goods and services that have a lesser or reduced effect on human health and the environment in their manufacture, use, and disposal when compared to other goods and services that serve the same purpose

NC Legislation for Agencies

- General Statutes 130A-309.14;143-58.2&.3
 - Addresses procurement of recycled content and EPP products and services, particularly paper
- Executive Order 156
 - Addresses sustainability, waste reduction, recycling, recycled content purchases, and EPP
 - Requires RC paper and equipment that can handle it
- **Annual Report** required on recycling and recycled content purchases, **DUE NOVEMBER 15th**

Focus Area: *More energy efficient, less toxic, less polluting, and which generate less waste overall*

Required Recycling:
Aluminum, Recyclable glass, Plastic bottles, Newspaper, Sorted office paper



NC's Green Economy

- Recycling Markets Directory; www.p2pays.org/dmrm
 - Over 600 businesses
 - More than 14,000 people in recycling jobs in NC
 - **Made in NC** and Recycling Means Business
- Biodiesel and Ethanol manufacturers
- Huge electronics market for southeast US
- Large scale food waste composting facilities
- Growing reuse opportunities
 - Habitat for Humanity RESTORE
 - Electronics



Financial Influence

- Electricity
- Natural gas
- Fuel oil
- Water and sewer costs
- Hazardous waste management
- Vehicle fuels
- Solid waste management
- Goods and services



