A Collation and Review
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Sustainable Paper Management

Introduction:

Sustainable Paper Management provides an opportunity to mobilize employee morale, productivity, and loyalty to the work place. Opportunities for personal and collective employee actions offer an opportunity to both address planetary crises and company profits. Since it is generally very difficult to tie personal actions to global issues, this focus if accurately framed, can release extraordinary pent up value-based energy. The sense of purposefulness potentially gained can provide a platform for the more difficult challenges that are involved in advancing sustainability to the core of business strategy. Paper-use is a great place to begin the triple bottom line journey!

Following, you will find the information you need to relate your paper management to both global and company issues, as well as he tools you need to calculate and track the reduction of your environmental and financial impact.

I. Why focus on the development of a sustainable paper policy?

A. Sustainable Paper Policies Are Good for Business
(with credits to National Resources Defense Council - NRDC)

- Saving paper *saves your business money*. A typical office disposes of about 350 pounds of wastepaper per employee per year.
- An eco-friendly paper policy *will give you an edge over your competitors* when it comes to winning the hearts and minds of your clients.
- A program to conserve and recycle paper can boost employee morale and productivity, by giving employees a valued opportunity to be involved in a long-term effort to protect the environment.
- A smart paper program will send a message to your investors -- shareholders or owners -- that you're looking to cut costs while being a good corporate citizen.
- An environmentally friendly paper program can be good public relations. Use online paper calculators or vendor statistics to keep track of how many trees you're saving, how much water and energy you're saving, and how many greenhouse gas emissions you're avoiding through smart paper purchase and use.

B. ...and Good for the Environment.
(with credits to NRDC)

- The pulp and paper industry consumes 42 percent of all wood harvested for industrial uses, contributing to the degradation of natural forest ecosystems around the world.

- Paper products are the single largest component of the garbage that goes into landfills and incinerators.

- The pulp and paper industry is the single largest industrial consumer of water - and water polluter -- in OECD countries. And it is the third biggest emitter of global warming pollution in industrialized nations.

- By reducing the paper your company uses, you can help rein in a number of environmental problems, including global warming, clearcutting of forests, air pollution from incinerators, water pollution from the paper-making process, and overflowing landfills.

- Replacing a ton of virgin fiber to make magazine stock paper with a ton of recycled fiber reduces

    - net greenhouse gas emissions by 47 percent
    - particulate emissions by 28 percent
    - wastewater by 33 percent
    - solid waste by 54 percent
    - wood use by 100 percent

- Buying 40 cases of copy paper made from 30 percent postconsumer paper instead of paper made from virgin pulp saves
    - more than seven trees
    - 2,100 gallons of water
    - 1,230 kilowatt-hours of electricity
    - 18 pounds of air pollution

- Forty cases of copy paper made from 100 percent postconsumer paper saves
    - 24 trees
    - 7,000 gallons of water
    - 4,100 kilowatt hours of electricity
    - 60 pounds of air pollution

- Experts project a 70 percent increase in tropical and subtropical timber harvesting specifically for papermaking in less than a decade. In tropical forests, deforestation is already eliminating one acre of forest every second.

- By purchasing fiber source certified paper, you reduce the impact of unsustainable and illegal logging practices that are destroying important ecosystems and increasing poverty while displacing indigenous peoples dependent upon their forest resources.

II. Develop Sustainable Paper Procurement Specifications

Specifications for copy paper should include: 1) highest feasible percentage of postconsumer recycled content, not less than 30%; 2) chlorine-free and mercury-free pulping caustic certification; 3) chain of custody certification for virgin content, and 4) a requirement that vendors offer tree-free alternatives. Clean Production and/or CSR reporting by the producing and distributing companies is also desired. (For an example of more comprehensive specifications see a model procurement

policy for a major printing company, developed with NRDC consultation: http://www.nrdc.org/cities/living/paper/purchasing.pdf

Purchasing paper with higher levels of recycled content may slightly raise the initial cost. If, however, purchasing is associated with employee participation in the implementation of a sustainable paper policy, the cost can be more than returned through paper conservation and employees with heightened morale and consequent productivity.

Environmental standards and certifications make it easy for institutions to choose high quality and environmentally preferable copy paper. The Responsible Purchasing Network (RPN) recommends: Forest Stewardship Council (FSC) chain of custody certification, Chlorine Free Products Association's Totally Chlorine-free (TCF), and/or Processed Chlorine-free (PCF) marks, and paper certifications from Green Seal and EcoLogo. Other certification programs include the Programme for the Endorsement of Forest Certification schemes (PEFC), and the Sustainable Forestry Initiative (SFI).

III. Implement a paper use reduction program.

Ways to Reduce Office Paper Waste
(with credits to NRDC)

Communications

- Use email instead of paper or faxes whenever practical, both for internal memos and for communications with clients and customers.
- Don't print email messages. Put the words "Don't print this email unless you really need to" at the bottom of all emails.
- Print less: Keep mailing lists current. Don't print more copies than you need or order extra on outside print jobs.
- Reuse what you can. Stock your fax machine with paper already printed on one side; reuse oversize envelopes and boxes; re-use one-sided "draft" paper in your printers.

