

## **A More Sustainable Event Industry is Just around the Corner**

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Not a day goes by without another story featuring an individual or corporation who has stepped into the green economy. As sustainability further entrenches its roots into the American culture, corporations are taking notice and developing products and services that meet the new 'green' standard. New research has shown that employees are embracing corporate social responsibility values and looking to align with companies that espouse these values. (Fresh Marketing, 2008). Consumer market research shows the large majority of US customers are more likely to purchase a competitive earth-friendly product over a conventional rival.

The battleground for the 'green' consumer is well underway, and it is expanding across industries at an unprecedented pace. The Green movement, a component of corporate social responsibility, demonstrates that employees, investors and consumers are seeking suppliers who share the same values and want to join them in promoting sustainability. (Hebard & Cobrdam 2009). Who would have imagined twenty years ago that companies like Waste Management, Shell, Dow Chemical, Weyerhaeuser, Panasonic, and Wal-Mart would today be leaders as stewards of the planet? These pioneers have navigated broad environmental change within their industries and have forged voluntary environmental standards for their employees and suppliers.

The United States Environmental Protection Agency (EPA) recently disclosed the Federal government invests over \$18 billion on travel and hospitality related services, including tradeshows, events, and meetings. In 2008, the EPA and the Green Meetings Industry Council initiated a process to create more sustainable benchmarks for Federal government agencies to implement within their operations. The EPA reviewed the Exhibit Designer and Producers Association's (EDPA) efforts to create a guide to 'greener' best practices for its members, and requested inclusion of the Hospitality industry in the benchmarking process. The Convention Industry Council (CIC), Accepted Practices Exchange (APEX), and the American Society for Testing and Materials (ASTM), are participating in setting the combined industry standards.

**Timeline:** ***The time for this change is immediately upon us in the tradeshow, event, and meeting industry.***

This benchmarking process is moving into its feedback stage via a wiki page which is due to be launched in April or May 2009 for user comments to be documented and considered. The first version is expected to be a navigation tool, to be released at the United Nations Global Climate Summit to be held in Copenhagen, Denmark this June.

**Stakeholders:**

Associations and Event/Meeting Planners who contract with General Service Contractors and Convention Centers have committed to produce environmentally responsible conferences and expositions. Exhibitors will be motivated to support these standards through the sustainable procedures and practices of its employees, vendors and contractors. Convention planning will continue to push the boundaries of sustainability and promote its mission of environmental awareness and education. Associations will begin implementing a gradual mandate over the course of the next 1-5 years, resulting in a set standard and expectation of Exhibitors to follow via a point system. The Exhibitor and General Service Contractors will be incentivized to work



Sustainability Stakeholders

- Associations
- Event/Meeting Planners
- Exhibitors
- Convention Planners
- Exhibit Producers
- Contractors

collaboratively with Show Management to improve the overall environmental performance of the conference.

Guidelines have been written by Stetson Convention Services and Meeting Strategies Worldwide for one of the earliest adopters of sustainable event practices, Greenbuild International Conference and Expo. These guidelines are part of the foundational standards being written through APEX/ASTM efforts and will help explain these benchmarks and how they might reshape the event industry.

**Exhibitors** will agree to implement the following practices and policies during the trade show.

## 1. Exhibit Property Construction and Material Usage



The Associations' commitment to leadership sustainability principals and innovations is to be considered a guiding tool for booth properties on the exposition floor. For newly constructed booths, the Association respectfully requests, for example, that the following material guidelines be adhered to:

### Life-cycle:

- Display should be designed with a responsible construction and afterlife considered. Materials should be capable of repurposing after the booth property is no longer suitable for the Exhibitor.

### New Booth Considerations

Cradle-to-Cradle Design-  
Display should be designed with a responsible construction and afterlife considered.

- Consult your exhibit house to investigate a buy-back or recycle program for your booth property at the end of its lifecycle. Parts of your booth can be repurposed, resold, or deconstructed and sent into responsible waste streaming.
- Consider a venue-based transaction to sell or donate obsolete exhibit properties.

