

I Print  
+  
Your Print  
=  
Eco Footprint

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## **Introduction**

There are many ways to curb the ecological footprint of day-to-day graphic design operations. In today's world, graphic designers no longer make graphics. They create messages that shape thoughts, public opinions, emotions and actions through visual communication. *I Print + Your Print = Eco Footprint* is an introduction for graphic designers as an expression of how we need to start relaying the message of sustainable and green design through our designs as well as our actions. Sustainability isn't just a trend anymore, it is an obligation. We are accountable for the footprint we leave behind, though it is impossible to leave nothing but possible to leave less. Becoming educated on the topic is only the beginning.

## **Background of Study**

I have just recently started to educate myself in sustainable and green design. After going to Marc Alt's presentation at the Auraria Campus in Denver, I realize how important sustainable and green design is. As graphic designers, we have so much power and influence because of our talent in visual communication. It would be a waste to not use it to better our surroundings. AIGA's Sustainability chapter has been a great resource in my researching process. I also made an attempt to research sustainability and green design at the downtown Denver Public Library but found very few sources available. Sustainable and green design is such a new topic in our country that online resources have been the fastest and most reliable source for now. I interviewed AIGA board member Susan Snipes to get a better understanding of what we, as graphic designers, should be doing today. She was very informational and brought up great points. Her interview is covered toward the end of the paper. It is a wonderful thing to find so much information from so many resources but almost more motivating to know there is room for more. Sustainable and green design is in its growing stage and needs more participants, educators and practitioners. Brian Dougherty's book Green Graphic Design was a great source that brought abstract thinking and processing to the topic.

## **Thesis**

Researching sustainable and green design will give me a clear competitive advantage by gaining knowledge of new ways to approach branding and design in order to achieve a greener future.

## **Sustainable Design**

Sustainability is simple. The idea is perceived as combining concern for the well-being of the planet with the continued growth of human development. In 1987 the World Commission on Environment and Development referred to sustainability as “meeting the needs of the present without compromising the ability of the future generation to meet their own needs.” The phrase was left intentionally weak in hopes to gain the widest acceptance. It leaves room for the present and future generations to have a choice of sustainability, not an obligation. It is clear that sustainability has not been defined very well. It is a movement that will start as an experiment instead of a law in hopes that many will follow. Sustainability represents nothing less than a fundamental shift in how business is conducted. It requires decision-making that takes economic, social and environmental factors into account considering the full life cycle of products.

Sustainability is nothing new. Businesses and industries have always hoped that whatever path they choose will be the sustainable path, one that will not push them out of business. Sustainable design implies a kind of growth that will be able to go on, not design that uses up all of our resources making it unable to go on. The intention of sustainable design is to design with nature in mind eliminating the negative impact we have on it through skillful, well thought out and sensitive design and development. Designing with the environment in mind shows good citizenship and good business. Companies that demonstrate a respect for the environment establish a competitive advantage especially with environmentally aware customers. A great point made by AIGA is the fact that “Companies that don’t meet their responsibilities to all their constituencies will have a difficult time. Responsible customers won’t want to buy their

products; talented people won't want to work for them; enlightened communities won't want them as neighbors; and wise investors won't entrust them with their economic futures." Sustainability is a method of survival for business, people and of course the planet.

Sustainable design is a reaction and potential rectification to a global environmental crisis. The growth and existence of economic activity and human population leads to the depletion of natural resources, damaged ecosystems and loss of biodiversity. We live in the age of consequence. Every building, road, advertisement and material resource we use creates a consequence to our surrounding environment. Allan Chochinov, editor and chief of Core77 (a New York-based design network serving a global community of designers and design enthusiasts) states, "Designers think they're in the artifact business, but they're not. They're in the consequence business. And that consequence can be a brochure, poster, ad campaign, an interactive application or a piece of product design. That is the business designers are in." Alternative development processes and material sources we use to become a greener community have been proven to create unintentional earth harming consequences. Soy based inks are considered to be more environmentally friendly upon their disposal but did anyone consider the amount of rainforest preserves that were cut down to create farming land for soy farms? Consequence. Individuals are trying to use e-mail and electronic devices as a form of communication to save trees and paper. What about the energy used or the large carbon footprint digital media leaves behind? Consequence. What about the biohazard waste the process of recycling paper leaves behind? Sustainable design is about building with a conscience, a conscience for the potential consequence.