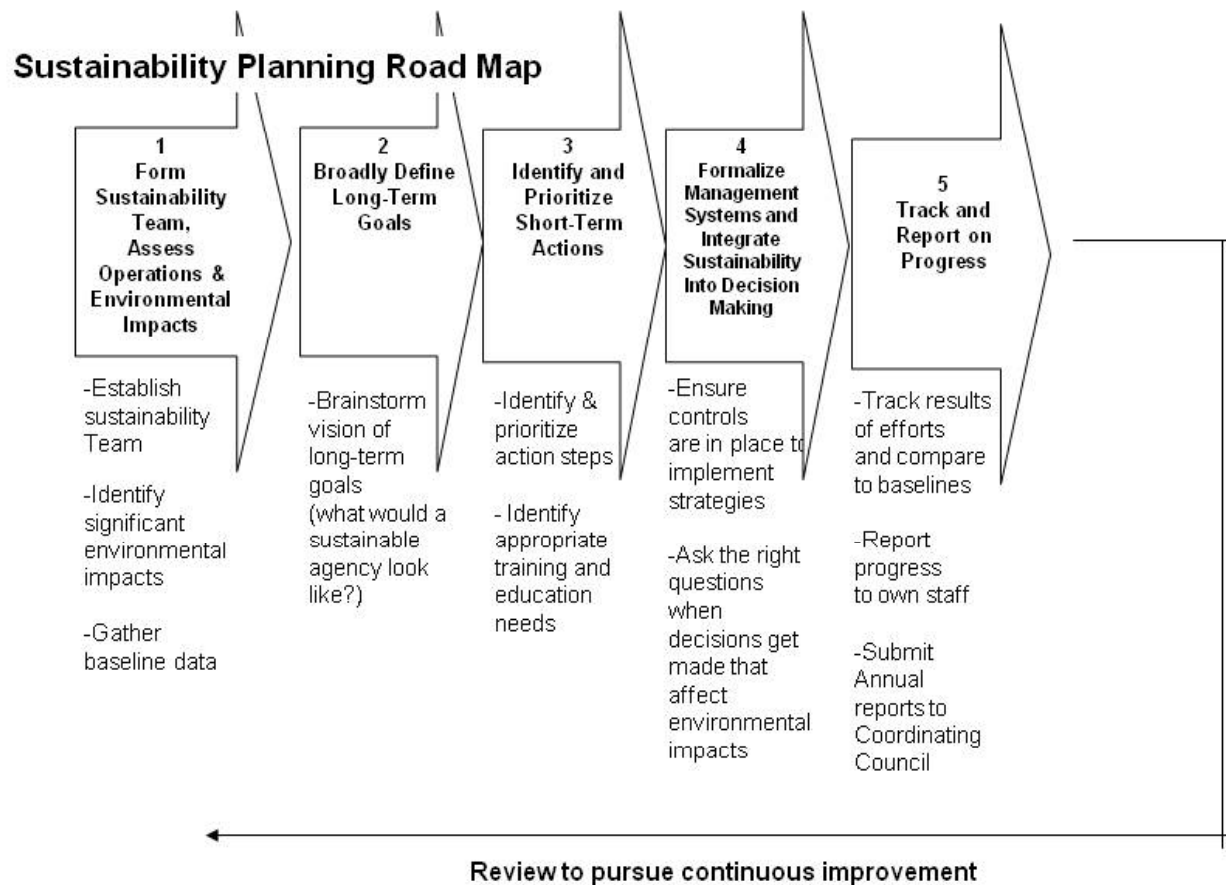
1. Sustainability Team

DENR Sustainability Team;

www.ncprojectgreen.com/DENRsusteam

Design an
Environmental
Management System;

www.p2pays.org/iso



2. Reduce and Reuse



- Put the burden on the suppliers and manufacturers
- Purchase in bulk, locally, and cooperatively
- Lease large ticket items - product stewardship
- Donate furniture, building materials, and electronics to the Reuse Store or local nonprofit (SURPLUS)
- Conduct waste assessment
- Waste Trader at www.ncwastetrader.org/home.aspx
- Biomass Trader at www.ncbiomasstrader.org/home.aspx

3. Recycle



RBAC Services - Recycling Markets Directory - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://www.p2pays.org/dmrm/start.aspx

Most Visited Getting Started Latest Headlines

Google epp full cost accounting Search + Mail News Bookmarks AutoLink AutoFill Send to epp full cost accounting Settings

RBAC Services - Recycling Marke...

NORTH CAROLINA Recycling Markets Directory

[RBAC Home](#) [Search Directory](#) [Get Listed](#) [N.C. WasteTrader](#) [Links](#)

Search Directory: Use this as a tool to find an outlet for your recyclable materials. If you're not sure under which category to find your material, see our complete [LIST](#) of materials.

By material. Select the *general* type of material you want to recycle from the drop-down list below, then click "Go." **By name.** Select the *specific* type of material you want to recycle from the drop-down list below, then click "Go."

STEP 1 Construction & Demolition Mat Go

STEP 2 Asphalt Pavement Go

- Asphalt Pavement
- Carpet
- Carpet padding
- Ceiling Tiles
- Concrete & Brick
- Deconstruction Services
- Drywall (Gypsum)
- Mixed C&D Processing
- Mobile Homes
- Mobile Recyclers – Concrete & Brick
- Mobile Recyclers – Wood Waste
- Plastic Buckets – HDPE
- Railroad Ties
- Roofing Material
- Salvaged Building Materials
- Scrap Lumber
- Vinyl Siding (PVC)

By name. If you know the name of the recycling company you want to use, click on the company's name:

[1](#) [2](#) [3](#) [4](#) [5](#) [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#)

Get Listed: If your company is not currently listed, you can do so by clicking on the numbers below.

You might also want to consider listing materials available/wanted on our marketplace for discarded or surplus materials or products.

Need Help? Please visit our [help page](#) or contact the RBAC staff at (800) 763-0136.