**Construction/Materials:**

- All materials should be recycled and recyclable, renewable resources or sustainable. All exhibit paint should be low-VOC or no-VOC content.
- Graphics should use materials extruded from recycle and/or renewable resources and/or low environmental impact, maximizing recycling and repurposing possibilities. Graphics should be printed using water, soy or vegetable based inks whenever possible.
- Booth should be constructed incorporating indoor air quality principals and energy efficient lighting should be utilized if applicable.
- Flooring should contain recycled content and/or be constructed of low-emitting materials such as composite wood, agri-fiber, FSC certified wood or with organic content.

**Transportation:**

- Newly constructed booth properties will consider total weight of booth as a contributing factor to the carbon emissions in the environment during shipment.

**Documentation:**

- The Association recognizes all Exhibitors who re-use their booth property as an equal partner to those Exhibitors who choose a newly constructed environmentally responsible booth.
- The following information will be requested to prove reuse of booth property: Year of construction, show names, show dates and projected life span of the property assets.

**2. Staff Training**

To ensure effective implementation, exhibit staff must be presented with the new exhibiting guidelines and informed of the waste management and diversion efforts implemented by Show Management.

### 3. Packing Materials



The Exhibitor is expected to minimize and consolidate shipments in order to reduce packaging materials.

- Show Management suggests that exhibitor's re-appropriated materials such as newspaper used egg cartons or used plastic bags instead of using Styrofoam or Bubble Wrap.
- Exhibitors should reuse packing materials and use durable containers made of recycled or rapidly renewable materials whenever possible.
- Reusable mover's blankets are a favorable choice.
- Use FSC certified wood, renewable, recycled materials to build crates.

- Avoid the use of one-way shippers and choose a reusable shipping container.

#### 4. Transportation & Logistics



- Reduce the environmental impact by employing a number of strategies. By shipping fewer materials or by sending a lighter booth property, the Exhibitor can significantly lessen their carbon footprint. In addition, the Exhibitor agrees to utilize the following approaches whenever possible:
  - **Alternative Fuel:** Use biodiesel, natural gas, or alternative fuel vendors whenever possible.
  - **Localize:** If you do not already own a booth property, consider renting at the show venue whenever possible and warehouse materials locally between shows.
  - **Improve Your Supply Chain:** Choose partners and vendors carefully to favor those who use responsible labor practices, work with local suppliers, have energy- and water-saving programs in place and have an integrated waste management program. Does your freight company make suggestions to help avoid unnecessary freight trips? Do you store your multiple booths regionally? Have you considered housing your booth midway between your most frequented events to mitigate shipping distance?



- Unfortunately, the carbon emissions contributed by human and freight travel are unavoidable, so consider bringing less collateral or printing locally. Additionally, the footprint of these activities can be offset using a number of strategies. Show Management recommends one of these three options to compensate:



**#1 Direct Carbon Offsetting:** in this scenario, carbon emissions are calculated and an equal amount of carbon credits are purchased to counterbalance the negative environmental impact. Using this formula, credits purchased can go to a number of positive options. Reforestation projects where trees are planted to absorb the CO<sub>2</sub> emitted and send oxygen back into the atmosphere. Energy Efficiency Credits go to projects dedicated to finding and creating product development

that improve product efficiency. Finally, Alternative Energy Credits go to speeding product advancement that reduces our dependence on natural resources such as petroleum and coal.

**#2 Inter-Corporate Offsetting:** If your company has an internal calculation in place that includes in house waste management, energy efficient office machines, responsible lighting options, eco-conscientious office supply procurement and other means by which your travel and shipping related to the Event can be formulated and submitted to the Association, this can be another way to equalize your environmental footprint.

**#3 Donating to programs that invest in or provide improved living environments,** hospitals, schools, etc., can be another way to offset your emissions. In this circumstance, the Exhibitor can invest in a community related organization that directly affects the carbon cost of exhibiting.



- Pre-loaded jump drives with your collateral are another great way to get attendees your information in a non-printed way.
- Giveaways should be made of recycled, responsibly grown natural fiber, non-toxic, biodegradable and not be merely promotional in nature. Most promotional providers offer a line of 'green' products that follow these guidelines. Made in North America.
- Try to avoid excessively packaged items.
- Gift items made from endangered or threatened species are NOT allowed. For further information please visit <http://www.fws.gov/endangered/wildlife.html>.
- If the Exhibitor chooses to reuse a printed material already in circulation, Show Management reserves the right to request verification of duration in print.