Printers and Copiers

- As printers and copiers need to be replaced, reduce the number of printers you buy to save money, energy and office space. Purchase units that can print on both sides of a sheet of paper. Then set all computers and copiers to default to double-sided printing.
- Save and collect 8.5 by 11 inch paper that's been printed on one side, restack it neatly, designate a paper drawer on each printer (or as many printers as practical) for this paper, and use it to print drafts.
- Adjust the house style on word processing programs to use a slightly smaller font and slightly wider margins.
- Work on drafts electronically, using "edit" and "comment" word-processing features, instead of working on paper.

Incoming Mail

- Cut down on the number of periodical subscriptions you buy. Survey to see who subscribes to what, then trim duplicates and work out a sharing system. One way to share information is to circulate the table of contents for each periodical.
- Reduce the amount of unwanted mail your company receives. The National Waste Prevention Coalition provides a postcard to send to mailers to have your name removed from lists: http://www.metrokc.gov. (See more resources and suggestions for curbing business junk mail at http://dnr.metrokc.gov.)

Office Kitchen

- Stock the kitchen with reusable mugs, plates, bowls, and utensils to discourage the use of paper and plastic disposables. Consider cloth napkins, or use paper towels with high postconsumer recycled content.
- Encourage employees who carry in lunches to use reusable bags and napkins.
- Encourage the use of tap water instead of bottled water.

Recycling More

- Distribute recycling bins for paper to every workstation and make sure the cleaning crew knows what they're for.
- Post signs in centralized areas to encourage reuse and recycling, and to educate staff on what can and cannot be recycled.

The above strategies for waste reduction have also been formatted for an Excel Spread Sheet by NRDC that can readily be customized.
http://www.nrdc.org/cities/living/paper/paper.xls

IV. Set Quantifiable Goals for Continuous Improvement

Track paper purchases and their environmental impact with the NRDC Paper Calculator
http://www.edf.org/papercalculator/

- 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.

- 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.

- You will need to collect twelve months of paper purchasing invoices, and determine the type, weight and post-consumer recycled (PCR) content of the office paper you are using. Utilizing these inputs of trackable data, the automatically generated report will utilize data from the paper life cycle to estimate environmental impact values. The values will vary according to the quantities, types and attributes of the paper used. (Quantities of reams used, if necessary can be calculated by total expense/price per ream. Weight of paper used can be calculated with an estimate of 5 lbs. per ream.)

Impacts measured include:

- Wood required to produce the paper used :
- Total energy consumption used to produce the amount of paper.
- Sulfur dioxide, Nitrogen Oxides, Particulates and Volatile Organic Compounds
- Greenhouse gases associated with producing and disposing of the paper
- Waste Water and Solid Waste
- Biochemical Oxygen Demand (BOD) measures the amount of oxygen that microorganisms consume to degrade the organic material in the wastewater.
- Total suspended solids (TSS) measure solid material suspended in mill effluent, which can adversely affect bottom-living organisms upon settling in receiving waters and can carry toxic heavy metals and organic compounds into the environment.
- Chemical Oxygen Demand (COD) measures the amount of oxidizable organic matter in the mill's effluent.
- Absorbable Organic Halogens (AOX) are an indirect measure of the quantity of chlorinated organic compounds in mill effluent, many of which are toxic.

Web Bibliography for further background and purchasing resources

NRDC Smart Paper: A Guide for Businesses
http://www.nrdc.org/cities/living/paper/bintro.asp

Paper Tells A Story
http://www.environmentalpaper.org/index.html

Metafore, a fee based organization with tools "for businesspeople focused on evaluating, selecting and manufacturing environmentally preferable wood and paper products. Metafore is a source of tools, information and innovative thinking."
http://www.metafore.org/

Sustainable Procurement of Wood And Paper Based Products by WRI and USBCSD
http://www.sustainableforestprods.org/

The Environmental Paper Network
http://www.environmentalpaper.org/index.html

Examples of Recently Publicized Company Activity

OfficeMax Rolls Out Paper Procurement Policy
http://about.officemax.com/html/officemax_environmental_policy_paper.shtml

Bank of America implements new paper procurement policy
http://www.greenbiz.com/news/2005/04/20/bank-america-implements-paper-procurement-policy

Transcontinental Implements Paper Purchasing Policy
http://www.greenbiz.com/news/2007/10/19/transcontinental-implements-paper-purchasing-policy

Corporate Express offering FSC-Certified Paper with Recycled Content Options
http://www.reuters.com/article/pressRelease/idUS136800+10-Mar-2008+PRN20080310

http://metafore.org/downloads/the_paper_consumers_guide_to_climate_change.pdf

Regional Sourcing with International Distribution -- Grays Harbor Paper, Hoquiam, WA, features 100 percent post-consumer commercial printing and copy paper. Harbor 100 is manufactured using FSC-certified pulp that is made with high grade office waste, with no virgin fiber is used in its manufacture. At the mill, 100 percent renewable carbon-neutral energy uses biomass, and all industrial waste from its production is land applied on Grays Harbor property. Grays Harbor has also recently purchased new semi trucks that run on biodiesel to regionally transport Harbor 100. Request it from your supplier. http://www.ghplp.com/