## **Life cycle Implementing Sustainable Design**

Sustainable and green marketing consists of the design and promotion of goods and services with a focus on environmental friendliness or awareness. This refers to improvements over the entire life cycle of a product, including environmentally friendly sourcing, clean production processes, improved impact during use, reduced packaging, recyclability, reusability, and resource recovery.

Sustainable lifestyles and marketing approaches are not only effective, they are efficient, too. Many large companies have set explicit objectives for minimizing the negative impact of their supply chains, including the impact caused by their suppliers. Wal-Mart, one of the most economically hated stores, is one of the leading companies on its way to sustainability. According to The Institute of Supply Management (ISM),

The development and implementation of measurement and performance criteria is important to the success of sustainability and social responsibility programs. Integrating goals and objectives with relevant measurements will ensure the ability to track and report progress against various initiatives. Supply professionals must consider impact, influence and positioning when selecting and developing metrics to embed throughout the: (1) supply organization, (2) entity and (3) supply base.

Wal-Mart and a few other large corporations created scorecards to track their sustainability progress. The scorecards hold just what the Institute of Supply Management suggested. Supply organization, entity and supply base considering the impact influence and positioning of every product that enters their store. All products are made from a number of materials and components that set a broad standard for the

overall environmental impact during their lifetime. Because there are so many factors that play a role in the impact products have during their life cycle, starting at the extraction from the ground, it makes it hard to determine which one is the most sustainable. In order to answer this question of which products are best to use, designers need to do a life cycle analysis on the products being considered for their project. A life cycle analysis, or LCA, is a method used to look at all of the impacts, adding them up and determining the best route to take in the building stage of your product. According to AIGI's Sustainability chapter "A life cycle analysis involves measurement and/or estimation of how much energy and raw materials are used and how much a solid, liquid and gaseous waste is generated at each stage of the product's life, from the extraction of the raw materials used in its production and distribution through to its use, possible reuse or recycling and its eventual disposal." The first step in a life cycle analysis is the inventory stage. The idea behind the inventory analysis is to examine all the inputs and outputs in a product's life time, beginning with what the product is made of and the operations involved in making the material. It is important to evaluate the input and output of the material during the product's use as well as to determine the product's lifespan. The second step of a LCA is the impact analysis. This refers to the overall environmental impact that the product has during its lifetime. Impact analysis includes the environmental damage by the manufacture, energy necessary to use the product and then, of course, the energy it takes to dispose of the product. It also includes the amount of gas emissions, hazardous chemicals used and the natural resources needed to create the final product. The third and final step of life cycle analysis is simple. Take a step back and consider if this product is even worth creating. Does it have a purpose or a need? Sometimes what you're designing

is as important if not more important than how you are designing it. Sustainable designers get really immersed and engulfed in the environmental sustainability of how things are made, what they are made of and what the embodied energy is. Step three allows designers to take a step back at the same time and think about what we are designing in the first place.

Brian Dougherty, author of Green Graphic Design, had a very unique way of evaluating products and their life cycle. It is a system he calls “NGISED” or “designing backwards.” Designing Backwards is a process of starting from the design project’s ultimate destination and working backwards to the first steps made at the design studio. It forces designers to gain knowledge and creatively avoid roadblocks that might prevent green solutions in the choices they make. In order to understand Brian Dougherty’s designing backwards, he laid out six steps that are necessary in the process. The first step, or sixth step in this case, would be imagining the best possible destiny for design. Consider the recyclability of the product and even the reusability.

Dougherty brought up six potential destinations products from the graphic design world may end up. The worst possible destination would be litter that lingers in our ocean and land, polluting our air and killing our animals. Some of the most common products designers create that end up as litter are promotional flyers that get placed on individuals’ cars. The second destination is a landfill that too pollutes the air and harms many animals. The landfill destination has no recycling capabilities. It is literally a piece of the earth that is left to rot away. Incineration was his third stated destination. This is the process of converting materials into energy, creating air emissions. This plays a large role in air pollution today. Compost through a municipal program or at home is option four,

and recycling is option five. The final destination and best option for graphic designers' products is the reuse of a product whether it is for the same purpose or a different purpose. It is hard, if not impossible, to control exactly where your product is going to end up, but by taking all options into consideration you can make better decisions on what materials to use while considering the worst destination options. Finding multiple purposes for one product or using easily reusable materials helps the "reused" destination to be more likely.

