

Environmental Sustainability Is a Printing Best Practice



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Along with People and Profits, the third P in the sustainable business model is Planet, aka environmental sustainability. We need all three of these aspects equally, and each has impacts on the other two.

When we think of environmental sustainability in the context of the printing industry, we immediately think of the impacts that printing has on air, land, and water quality. Industrial activities are regulated and, while this is only part of the big picture, it is a good place to start. When we operate within the conditions of our air, storm water, and wastewater permits, and properly dispose of wastes, we prevent the release of pollutants into the environment.

Technology has allowed printing to become a cleaner process. We have lowered the volatile organic chemical (VOC) content in cleaning solvents, improved the control efficiency of oxidizers, and re-designed processes so that more printing can be done with digital technology. This not only emits fewer VOCs, it also eliminates the pre-press process and its related wastewaters. These technologies have allowed us to print high quality products with a fraction of the environmental impact.

These changes don't only affect the environment, they also limit human exposure to pollutants, protecting both planet and people.

"Any action taken to increase environmental sustainability reduces human exposure and can save money."

The goods we create can lend themselves to environmental sustainability. Printed materials that are engineered to be easy to recycle means today's magazine is printed on the same paper as next month's newspaper. Reduced packaging size or thickness conserves resources, while compostable or reusable packaging reduces landfilled waste.

Printers have impacts on the environment that aren't directly related to the production of printed materials. Our buildings can also be the focus of environmentally sustainable actions. This can be in the form of energy efficiency, water conservation, on-site retention of storm water, and even in how we select furniture, flooring, and maintenance materials.

If you're wondering how furniture and flooring can be more sustainable, think of it this way – when we select furniture and finishes made from materials that are sustainably harvested, locally sourced, and designed to reduce indoor air pollution, we reduce the environmental footprint of those building components. Using less energy and water also means reduced utility costs, protecting both planet and profits.

Printed products have places to go. Whether you print books, catalogs, packaging, or textiles, they need to find a way into the hands of consumers. Transportation represents a large portion of the environmental impact from printing.

How do we find ways to move product and reduce environmental impact at the same time? We can use trucks that emit less because they are cleaner-burning, more aerodynamically streamlined, electronically monitor tire pressure, and use low-sulfur fuel. We can reduce idling time by instituting a "no idling" policy, requiring drivers to shut down the engine during loading and unloading. Some long haul trucks are equipped with auxiliary power units to power the cab during downtime while consuming a fraction of the fuel that would be needed to keep the truck idling. Advanced logistics can consolidate loads resulting in fewer trips and trucks that don't return empty.

Do you have company vehicles? Some of these same principles can be applied to corporate fleets, carpooling to off-site meetings in vehicles that are kept well-tuned with properly inflated tires.

Environmental Sustainability Programs

Environmental sustainability is not a single action or focus. If you are considering ways to reduce your environmental impact, start with the "low hanging fruit," actions that are easy to implement and have a short payback.

There are many resources available to help printers become more environmentally sustainable, for example Sustainable Green Printing Partnership is specific to the printing industry, Leadership in Energy and Environmental Design (LEED) addresses sustainable buildings, and U.S. EPA's SmartWay Partnership helps shippers find resources to reduce transportation impacts.

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In Wisconsin, there are flexible air permit options for printers and for businesses that participate in the state's Green Tier program. For more information, visit the Green Tier website at <https://dnr.wi.gov/topic/greentier/>.

Indiana has the Environmental Stewardship Program (ESP). It is a voluntary, performance-based leadership program that offers benefits such as reduced reporting or advanced notice for compliance inspections for companies that go above and beyond compliance. For more information, visit <https://www.in.gov/idem/partnerships/2458.htm>.

Related to SmartWay, Illinois has a program called Driving a Cleaner Illinois that provides funding for diesel emission reduction projects. For more information, see <https://www2.illinois.gov/epa/topics/air-quality/driving-a-cleaner-illinois/Pages/default.aspx>.

Any action taken in the printing sector to increase environmental sustainability not only reduces human exposure, it also can save money: a people, profits, planet trifecta.

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RESOURCE REQUEST

Members often call the GLGA offices looking for help to find resources to solve business problems – problems that many other companies have, too. In this feature, we share some of the most frequent resource requests we hear along with the GLGA and PIA resources that are available to you through your association membership.

Q. What resources do GLGA and Printing Industries of America have to help with our sustainability efforts?

A. Check out PIA's dedicated Sustainability Assistance webpage for

- *The Green Guide for Graphic Communications* provides a step-by-step approach to evaluating and marketing your sustainability profile. Log in with your PIA user name to read the guide online and download the 10-chapter pdf plus assessment tools.
- Criteria information for getting started with the Sustainable Green Printing (SGP) Partnership
- *Carbon Footprint Calculator for Printing Operations*, a downloadable Excel file that will provide emissions data reported as carbon dioxide equivalents (CO₂e) and contains an EZ Form that is supported by 14 separate calculation sheets that address fuel combustion, solvent oxidation, vehicles, refrigerants, electricity purchased, etc.

Using these tools requires a user name to log in to the PIA website. If you need one, call PIA Member Central at (800) 910-4283 ext. 770 or email membercentral@printing.org.

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The Green Guide for Graphic Communications
For those new to the concept of sustainability, this guide will help you identify green printing practices and assess the strength of your green printing program.

Sustainable Green Printing (SGP) Partnership
The SGP Partnership is an industry-specific, voluntary program designed to reduce the environmental impact and increase social responsibility of the print and graphic communications industry.

Carbon Footprint Calculator for Printing Operations
To assist our members with determining the carbon footprint of their operation, Printing Industries of America has developed an Excel-based tool that is designed for calculating Scope I and II emissions of a printing operation.

www.printing.org/programs/environmental-health-safety/sustainability-assistance