## 6. Recycling Participation



- The convention center and municipal waste management provides a recycling program that captures compost, plastics, glass, paper and cardboard that is separated into 3-5 streams.

- Exhibitors will NOT receive a waste basket in their booth unless they order porter service, and are asked to use the well placed recycling stations located strategically on the exposition floor.
- All exhibitors and booth staff are required to participate in the recycling efforts by ensuring their cardboard, freight materials, packing materials, shrink wrap and other waste is emptied into the provided receptacles.
- Additionally, the Association will use a compost program to recycle organic material. This includes all food waste, paper products that have touched foods and alternative products that have compostable or biodegradable properties.

## 7. Donations



There is significant waste often left on the exposition floor following close of show; this practice is strictly prohibited. In order to support the waste management efforts employed by Show Management and the facility, Exhibitors are expected to consider the following alternatives:

- Be proactive and understand the waste streams available at show site (outlined in detail above) and bring materials that have available streaming options.
- Use the donation programs available. An area will be provided to collect any materials that are eligible for repurposing. Prior to disposing of any materials, Exhibitors are requested to consider donating any usable items such as construction materials, preferably still palletized. Another frequent donation item is substrates such as cardboard signage, foam core, Sintra aka Polyvinylchloride, Coroplast, etc. that can be reused by local elementary school students. Paints, booth furniture and many others are acceptable.
- If you should choose to donate or sell your entire booth property, please coordinate your arrangements with the General Service Contractor to allow for a productive transition.
- The Exhibitor is encouraged to permit Show Management, other appointed agents or an independent third party access to the Exhibitors services/products as necessary to monitor and report on all Environmentally Responsible exhibiting conditions as set forth in an Exhibitor contract.

### **Potential Metrics**

A series of documents may be requested by the Association outlining the Exhibitor's total event participation, procedures and materials within a predetermined time frame of event close, including:

1. Sustainable Leadership Worksheet (In development)
2. Carbon offset documentation
3. Plan for future improvements
4. Booth Property description-year of construction, show names and dates used, projected lifespan
5. Booth construction materials certifications, e.g. FSC, GreenStar, Energy Star ratings, etc.

Show management companies will be held accountable to adhere to the Association mandated sustainable practices and/or policy may result in Exhibitor compensatory liability for costs or fines.

All non-recyclable and/or waste left on the exposition floor by the Exhibitor will also result in fines and penalties, extreme cases may produce restrictions or prohibition of exhibiting at future Association events.

#### RESOURCES:

[www.usgbc.org](http://www.usgbc.org)

[www.greenexhibits.org](http://www.greenexhibits.org)

[www.rateitgreen.com](http://www.rateitgreen.com)

[www.ashrae.org](http://www.ashrae.org)

[www.mbdc.com](http://www.mbdc.com)

[www.epa.gov](http://www.epa.gov)

[www.edpa.com](http://www.edpa.com)

[www.green2green.org](http://www.green2green.org)

[www.sustainableabc.com](http://www.sustainableabc.com)

[www.builditgreen.org](http://www.builditgreen.org)

[www.thegreenarchitect.com](http://www.thegreenarchitect.com)

[www.ecollect.net](http://www.ecollect.net)

[www.goodtobegreen.com](http://www.goodtobegreen.com)

[www.iaqa.org](http://www.iaqa.org)

Printing and Substrate RESOURCES:

www.sgppartnership.com

www.edpa.com

Energy & Lighting RESOURCES

www.energystar.gov

www.ashrae.org

Donation RESOURCES

Artist for Humanities

**Disclaimer**

The Association suggests numerous links to organizations that practice sustainability. Providing a link is not to be considered an endorsement of a site or the entity that produced it, its political views, products or services.