Step number five of Brain Dougherty's designing backwards entails imagining the user's experience with the design. Envision scenarios that would make the experience more memorable. Add value to the design. Educate your users.

Step four is visualizing the process for distribution and delivery of the product. Some things to take into consideration for step four is efficient packaging and how much energy and space your product uses and how it affects the distribution process. Consider alternative distribution options that may be more efficient and effective. Look past the design of the label and think about the process your product will go through when being distributed from point A to point B.

Step number three deals with the warehouse storage. Take into consideration how much room your product is taking up in the warehouse enabling other materials to be stored or forcing more warehouses to be used. Be conservative and efficient with your packaging designs.

Step two deals with the bindery process. An important aspect of this is eliminating as much trim waste as you can. One way to avoid excessive waste is to find out what size press sheet you will be printing on, the type of paper you will be printing on and the

number of prints you will need. Talk to your desired printer and find out what size of printing press they use to get a better idea of paper and press sheet options.

The first and final step is printing your product. Design for green printing by exploring recycled paper and ink options. UV inks and low VOC printing is the most sustainable route but isn't always available. Talk to your printer. Get the information you are looking for and the resources that will best fit your needs. Designing backwards is a strong way to get the right resources and information you need before it is too late.

Every step in the life cycle analysis is important. One step that has very briefly been mentioned is the idea of resource recovery. Resource recovery is also known as Extended Producer Responsibility (EPR) or "Product Stewardship." EPR is a strategy in sustainable design to hold producers liable for the costs of managing their products at the end of their life cycle. Waste disposal has been a major burden on taxpayers and local governments costing \$40 billion a year in the U.S. In recent years, over two dozen countries have introduced Producer Responsibility programs and policies. The U.S. lags behind because wealthy corporations in the United States are fighting the introduction of such policies. It is taxpayers and local governments who pay the price. EPR promotes that the producers themselves have the greatest control over product design and marketing and therefore have the greatest ability and responsibility to reduce toxicity and waste. Nail Nasr, director of the Rochester Institute of Technology's National Center for Remanufacturing and Resource Recovery, states:

If you look at it from a business perspective, it makes sense, the producer knows what went into it [the product], [and] knows how it was put together. They're the best ones to take it back and deal with it. Because of the threat of take-back

programs and other regulations, business people unprepared to address these issues are at high risk. If they don't understand the impact of their product up front, they will encounter big spending issues later on and if their competitor has addressed it up front in design, it becomes a survival issue.

Extended Producer Responsibility was defined by Thomas Lindqvist in 1990 as, “an environmental protection strategy to reach an environmental objective of a decreased total environmental impact from a product, by making the manufacturer of the product responsible for the entire life cycle of the product and especially for the take-back, recycling and final disposal of the product.” Xerox has one of the best success stories involving resource recovery. The following example comes from the North Coast Café, South: Sustainable Design studies. Back in 1990, Xerox engineer John Elter, a pioneer in remanufacturing and resource recovery initiated the LAKES program which he describes as a “clean sheet” design, meaning it was a brand new product, without precedent. What Elter did, following an inspiration after touring a small remanufacturing facility in Holland, was to propose a radically new design for a machine that would use remanufactured parts, be committed to resource recovery and a “zero to landfill” goal. As Elter explains,

What LAKES did is it internalized the environment to a much greater extent than any other program ever had at Xerox. It became one of our design objectives; it wasn't looked on as any kind of constraint as much as an objective. After I started the project I made a commitment to my boss: Not only would we meet the government regulations, we would actually exceed them. Exceeding the

requirements put a value on how important design for the environment was meant to be.

