

Becoming a Green Printer

“How do I become a green printer,” is a frequently asked question of the PIA MidAmerica staff. At present, there are no accepted guidelines established for a green printer.

Consequently, PIA/GATF has taken a leadership position in establishing the Sustainable Green Printing Initiative (SGP), which is creating guidelines for printing industry sustainable (green) practices as well as establishing a certification/registry process. These guidelines are scheduled to be published in the spring of 2008.

As an aid to our membership, the following ideas should be considered if a company desires to develop a green/sustainable position in the marketplace. Many of these practices will be incorporated in the SGP guidelines.

- The company should meet all applicable environmental, health, and safety regulations (local, state, and national)
- The company should establish an Environmental, Health and Safety baseline for pollution and injuries and illnesses. This can provide quantitative data in helping to measure the company’s sustainability performance.
 - Pollution includes air pollution emissions (e.g., VOC, HAP, NOx, SOx, PM, CO, Ozone Depleting Substances, and Green House Gasses), hazardous waste generated, solid waste generated, water consumption, and wastewater discharged.
 - Injury and illness data drawn from OSHA’s Form 300.
- The company should have recycling (paper and other materials) programs in place for its manufacturing as well as administrative areas.
- The company should have a chain of custody program in place (FSC, SFI, or both) to provide their customers with paper manufactured using sustainable forest practices.
- Inks and coatings should be low VOC, and when possible vegetable oil based and free of heavy metals.
- Fountain solutions should be alcohol free and substitutes should be free of air toxics. Consider filtration systems when disposing of used fountain solutions
- Cleaning solutions should be low VOC (70% or less) and/or low vapor pressure with no toxic chemicals present.
- Ideally, used cleaning solvents should be recovered and recycled
- Adhesives used in the binding process should be recyclable.
- The company should utilize a digital workflow with CTP technology. The company should explore technologies which do not create a waste stream and/or use control processes to ensure the effluent is meeting all local/state regulatory requirements.

- Consider digital proofing systems which are dry, inkjet or water based. Add soft proofing to the workflow.
- Calculate the amount of energy being consumed in day to day operations and create a baseline. Subsequently the company should establish procedures, as well as invest in capital items which will reduce the amount of energy being consumed. Target a 20% savings in the short term; 40% in the long term. Consider using "green" resources in providing energy.
- Review the business "envelope" that consists of the building and surrounding landscape. Look at the following items and determine methods to control or minimize energy loss: doors, windows, insulation, roofing – construction and rainwater, lighting, plumbing fixtures, heating, ventilation, filter replacements, and air conditioning.
- Analyze the exterior grounds – grass, parking lot, shrubs, trees and determine methods to reduce the use of water and chemicals.
- Review the type of maintenance being performed on the building. Including the energy being consumed along with the cleaning supply chemicals being used. Are they biodegradable?
- Review the waste being generated from packaging/pallets, food, drinks, office waste (ink/toner, paper, folders).
- Transportation – are vehicles being maintained to reduce emissions? Consider using vehicles that use alternative fuel sources (diesel, bio-diesel, propane). Develop a program for employees to take advantage of public transportation or car pooling.
- Waste Water – toilets, sinks, process (prepress and press). Are there ways to reduce the amount of water being consumed?
- Establish a company policy to educate its employees and customers regarding sustainability practices.

*Developed by PIA MidAmerica
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