Done

start Calendar - Microsof... 7 Reminders RBAC Services - Re... CAGP March 2009... Presentations 3:49 PM

4. Think about transportation

- Carpool and promote public transportation
- Purchase hybrids & alternative fuel vehicles for your fleet
- Use biodiesel in your campus buses
- Implementing polices that suggest idle reduction, regular maintenance and properly inflate tires, slow acceleration, and maintaining the speed limit

NC Solar Center

Clean Cities Coalitions





Vehicular opportunities

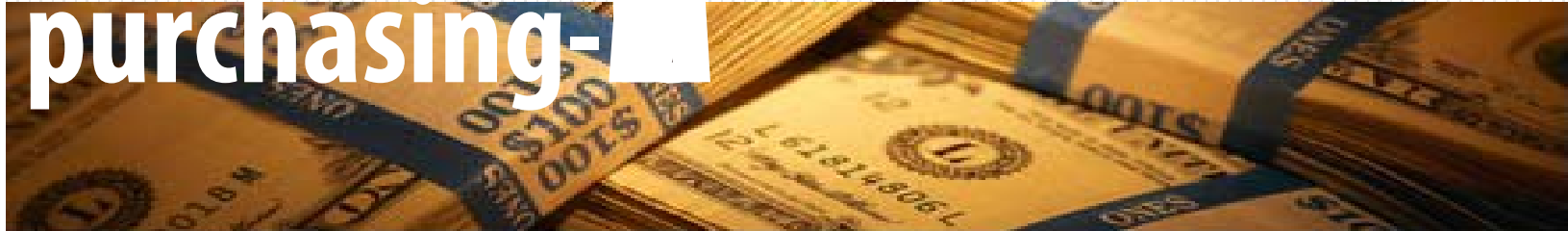
- Re-refined motor oil
 - On STC/American Petroleum Institute (API) Certified
- Retread tires
- Alternative Fuel Vehicles
 - 3,317 in State Motor Pool (propane gas, ethanol, or compressed natural gas)
 - State's primary alternate fuel is E-85; costs about \$0.27 more/gal
 - Public Biodiesel tanks in Durham, Cary, and Garner at equal cost
- Hybrid cars
 - 46 in State Motor Pool
- Triangle Clean Cities; www.trianglecleancities.org/index.shtml
- Alternative Fuels Data Center; www.eere.energy.gov/afdc/

5. Buy Green

- Buy recycled content products
 - Paper and paper products
 - Building materials
 - Retread tires, rerefined motor oil
 - Mulch and other outdoor equipment
- Green products
 - **Life cycle cost accounting**
 - Local, Durable, Non-Hazardous
 - Pilot new products
 - Energy efficient office equipment – printers, photocopiers, fax machines, laptops, computers



purchasing-



Goal: Reduce, minimize, and/or eliminate environmental & health impacts associated with products & services & support recycling markets

- + Reduces energy consumption
- + Conserves natural resources – air, water, trees, space
- + Decreases toxic materials in waste stream
- + Creates markets for recycled materials
- + Builds local economies
- + Creates jobs

Do Inventory



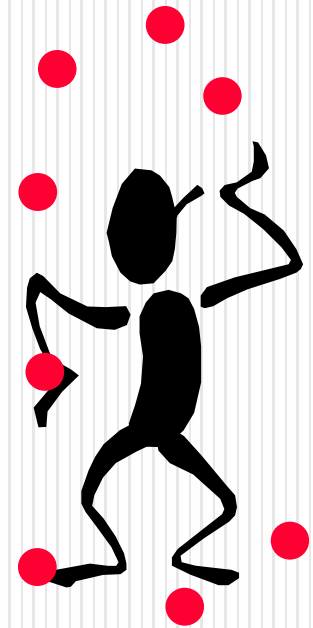
- Paper - photocopier/printer paper, notebooks and notepads, note cards, post-its, folders, calendars, envelopes
- Supplies - pencils, pens, scissors, tape dispensers, toner cartridges
- Technology - computers, photocopiers, printers, lights
- Vehicle related - cars, oil, diesel
- Cleaning products - cleaners, trash can liners, trash cans, paper towels, toilet tissue
- Building materials – paint, benches, mulch, carpet, furniture
- Water related – shower heads, urinals, toilets

Some EPP Attributes

- Recycled content
- Durability
- Maintenance
- Recyclability
- Disposal
- Energy efficiency
- Water efficiency
- Raw materials acquisition
- Production
- Manufacturing
- Packaging
- Distribution and transportation methods
- Operation