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GLOSSARY

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| <b>Actual Emissions</b>                         | Pollutant air emissions, either measured or calculated, based on a facility's current operating parameters (e.g. throughput, hours of operation, etc.)   |
| <b>Aerobic Degradation</b>                      | The breakdown of a molecule into smaller chemical entities in the presence of oxygen. (National Institutes of Health, Bethesda, MD) Aerobic degradation includes aerobic treatment which is a process by which microbes decompose complex organic compounds in the presence of oxygen and use the liberated energy for reproduction and growth. (Such processes include extended aeration, trickling filtration, and rotating biological contactors.)<br><a href="http://www.epa.gov/OCEPAterms/dterms.html">http://www.epa.gov/OCEPAterms/dterms.html</a> |
| <b>Anaerobic Degradation</b>                    | The metabolism of substances by bacteria that do not require oxygen to live. (Etoxnet Glossary of Terms)   |
| <b>Anaerobic Decomposition</b>                  | Reduction of the net energy level and change in chemical composition of organic matter caused by microorganisms in an oxygen-free environment.<br><a href="http://www.epa.gov/OCEPAterms/dterms.html">http://www.epa.gov/OCEPAterms/dterms.html</a>  |
| <b>Air Permit</b>                               | Legally-enforceable documents designed to improve compliance by clarifying what facilities (sources) must do to control air pollution.<br><a href="http://www.epa.gov/air/oaqps/permits/basic.html">http://www.epa.gov/air/oaqps/permits/basic.html</a>  |
| <b>Best Available Control Technology (BACT)</b> | An emission limitation based on the maximum degree of emission reduction (considering energy, environmental, and economic impacts) achievable through application of production processes and available methods, systems, and  |

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|                           | <p>techniques. BACT does not permit emissions in excess of those allowed under any applicable Clean Air Act provisions. Use of the BACT concept is allowable on a case by case basis for major new or modified emissions sources in attainment areas and applies to each regulated pollutant.</p> <p><a href="http://www.epa.gov/OCEPAterms/dterms.html">http://www.epa.gov/OCEPAterms/dterms.html</a>, ASTM Test Method 6866</p>  |
| <b>Bio-Based Material</b> | <p>A bio-based material or “biomaterial” is any material made from renewable plant matter (as opposed to non-renewable prehistoric plant material, fossil fuels), including agricultural crops and residues, and trees. Sustainable biomaterials are those that are (1) sourced from sustainably grown and harvested cropland or forests, (2) manufactured without hazardous inputs and impacts, (3) healthy and safe for the environment during use, and (4) designed to be reutilized at the end of their intended use such as via recycling or composting.</p> <p><a href="http://www.cleanproduction.org/Steps.BioSociety.Biobased.php">http://www.cleanproduction.org/Steps.BioSociety.Biobased.php</a></p> |
| <b>Biodegradable</b>      | <p>Biodegradable materials can be degraded by microorganisms such as bacteria, enzymes and fungi. This degradation produces water, carbon dioxide and/or methane and in some cases residues non toxic to the environment. This term can be applied to both chemicals and substrates used in the printing industry. Specific test methods can be applied to determine biodegradability. ASTM Test Method 6400/6868</p>  |
| <b>Bioplastics</b>        | <p>A form of plastic derived from renewable biomass sources, such as vegetable oil, corn starch, pea starch, micro biota, etc. Bioplastics are used either as a direct replacement for traditional, petroleum-based plastics or as blends with traditional plastics.</p>   |
| <b>Carbon Cycle</b>       | <p>The natural circulation of carbon which is exchanged among large carbon reserves in the land, the ocean, the biosphere and the atmosphere. It includes the circulation through ecosystems in the course of which carbon atoms from carbon dioxide are incorporated into organic compounds formed by green plants through photosynthesis. (<a href="http://unstats.un.org/unsd/environmentgl/default.asp">http://unstats.un.org/unsd/environmentgl/default.asp</a>)</p>  |
| <b>Carbon Footprint</b>   | <p>A carbon footprint is a measure of the impact human activities have on the environment in terms of the amount of green house gases produced, measured in units of carbon dioxide. It is meant to be a useful metric for individuals and organizations as they conceptualize their personal (or organizational) impact on global warming.</p>  |
| <b>Carbon Neutral</b>     | <p>Carbon neutral, or carbon neutrality, refers to a net zero carbon release, brought about by balancing the amount of carbon released with the amount sequestered or offset. <a href="http://www.epa.gov/OCEPAterms/dterms.html">http://www.epa.gov/OCEPAterms/dterms.html</a></p>  |
| <b>Carbon Offset</b>      | <p>A carbon offset is the mitigation of greenhouse gas emissions by offsetting emissions generated in one location with emissions reductions or displacements in another where it is technically and/or economically more feasible to achieve those reductions. Carbon offsets are measured in metric tons of carbon dioxide-equivalent (CO<sub>2</sub>e). One carbon offset represents the reduction of one metric ton of carbon dioxide, or its equivalent in other greenhouse gases. Carbon offsets can be purchased and traded through financial instruments representing greenhouse gas emission reductions.</p>  |