Elter and his engineering team took advantage of the fact that Xerox's business has a large customer base that leases their products and, at the end of the lease, or at the end-of-life, returns them. Early on, through market research, Xerox also found out that customers hated having old parts needing disposal left behind by repair technicians. *Taking back* quickly became part of Xerox's marketing strategy. The logical next step was to refurbish and reuse those parts, especially copier and printer cartridges. Even today Xerox enjoys a 60 percent return rate on print cartridges, the highest in the industry, at a substantial cost savings to the company and to the consumer. Anne Stocum, Xerox's Environmental Manager for Market Access and Support says, "Implementing sustainable design principles actually benefits Xerox three ways: they satisfy our customers, particularly those who are environmentally committed, they save the company several hundred million dollars annually, and they help us fulfill a long-standing corporate commitment to protecting the environment. When Elter's team set out to radically alter the way Xerox built its products, by designing components that could be remanufactured, reused and recycled, they didn't realize that it would take nearly ten years and half a billion dollars.

When you talk about a single product, you're talking about a one-off, Elter says, you design it, you build it, you manufacture it and then it has its end of life and it goes away. When you're talking about a platform product, which is what we did, you're talking about a family of products that can be produced off the platform for

10 years or more. It's worth the investment because you don't have to reinvent everything, you can reuse.

Each year, Xerox takes back over one million parts to its remanufacturing plant in Webster, NY alone. Each remanufactured part goes through a signature analysis, tested for noise, vibration, heat, energy efficiency, etc. Any remanufactured part that does not perform identically to a newly manufactured part is rejected. Today, 80 percent of Xerox products are remanufactured; 90 percent of each product is recyclable. Xerox, and most other business using sustainable design principles, claim the only downside to marketing remanufactured products is consumer reluctance—they may think a 'used' product is not as good as a new one. But, as Xerox points out, their customers are buying the ability to make copies. So long as they stand behind them and their machines provide that service, it doesn't matter whether the components of the machine are new or old. Many other companies have adapted to the resource recovery process and would never have it any other way. It is refreshing, it is re-nourishing and it is recycling to the fullest extent. Resource recovery involves planning ahead or designing backwards. It is an approach that makes producers aware of their waste by avoiding more waste knowing that they are the ones that have to deal with it in the end. Resource recovery helps communities achieve environmental goals and sets all of us on a more environmentally sustainable course.

Each life cycle stage of a product introduces opportunities to design with new types of alternative materials, optimal shapes or renewable power. We can create new jobs, restore our environment and promote social sustainability. The solution of the sustainable life cycle of individual services and products is creative, practical and

profitable. At a presentation by Marc Alt, Sustainable Design Speaker and Educator, he provided his listeners with a ten-step process to create stronger sustainable design. The first step is: don't design things, design life cycles. This relates back to Brian Dougherty's "designing backwards." By designing life cycles you have a better idea of how your products are going to circulate through their lifetime. The second step is to dematerialize products into services. The third step Marc Alt states is to use appropriate local technology and resources. Staying local helps reduce transportation impacts and also supports local businesses. Step four is to co-create with and for communities and people. Step five is to design for disassembly, take-back and recycling. This step is very practical and necessary. Designing for disassembly, take-back and recycling would decrease the hazardous waste and the overall ecological footprint every material leaves behind. Supporting third party certifications is step number six. Third-party certification is a scientific process by which a product, process or service is reviewed by a reputable and unbiased third party to verify that a set of criteria, claims or standards are being met. This helps regulate claims of sustainability on materials, products and services. The seventh step is pretty self-explanatory — minimizing materials, energy and inputs your product creates. Step eight states that using non-toxic, recycled and re-reclaimed resources is the most sustainable route. Step nine is simply using 100% renewable energy. Renewable energy is energy generated from natural resources such as sunlight, wind, rain, tides, and geothermal heat. These are all sources of renewable or naturally replenished energy. The final step Marc Alt introduces as a path to sustainability is to create no waste, referring back to the resource recovery. Each step plays an important part in being a sustainable designer, and all of the steps together lead to a completely

sustainable product. This all may seem too hard, frustrating, aggravating and petty, but in time and with practice, sustainable design will become second nature.