Pick your battles

- Use resources for attribute lists
 - EPA's Database and Green Seal
 - EPA's "Menu of Attributes"
- Or, brainstorm your own list
- Search the web for studies already done, copy and share
- Not all attributes are applicable to your use and location
- Chose a concise list to consider; be efficient
- Make an impact
 - Specified in EO
 - Electronic office equipment: Energy Star compliant
 - Remanufactured & used equipment: purchasing preference
 - Vehicles: less polluting fuels, highest available mpg



6. Retrofit Your Building for Energy and Water Efficiency

- Make them economic and environmentally sound
- Install energy efficient products
 - Fluorescent lighting fixtures
- Use water efficient fixtures
 - Low flow sinks and showers
 - Low flow toilets, waterless urinals, compostable toilets



Energy Office

www.energync.net

Solar Center

www.ncsc.ncsu.edu

NC Green Power

www.ncgreenpower.org

Save Water NC

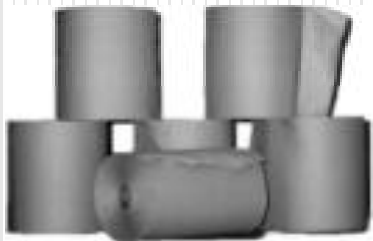
Div of Water Quality

Div of Water Resources

7. Use Green Cleaners



- Healthier for users and building occupants
- Changes the way cleaning is done, making it more efficient and effective
- Cleaners, trash can liners, trash cans
- Minimizes disposal cost of hazardous chemicals
- Use in conjunction with recycled content paper products (tissues, towels, toilet paper)



8. Hold Green Meetings

- Zero waste luncheons
- Buying local food
- Teleconference
- Webinars
- Carpool

9. In the Kitchen you can...

- Compost
 - contract collection for large facilities
 - Onsite worm bin for small café or break rooms
- Buy and/or provide local, organic food from Farmers Market
- Use reusable plates, cups, and utensils
- If not reusable, use biodegradable products (paper or biobased products like earthshell)



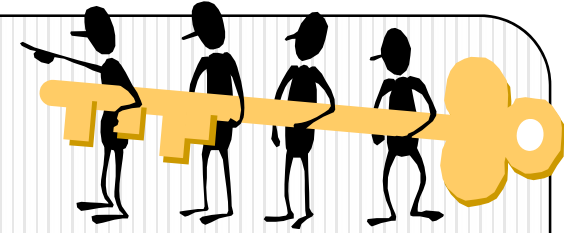
Tool Kit

10. New Building & Renovations

- Design landscape using drought tolerant, native plants & use compost and mulch from recycled materials
- Carpet and other floor coverings
- Paint
- Ceiling tiles
- Windows
- Furniture
- Insulation
- NC Green Building Database;
www.ncgreenbuilding.org/site/ncg//index.cfm?
- LEED

Working Your Programs Whatcha Need

- Current policies and procedures
- Contracts and specifications
- Training Manuals
- Website (to put your tools up)
- Buy-in