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| <b>Compostable</b>                           | The term compostable verifies that a material or mix of materials can be decomposed in a composting system within one composting cycle. ASTM Method 6400/6868. Composting is the controlled biological decomposition of organic material in the presence of air to form a humus-like material. Controlled methods of composting include mechanical mixing and aerating, ventilating the materials by dropping them through a vertical series of aerated chambers, or placing the compost in piles out in the open air and mixing it or turning it periodically. <a href="http://www.epa.gov/OCEPAterms/dterms.html">http://www.epa.gov/OCEPAterms/dterms.html</a> |
| <b>Cradle-to-Cradle</b>                      | A system by which materials are maintained in closed loops to maximize material value without damaging ecosystems. ( <a href="http://www.mbdc.com/c2c_home.htm">http://www.mbdc.com/c2c_home.htm</a> ) Cradle-to-cradle protocols minimize waste through recycling and reuse, rather than disposal.   |
| <b>Cradle-to-Grave</b>                       | A system for controlling hazardous waste from the time it is generated until its ultimate disposal – in effect, from "cradle to grave". ( <a href="http://www.epa.gov/osw/laws-reg.htm">http://www.epa.gov/osw/laws-reg.htm</a> )   |
| <b>Drain Safe</b>                            | Products deemed safe by local, state and federal criteria for disposal into a sanitary sewer system that may go directly to Publicly Owned Treatment Works (POTW) and will not cause the POTW to exceed its permitting limits. The term does not apply to a mixed effluent or to storm water drains.  |
| <b>Effluent Guidelines</b>                   | National standards based on the performance of treatment and control technologies, for wastewater discharges to surface waters and municipal sewage treatment plants. Effluent guidelines are issued for categories of existing and new sources. ( <a href="http://www.epa.gov/guide/">http://www.epa.gov/guide/</a> )  |
| <b>Energy Recovery</b>                       | Obtaining energy from waste through a variety of processes (e.g. combustion).   |
| <b>Envelope</b>                              | Within the SGP Partnership registration program, the envelope includes all the manufacturing support activities and includes the building, grounds, utilities, employee and other functions of an individual site.  |
| <b>Environmental Audit</b>                   | An independent assessment of the current status of a party's compliance with applicable environmental requirements or of a party's environmental compliance policies, practices, and controls.  |
| <b>Environmental Impact</b>                  | Any change to the environment, good or bad, that wholly or partially results from industrial/manufacturing activities, products or services.  |
| <b>Environmental Management System (EMS)</b> | An EMS is a set of processes and practices that enable an organization to reduce its environmental impacts and increase its operating efficiency. ( <a href="http://epa.gov/ems">http://epa.gov/ems</a> )   |
| <b>Environmentally Sound Technologies</b>    | Techniques and technologies capable of reducing environmental damage through processes and materials that generate fewer potentially damaging substances, recover such substances from emissions prior to discharge, or utilize and recycle production residues. The assessment of these technologies should account for their interaction with the socio-economic and cultural conditions under which they are implemented.  |
| <b>Greenhouse Gas</b>                        | A gas, such as carbon dioxide or methane, which contributes to potential climate change. The greenhouse effect is a process that raises the temperature of air in the   |