### **The Importance of Greener Materials**

It is increasingly important to determine the exact composition of raw materials and parts that will be used in a product. Though it is difficult, if not impossible, to measure the environmental impacts of a product over its entire life cycle, it is important to be educated on the recently updated eco-friendly ways. When materials in the design world are used efficiently before, during and after production, the footprint left behind is more easily reduced.

Paper is becoming more and more environmentally friendly. Different papers are produced in different ways, so it is difficult to generalize about the environmental impact. Recycled paper is said to be the greenest option. It uses up waste paper, and its production requires fewer chemicals and between 30% and 62% less energy than virgin paper. The energy of virgin paper is calculated from the process of felling trees, transporting them, pulping and manufacturing the trees and the distribution of the paper.

In 2007 advertising mail was more than 50% of all mail received by households. According to the Environmental Defense Organization, 17 billion catalogs were produced in 2001 using mostly 100 percent virgin fiber paper. The fact of the matter is that there are many other options in paper choices other than virgin fiber paper.

It is important to become familiar with some of the acronyms used in the paper production world. TCF stands for Totally Chlorine Free paper. This means the paper is made from 100 percent virgin fiber (including alternative fiber from sources other than trees) that is unbleached or bleached with non-chlorine compounds. TCF cannot apply to

recycled papers, because the source fiber cannot be determined. PCF stands for Process Chlorine-Free. This paper contains post-consumer recycled fiber that was processed without the use of any additional chlorine or chlorine compounds. If these papers also contain a percentage of virgin fiber, the virgin fiber must have been processed without the use of any chlorine or chlorine compounds. ECF stands for Elemental Chlorine-Free. This indicates paper made from virgin or recycled fiber that is bleached using alternative chlorine compounds as a substitute for elemental chlorine, which serves to reduce harmful byproducts.

Unfortunately print is not always the first area companies are concerned with for many reasons. One reason may be that printing is seen as a necessary evil rather than a critical activity. For some companies their printing activities may not be managed from their central location, which gives them less or no control over the products and processes used. Another factor that plays into the lack of companies' printing concerns is the fact that the total cost of print and long term life cycle costs to the company are hardly ever measured or even taken into consideration. A few easy considerations companies can analyze when choosing paper is to choose paper made with 100 percent post-consumer waste recycled fiber or FSC certified fiber to preserve forest lands. Choosing uncoated papers over coated papers that yield very little recyclable fiber is a good alternative. A final suggestion would be to choose paper mills that have received third-party certifications from Green-e, Green Seal and the Forest Stewardship Council. If all printers, advertising agencies, and designers were aware of sustainable resources and tactics available to them and saw printing as an art but also as a science, our environment would benefit greatly.

A wonderful example I found from a source called Re-nourish was about two design students attending the University of Illinois. They discovered that if they trimmed just 1/4" off the height of each page in their book they would save around 1,000 press sheets. This saved them \$3,000, allowing them to specify a high quality, 100% recycled, FSC-certified paper. With a little sustainable design thinking, they saved 9,717 gallons of water, 13 million BTUs of energy, 942 pounds of solid waste and avoided 2,255 pounds of greenhouse gases. Imagine what a difference it would make in our environment if all designers took such precautions. Not only does the environment benefit from their actions but they also saved 3,000 dollars! They also reduced the amount of paper waste that ends up in a landfill, which leads to the reduction of methane gas in the air that is caused by biodegrading paper. All that it takes is a little education. Simple solutions go a long way.

Another obligation sustainable designers have is the evaluation of their printers' material options. Paper plays a significant factor as well as ink. Ink is one of the many materials used that designers must become educated about in order to make a more sustainable product. The two most important factors from a green standpoint are the effect on the environment of the printing process and the recyclability of the finished product. It is important to discuss various factors and ink options with your printer before the process begins.

To further understand ink factors and options, I will briefly cover petroleum-based inks, vegetable oil-based inks, recycled inks and heavy metals. Petroleum-based ink contains ozone-damaging distillates (normally used for the removal of heavy oil, grease, tar and waxes) and volatile organic compounds (organic chemical compounds that

have high enough vapor pressures under normal conditions to significantly vaporize and enter the atmosphere). Petroleum-based ink is not a renewable resource and is not considered environmentally sustainable. Vegetable oil-based inks can be an effective alternative. They are biodegradable and made with renewable resources such as soy, linseed, cottonseed, tung or china wood oil. Recycled inks can also lessen the environmental impact of printing.