Key Elements of a Policy

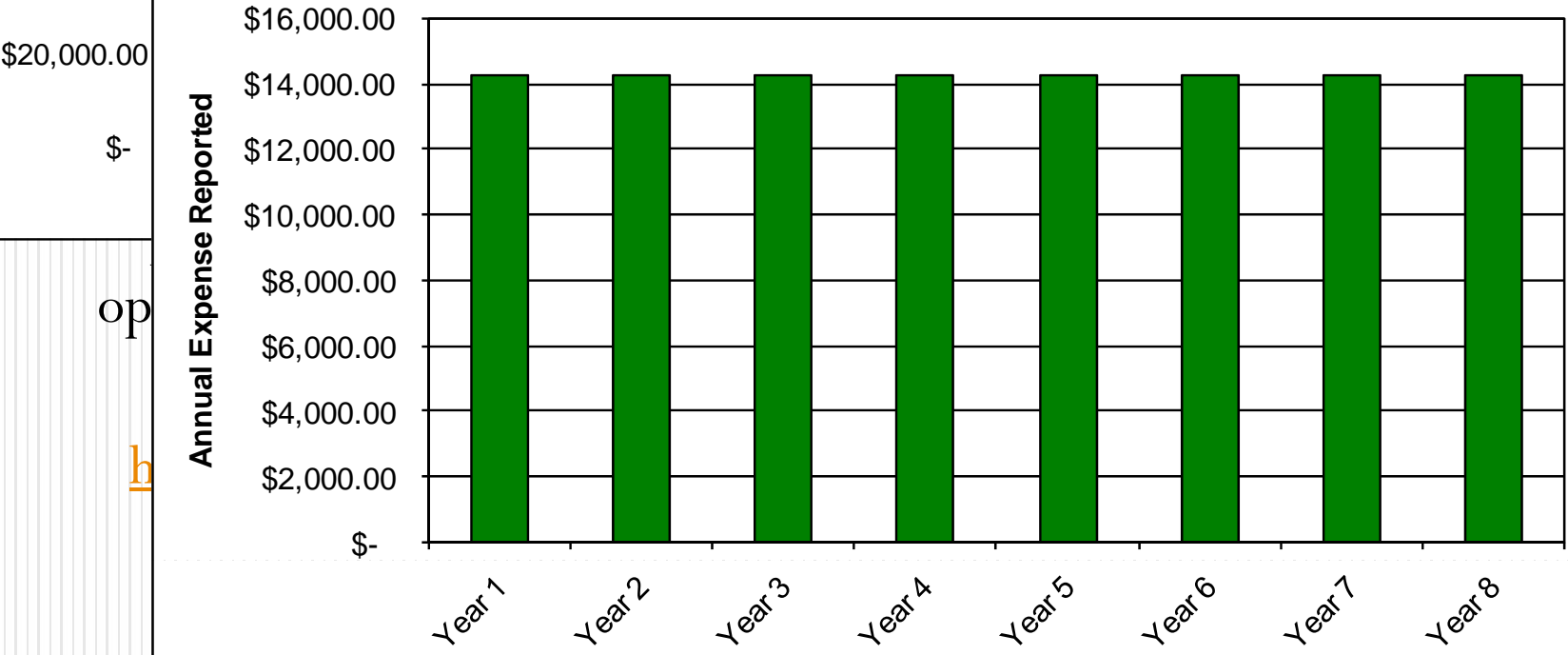
- **INTEGRATED** policy in purchasing department
- **Get key personnel involved**
- **Review** your current purchasing policies and look for any **contract language** that may hinder green purchasing
- **Consider elements** you want to emphasize
- **Research policies** in place in organizations similar to yours
- **Spread the news** - make sure suppliers, purchasers, and users know about policy

Cash Flow Accounting



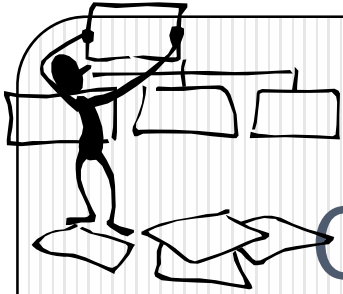
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Full Cost Accounting



op

b



Getting Specific

- Establish a preference for recycled content products
- Create minimum content standards
 - Federal agencies paper has to have a minimum of 30% post-consumer content (EO 13101)
- Set goals, or a series of goals
 - NC agencies goal to purchase only recycled content paper by 2001
- Institute a price preference for EPPs
 - Allow a 5 or 10% price differential for products that have green attributes

Honors Classes: Sustainability

Assess impacts of facility and operations on health and safety, environmental quality, land use, and resource conservation