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|                                      | lower atmosphere due to heat trapped by greenhouse gases.  |
| <b>Greenwashing</b>                  | The unjustified appropriation of environmental virtue by a company, an industry, a government, a politician or even a non-government organization to create a pro-environmental image, sells a product or a policy. Sourcewatch  |
| <b>Hazardous Air Pollutant (HAP)</b> | Toxic air pollutants, also known as HAPs, are those pollutants that are known or suspected to cause cancer or other serious health effects, such as reproductive effects or birth defects, or adverse environmental effects. U.S. EPA is working with state, local, and tribal governments to reduce air toxics releases of 188 pollutants to the environment. Examples of toxic air pollutants include benzene, which is found in gasoline; perchlorethylene, which is emitted from some dry cleaning facilities; and methylene chloride, which is used as a solvent and paint stripper by a number of industries. Examples of other listed air toxics include dioxin, asbestos, toluene, and metals such as cadmium, mercury, chromium, and lead compounds. U.S. EPA specifies Method 311 in the Printing and Publishing MACT standard for determination of hazardous air pollutants in publication rotogravure and wide web flexographic ink systems. ( <a href="http://www.epa.gov/ttn/atw/allabout.html">http://www.epa.gov/ttn/atw/allabout.html</a> ) |
| <b>Hazardous Waste</b>               | Hazardous waste is a waste with properties that make it dangerous or potentially harmful to human health or the environment. The universe of hazardous wastes is large and diverse. Hazardous wastes can be liquids, solids, contained gases, or sludges. They can be the by-products of manufacturing processes or simply discarded commercial products, like cleaning fluids or pesticides. ( <a href="http://www.epa.gov/osw/hazwaste.htm">http://www.epa.gov/osw/hazwaste.htm</a> )  |
| <b>Incineration</b>                  | Also known as combustion, incineration is a controlled burning process to reduce waste volume. In addition to reducing volume, incineration can convert water into steam to fuel heating systems or generate electricity. Incineration facilities can also remove materials for recycling. ( <a href="http://www.epa.gov/epaoswer/non-hw/muncpl/landfill/sw_combst.htm">http://www.epa.gov/epaoswer/non-hw/muncpl/landfill/sw_combst.htm</a> )   |
| <b>Inert</b>                         | In chemistry, the term inert is used to describe something that is not chemically active ( <a href="http://en.wikipedia.org/wiki/Inert">http://en.wikipedia.org/wiki/Inert</a> ) or has only a limited ability to react chemically; chemically inactive; an indifferent chemical in a reaction.  |
| <b>Landfill</b>                      | Final placement of waste in or on the land in a controlled or uncontrolled way according to different sanitary, environmental protection and other safety requirements.  |
| <b>Lead (Pb)</b>                     | A heavy metal that is hazardous to health if breathed or swallowed. Its use in gasoline, paints, and plumbing compounds has been sharply restricted or eliminated by federal laws and regulations  |
| <b>Lean Manufacturing (Lean)</b>     | An overall methodology that seeks to minimize the resources required for production by eliminating waste (non-value added activities) that inflate costs, lead times and inventory requirements, and emphasizing the use of preventive maintenance, quality improvement programs, pull systems and flexible work forces and production facilities.   |
| <b>Life Cycle Assessment (LCA)</b>   | A technique for assessing the potential environmental impacts of a product by examining all the material and energy inputs and outputs at each life cycle stage.   |