Color quality can vary greatly when using recycled ink because they are not recycled the same way as paper, plastics or glass. Printers can reuse old or spent inks by blending them together. Otherwise such inks may be returned to ink distributors or disposed of through a registered disposal company. Heavy metal inks that are contained in some pigments are not environmentally friendly. To be a greener designer, discuss with your printer which colors do not contain heavy metals and what alternative pigments can be found to match the desired color. Some easy ink tactics that make your product greener is using fewer ink colors and reducing full-page ink floods to reduce the de-inking process. De-inking, the industrial process of removing printing ink from paper fibers of recycled paper to make de-inked pulp, raises some concern because the byproduct is waste that must be disposed of. Less ink has less of an impact on the environment.

Some designers and business owners may believe that the list of considerations we must all consider to be more sustainable is an impossible, impractical or economically unfeasible approach. However, there are many large and small printing companies that perform well on all of these factors. A great example is a British printing company, Beacon Press Ltd., a 60-person company that has won more than 21 awards for its

environmental management systems. They have reduced their gas consumption by 46 percent and their water use by 57 percent since 1995. They have totally eliminated all alcohol used in the printing process, using vegetable-based inks, recycling 95 percent of all dry waste, using green electricity generated from renewable sources, and 95 percent of their press-cleaning solvents are re-recycled for further use.

What designers may see as being so impossible has proven to be possible by many sources beyond Beacon Press. According to AIGA, “A partnership between CitiGroup and The Alliance for Environmental Innovation is expected to generate annual savings of 1,000 tons of solid waste, 19 million gallons of wastewater pollution and 2,000 tons of greenhouse gas emissions with no increase in direct costs. At Citibank’s current rate of annual paper use, this change alone will result in potential savings of 6,700 tons of wood each year, enough to build 500 average single-family homes in the United States.”

Packaging can be one of the bigger challenges when striving to be green. According to the Environmental Protection Agency (EPA), as much as a third of the developing world’s non-industrial solid waste stream consists of packaging. Size of the overall packaging has the most immediate impact on pursuing eco-friendly options. While oversized packaging used to be considered to be a good way to gain more attention on a store’s shelf, it is now seen as wasteful and unnecessary. Designing a product’s packaging to be more relevant to the product’s size reduces the amount of packaging waste. It also allows for more room for more products in the transportation process as well as on the display shelf. Another way to make packaging environmentally friendly is to design it to last. Make it a keepsake, an alternative use, a better use of storage or a display holder for items at home. Increasing its lifespan and giving it more than one

purpose decreases its waste value. The choice of materials used while doing so has a great influence on the package's impact on the environment. Packaging components can be made with recycled materials to help stay green. The amount of energy used to make materials should be a contributing factor designers take into consideration. Another important factor is the amount of pollution and waste created by the manufacturing process of the material. Last but not least, the level of biodegradability, ease of recycling and likelihood of recycling are important factors that reflect the amount of negative environmental impact. Below is a list of materials and the sustainable measurement they have in relation to the environment.

Material	Sustainable Source	Energy to Manufacture	Energy to Recycle
Aluminum Cans	No	Very High	Moderate/Low
PET Plastic	No	Very High	Moderate
LDPE Plastic	No	High	Moderate
HDPE Plastic	No	High	Moderate
Steel Cans	No	Moderate	High
Paperboard (bleached)	Yes	Moderate	Low
Bleached corrugated cardboard	Yes	Low	Moderate/Low
Paperboard (unbleached)	Yes	Low	Low
Unbleached Corrugated Cardboard	Yes	Low	Low
Glass	No	Low	Low

(Chart from: A Field Guide: Eco-Friendly, Efficient and Effective Print.)