- Capital improvements – energy efficient, water conservation, land preservation
- Facilities management – reduce energy and fuel consumption, conserve water, minimize emissions
- Vehicle use and transportation – alternative fueled or low emission vehicles, carpool, flex-time, telecommuting

Required: Environmental Sustainability Officer

EO

Pointers and Priorities

- EPP, not a new process, just more attributes
- Still consider —
 - Price
 - Performance
 - Availability
- **just add an environmental flavor!**
- Look for labels — Recycled, organic, sustainably harvested



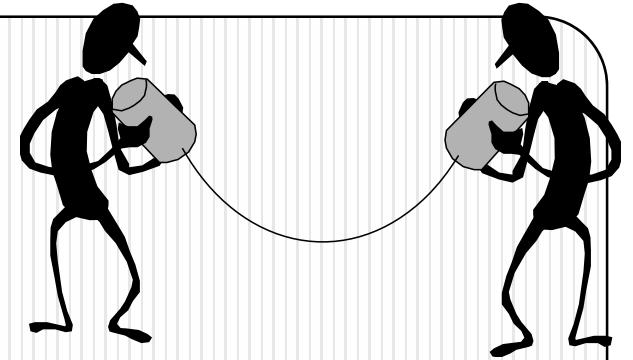
Green Purchasing means...

- Quality products at competitive prices while protecting the environment
- Considering the effects of your purchasing decisions
- Our recycling markets improve and cost of green products is driven down as demand increases
- Allowing for full cost accounting rather than linear thinking in regards to costs
- Buying durable over disposable
- *Purchasing with Environmental Flavor*

Does NOT ask or require that you buy
sub-standard products!!

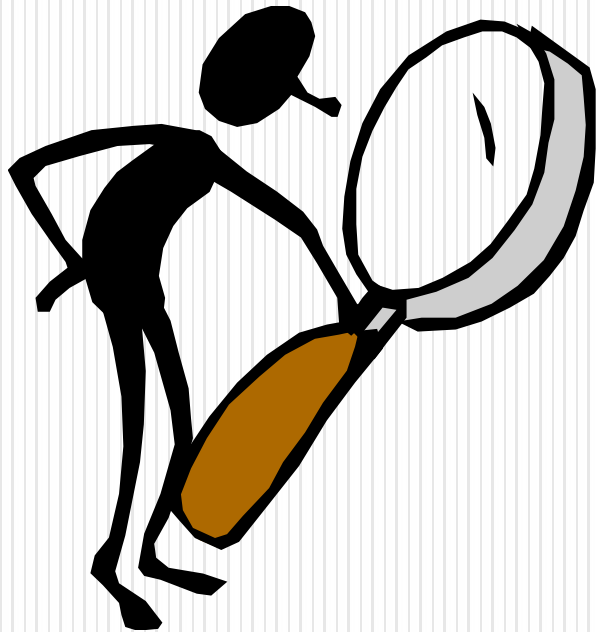
Now What?

policy—team—inventory—evaluate--review



- Use your sustainability office
- Tap into student resources
- Look at how purchasing works – green your contracts and your store
- Train purchasers and p-card holders – educate all employees about your efforts
- Put info up on your purchasing site
 - Consider interests of your organization and focus on products that make an impact
 - Research for specifications - Put your own **twist** on it!
 - Make sure products work; ask for feedback from users
 - Use it or lose it depending on performance
 - Edit specifications depending on availability
 - Share your specifications, policies, and products with others

Where to Look for Products and Specs



- à Existing vendors
- à State/Federal Contract
- à Internet resources
- à Trade exhibitions and shows
- à Local stores

My EPP; www.p2pays.org/epp

EPA CPG; www.epa.gov/cpg

EPA EPP; www.epa.gov/epp

Center for New American
Dream; www.newdream.org

NC Purchase & Contracts;
www.doa.state.nc.us/PandC/recycled.htm

NC Project Green;
www.ncprojectgreen.com



www.p2pays.org/epp
www.ncprojectgreen.com

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