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|   | ( <a href="http://www.mbdc.com/c2c_gkc.htm">http://www.mbdc.com/c2c_gkc.htm</a> )  |
| <b>Living Wage</b>                                    | An above market wage mandate set at upwards of \$15 an hour. Traditional living wages apply only to government employees or employees of companies that contract with governments. Recently, efforts have been made to expand the reach of these ordinances to all local businesses.   |
| <b>Maximum Available Control Technology (MACT)</b>    | The emission standard for sources of air pollution requiring the maximum reduction of hazardous emissions, taking cost and feasibility into account. Under the Clean Air Act Amendments of 1990, the MACT must not be less than the average emission level achieved by controls on the best performing 12 percent of existing sources, by category of industrial and utility sources |
| <b>Non-Attainment Area</b>                            | Area that does not meet one or more of the National Ambient Air Quality Standards for the criteria pollutants designated in the Clean Air Act.   |
| <b>Permissible Exposure Limit</b>                     | Also referred to as PEL, federal limits for workplace exposure to contaminants as established by OSHA.   |
| <b>Post-Consumer Materials/Waste</b>                  | Materials or finished products that have served their intended use and have been diverted or recovered from waste destined for disposal, having completed their lives as consumer items. Postconsumer materials are part of the broader category of recovered materials.   |
| <b>Post-Consumer Recycling</b>                        | Use of materials generated from residential and consumer waste for new or similar purposes; e.g. converting wastepaper from offices into corrugated boxes or newsprint   |
| <b>Pollution Prevention (P2)</b>                      | Pollution prevention is the reduction or elimination of waste at the source by modifying production processes, promoting the use of non-toxic or less-toxic substances, implementing conservation techniques, and re-using materials rather than putting them into the waste stream.   |
| <b>Potential to Emit (PTE)</b>                        | The maximum capacity of a stationary source to emit a pollutant under its physical and operational design.   |
| <b>Process</b>  | Within the SGP Partnership registration program, the process includes all manufacturing steps (e.g., prepress, press and post press) involved with converting raw materials into a finished product including process by-products (e.g., solid wastes, air pollution and wastewater) that have an environmental, health and safety impact.   |
| <b>Product</b>  | Within the SGP Partnership registration program, the product includes the design aspects and input material management to create the product.  |
| <b>Publicly Owned Treatment Works (POTWs)</b>         | A waste-treatment works owned by a state, unit of local government, or Indian tribe, usually designed to treat domestic wastewaters.   |
| <b>Reasonable Available Control Technology (RACT)</b> | RACT is required on existing sources in areas that are not meeting national ambient air quality standards (i.e., non-attainment areas). ( <a href="http://epa.gov/ttn/catc/rblc/htm/welcome.html">http://epa.gov/ttn/catc/rblc/htm/welcome.html</a> )  |
| <b>REACH</b>  | A new European Community Regulation on chemicals and their safe use (EC 1907/2006). It deals with the Registration, Evaluation, Authorization and Restriction  |

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|   | of Chemical substances. The new law entered into force on June 1, 2007. The aim of REACH is to improve the protection of human health and the environment through the better and earlier identification of the intrinsic properties of chemical substances. ( <a href="http://ec.europa.eu/environment/chemicals/reach/reach_intro.htm">http://ec.europa.eu/environment/chemicals/reach/reach_intro.htm</a> )  |
| <b>Recyclable</b>   | Includes the reuse, reconditioning, and remanufacturing of products or parts in another product. <a href="http://www.ftc.gov/opa/1998/04/green.shtm">http://www.ftc.gov/opa/1998/04/green.shtm</a>   |
| <b>Recycled Content</b>   | Refers to the percentage of recycled materials in a product. "Recycled content" includes products and packages that contain reused, reconditioned or remanufactured materials, as well as recycled raw material. <a href="http://www.ftc.gov/opa/1998/04/green.shtm">http://www.ftc.gov/opa/1998/04/green.shtm</a>   |
| <b>Recycling</b>  | The reprocessing of old materials into new products, with the aims of preventing the waste of potentially useful materials, reducing the consumption of fresh raw materials, reducing energy usage, reducing air (from incineration) and water (from landfilling) pollution by reducing the need for "conventional" waste disposal, and lowering greenhouse gas emissions as compared to virgin production. Recycling is a key concept of modern waste management and is the third component of the "Reduce, Reuse, Recycle" waste hierarchy, though colloquial usage of "recycling" can also include "reuse." ( <a href="http://en.wikipedia.org/wiki/Recyclable">http://en.wikipedia.org/wiki/Recyclable</a> ) |
| <b>Renewable Resource</b>                                       | A natural resource qualifies as a renewable resource if it is replenished by natural processes at a rate comparable or faster than its rate of consumption by humans or other users. Resources such as solar radiation, tides, and winds are perpetual resources that are in no danger of being used in excess of their long-term availability. Natural resources that qualify as renewable resources include oxygen, fresh water, timber, and biomass. However they can become non-renewable resources if used at a rate greater than the regeneration of new materials. ( <a href="http://en.wikipedia.org/wiki/Renewable_resource">http://en.wikipedia.org/wiki/Renewable_resource</a> )                      |
| <b>Resource Conservation and Recovery Act (RCRA)</b>            | The public law that creates the framework for the proper management of hazardous and nonhazardous solid waste. The Office of Solid Waste (OSW) is the regulatory body. <a href="http://www.epa.gov/epaoswer/osw/laws-reg.htm">http://www.epa.gov/epaoswer/osw/laws-reg.htm</a>   |
| <b>Retention Factors</b>  | The October 2006 Control Techniques Guideline (CTG) for Letterpress and Lithographic Printing recommends that state and/or local pollution control agencies use substrate "retention factors" in the calculation of VOC emissions lithographic and letterpress printing facilities. Retention factors assume that a percentage (i.e. 20% for heatset and 95% for coldset inks) of the ink VOC content remains in the substrate and is not emitted.   |
| <b>Sustainability and/or Sustainable Development</b>            | Meeting the needs of the present without compromising the ability of future generations to meet their own needs. (World Commission on Environment and Development)   |
| <b>Sustainable Green Printing Partnership (SGP Partnership)</b> | A registration organization for the printing industry. It is designed to provide criteria and direction for what constitutes a sustainable green printing facility. ( <a href="http://www.sgppartnership.org">http://www.sgppartnership.org</a> )  |