Designers face important decisions about paper, ink and packaging techniques in how they will be used to produce pieces they can be proud of while being environmentally friendly. It is up to designers to make choices that benefit the big picture while staying true to their creative goals. It is hard to take all of the factors impacting our world today and determine what is best for the projects every designer comes across. Fortunately, there are more green solutions and information available. By influencing

sustainability's growth in communities, designers encounter green solutions, green resources, better information and facts. Green design will be less likely to put you over your budgeted goal. Material selection is not the easiest process to go through. The most important aspect to pay attention to is the status of the recyclable or compost-ability in materials. Also avoiding or minimizing the use of restricted or hazardous material contained in the product is advisable. Finally if plastics are used, find out if they are clearly marked by an identification system, such as ISO 1149, to determine the reusable standards of the material. It's important to consider the entire production process. Ask suppliers to start providing you with independently verified information about the life cycle environmental impacts of the material and processes they use. Designers have an obligation to themselves and to their careers to seek out the knowledge, sources and skills required to bring sustainable design from the bottom of this design practice to the mainstream of design practice and business communications in print. Educate those around you while continuing to educate yourself. In a sustainable world, knowledge is power.

### **Interview With Sustainable Design Educator**

I recently interviewed AIGA board member Susan Snipes. She has been a member of AIGA since 2002 and on the board since 2006. Within the last two years, she was appointed the position of Secretary as the Colorado chapter. When given this position, Susan was determined to create a more sustainable related program. Through AIGA of Colorado, she put on an awards competition that recognized sustainability. This competition started out as a regional one and grew into being a nationwide competition as well as attracting some entries from Canada. This was the first AIGA national

competition that recognized sustainable work, both environmentally and socially. With Susan's experience and knowledge in sustainable design, I saw her as a prime individual to interview. The following includes key questions asked during interview.

**What is your take on the life cycle behind graphic design?**

For designers, a lot of them do not think about the life cycle. A lot of people think that if I am using paper, it should be 100% post-consumer, but it doesn't necessarily need to be 100% recycled, 30% and even 10% are options that are available. How it fits in with the life cycle relies on the thought of "what is the purpose of this product and is the impact at the end of its life cycle worth the production of it? Will the user keep the product as a reference that they have in their life and beyond or do they use it one time and throw the product away?"

**What is your overall view on sustainability and what graphic designers need to be doing now?**

Every small company needs to think about what sustainability means for their company. It is different for all companies depending on what product or service they focus on. For some of them it may be, is my business sustainable? Are we doing things in a way that positively affects our employees and takes care of them? Are we doing things for customers that we respect their work and we like the work they're doing? Companies can also take it to the relationship they have with vendors and determine if they are working with the right vendors, possibly asking: are they responsible with the way they are using their supply in day-to-day office management? All in all, it would be more of a company philosophy. Beyond that, there is something that the center for sustainability does recommend-that every time you take a project, you see if it fits your criteria. Is it a

company that I want to work with? Do I like their mission and is this project going to be something that is successful for them and what we are making. It is important to evaluate a project while you are working on it. Everyone should always be considering what impact it has socially and environmentally.

**Are you familiar with the term “triple bottom line?”**

Yes, I am somewhat familiar with that term. An idea that has surfaced more recently with the people that I have been around is the idea that individuals do not like to use the word “green” as much. One of the non-profits that I was talking with, who were focused on sustainability on the environment, stated that green is actually a passé color and should actually be blue that represents sustainability. The triple bottom line is used more in the corporate world as an accepted way for businesses to demonstrate they have strategies for sustainable growth. The triple bottom line is a form of reporting that takes into account the impact your business has in terms of social and environmental impacts along with financial returns. It stands for People Planet Profit. In greater detail, people stands for treating your employees right as well as the community where your business operates. Planet, of course, stands for minimizing your ecological impact in all areas, and profit basically falls under making an honest profit rather than raking in a profit at any cost. Because surrounding areas have said to have “green fatigue” or “green washing,” the triple bottom line seems to grasp more interest and understanding than just the phrase “going green.”

**Do you think there will be a position as a CG(green)O anytime soon?**

I doubt it. I think it would be something that would have to be something that is built in to all of what people do. I think companies, not all of them but many of them, are

paying attention to how well they take care of their employees. So they're thinking about their social responsibility. But there isn't really a position for someone to manage that. It's just kind of what the company philosophy is. And I think probably the same will be true for environmental responsibility. The company will either have that as part of their philosophy or they won't. Consumers will start to ask what the company philosophy is and then choose to do business with them based on if they have it or not, or if they like it or not. It seems like a lot of people are starting to do that, especially in the graphic design industry. One of the things I have heard to be challenging is that there are some mandates, probably more of a government type levels, where a project that some one is doing, say printing some city publication, has to be printed from a FSC certified printer or with some certain requirement, that has been potentially harder because people want to have something that they can say yes this is what I need to do, this fits, but it might not be the right choice.

Contrary to Susan's belief, I think a CGO would be a wonderful investment for all companies worldwide. It is hard to keep track of the sustainable regulations as well as what is coming into a company and what is going out. Having an individual focus solely on the sustainable actions of their company would be extremely helpful and worth the extra attention. One of the biggest problems that sustainability has today is the lack of attention we all pay to it. Because it is a process that needs the utmost attention, having a CGO would only benefit the economy.

As the interview came to an end, Susan concluded with an idea she heard from Dawn Danby, Sustainable Design Program Manager, "If we really want to make a dent in how we are managing the way we make stuff, the way we deal with resources in an active

way, we actually have to bring more people to the table. Some of those people may not speak the same language as you and if we brought them into this room right now they may not feel entirely comfortable, and we may not feel entirely comfortable with them either, but I think it is essential.” To a certain degree, we all need to learn how to speak another language in order to reach those who are not interested or don’t know they are interested.

### **Where Do Graphic Designers Come In?**

The creative design community has a large role in the sustainable and green design world. Designers are both consumers and contributors to the economy through our creative work. Illustrators, designers and animators all have the potential to make a difference, not only through changing our own habits but also by using our role as communicators to put across the ideas and influence other individuals. As designers we can play a part in fostering a new greener culture by promoting environmentally sustainable solutions. Graphic designers are accountable for the footprint they leave behind. Steven Heller states “Being accountable to some moral standard is key. A designer must be professionally, culturally and socially responsible for the impact his or her design has on the citizenry.”

The role of a graphic designer goes beyond that of just selling something for someone else. Graphic designers play an important role in shaping thoughts, emotions, public opinions, outlooks and policy through visual communication. This is also reflected in the clients we take on and the message they are promoting and the materials they are willing to use. It is important that designers demonstrate a commitment to sustainability, both to serve our clients and our companies effectively and continue to improve our craft.

Designers often take for granted that as specifiers, designers have tremendous amount of power over what is available within the design and publishing marketplace. As trendsetters and communicators, designers have the ability to affect the habits of industries outside of our own. In the new sustainable economy, designers will be engaged to re-conceive, redesign and innovate nearly every element of everyday life. The key to sustainability is making the market work with the environment, not against it. That is where designers come in.

## **Conclusion**

If and when I print (the designer) your print (the client) we are all (the designer and the client) leaving an eco-footprint (the amount of biologically productive land and sea area needed to regenerate the resources a human population consumes and to absorb and render harmless the corresponding waste) (Alt, Marc). If business owners or freelancers of the visual communication world can control our services easily and lessen the harmful effects on the environment, why wouldn't we? The ecological footprint all human beings leave behind is becoming more and more apparent. Individuals have an obligation to themselves to seek knowledge, skills and tactics that are required to move toward a sustainable world. Graphic designers have more control over the situation than any of us want to admit. Conveying the right messages to clients, users, and industries will bring sustainability from the tips of our fingers to the palm of our hands. Everyone is aware of the crisis that is going on in the world today and very few act on it. Educating individuals about sustainability and what it really means in regards to: greener options to chose from in the design world as well as in everyday life, the importance of a product's life cycle, and how we can play a role in getting design more sustainable is only the

beginning. We need to become accustomed to the changes that are desperately needed. Designers need to think clearly about their actions and the consequences they create. They need to devise strategies that will fulfill sustainable design. The ecological footprint that we leave behind every single day needs to be reduced. If we continue down the careless path we are all on, it will only be a matter of time before natural resources run out and renewable resources no longer exist. Re-think your design techniques, your materials and the message you are conveying to everyone around you. Design for the future, for the future is ours.

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