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| <b>Stakeholder</b>                                    | A party who affects, or can be affected by, an organization's actions. ( <a href="http://en.wikipedia.org/wiki/Stakeholder">http://en.wikipedia.org/wiki/Stakeholder</a> )   |
| <b>Total suspended solids (TSS)</b>                   | Particles suspended in water which will not pass through a filter. Suspended solids are present in sanitary wastewater and many types of industrial wastewater. There are also nonpoint sources of suspended solids, such as soil erosion from agricultural and construction sites. <a href="http://www.deq.state.mi.us/documents/deq-swq-npdes-TotalSuspendedSolids.pdf">http://www.deq.state.mi.us/documents/deq-swq-npdes-TotalSuspendedSolids.pdf</a>  |
| <b>Toxic Characteristic Leaching Procedure (TCLP)</b> | A procedure designed to determine the mobility of both organic and inorganic analytes present in liquid, solid, and multiphase wastes. This is usually used to determine if a waste may need to carry a hazardous waste code under RCRA (40 CFR Part 261) of D004 through D052. ( <a href="http://www.ehso.com/cssepa/TCLP.htm">http://www.ehso.com/cssepa/TCLP.htm</a> )  |
| <b>Verification</b>                                   | The process of checking that a product, service, or system meets specifications and that it fulfills its intended purpose. These are critical components of a quality management system. ( <a href="http://en.wikipedia.org/wiki/Verification_and_Validation">http://en.wikipedia.org/wiki/Verification_and_Validation</a> )   |
| <b>Volatile Organic Compound (VOC)</b>                | VOCs include any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions. ( <a href="http://epa.gov/iaq/voc.html">http://epa.gov/iaq/voc.html</a> )<br>Test Methods: Publication Rotogravure Inks and Coating – EPA Reference Test Method 24A, All other thin film Inks/Coatings – EPA Reference Test Method 24   |
| <b>VOC Emissions</b>                                  | VOC's which are put into the air or emitted by various sources   |
| <b>Waste</b>  | (Hazardous) is a waste with properties that make it dangerous or potentially harmful to human health or the environment. The universe of hazardous wastes is large and diverse. Hazardous wastes can be liquids, solids, contained gases, or sludges. They can be the by-products of manufacturing processes or simply discarded commercial products, like cleaning fluids or pesticides. Nonhazardous waste includes all solid waste that does not meet the definition of hazardous waste. <a href="http://www.epa.gov/osw/laws-reg.htm">http://www.epa.gov/osw/laws-reg.htm</a>                            |
| <b>Waste Management</b>                               | The collection, transport, processing, recycling or disposal of waste materials. The term usually relates to materials produced by human activity, and is generally undertaken to reduce their effect on health, aesthetics or amenity. Waste management is also carried out to reduce the materials' effect on the environment and to recover resources from them. Waste management can involve solid, liquid or gaseous substances, with different methods and fields of expertise for each. ( <a href="http://en.wikipedia.org/wiki/Waste_management">http://en.wikipedia.org/wiki/Waste_management</a> ) |
| <b>Waste-to-Energy</b>                                | The practice of incinerating waste products to generate steam, heat, or electricity.   |

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