

Analysis of Barriers and Incentives to Printers' Participation in the Green Business Program



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Bay Area Green Business Program
and
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ANALYSIS OF BARRIERS AND INCENTIVES TO PRINTERS' PARTICIPATION IN THE GREEN BUSINESS PROGRAM

INTRODUCTION

The purpose of this study was to examine the barriers and incentives to business participation in the Green Business Program (GBP). The study focused on GBP certified and non-certified printers in Alameda County but also examined other pollution prevention and green business programs throughout the United States. Interviews were conducted with Alameda County printers as well as potential governmental and corporate customers for printing products. While not statistically significant, the following report was prepared to provide direction and to help increase small business participation in Bay Area Green Business Programs.

Printing Industry – Overview

According to the Illinois Waste Management and Research Center, the printing industry is the largest employer in the United States, with over one million employees. It's also the quintessential small business-based industry, with 80 percent of print shops employing fewer than 20 people¹. In fact, the printing industry is the "largest conglomeration of small businesses in the domestic manufacturing sector."² The EPA defines the printing industry as "firms engaged in printing...platemaking and bookbinding...publishing newspapers, books and periodicals...textile printing...packaging

with incidental printing and manufacturers of printed circuit boards."³

Due to the numerous printing processes used, the printing industry is diverse. Lithography, letterpress, flexography, gravure and screen-printing are the five main printing processes.⁴ These processes are distinguished by the method of image transfer and type of image carrier used. In all processes but offset printing, the image is transferred directly from the image carrier to the substrate; in indirect printing (offset printing), the image is first transferred from the carrier to a blanket cylinder and then to the substrate.

Printers release "toxic chemicals through press cleaning, use of solvent-based fountain solution, and use of inks that contain toxic metals and solvents."⁵ Wastestreams typical of the printing industry are presented in Box 1 below. Most hazardous waste, including silver, toluene, benzene, xylene, cyanide and heavy metals, results from cleaning solvents and ink in the printing and cleaning stages. Relative to other print processes, quick print and laser print shops generate little chemical waste.⁶

Because of its size and the potential for hazardous pollutants, the printing industry is essential to target for pollution prevention, and yet, because of their small business character, print shops are inherently difficult to reach and

¹ www.wmrc.uiuc.edu/packets/printing/domestic.htm

² *Printing Industry and Use Cluster Profile*. Prepared for US EPA by Mattech Inc., Falls Church, VA, June 1994. Available online at: <http://www.epa.gov/opptintr/dfe/printing/usecluster/>

³ Ibid.

⁴ Ibid.

⁵ *An Analysis of Pollution Prevention Opportunities and Impediments in the Printing and Publishing Industry Sector in Georgia*. Pollution Prevention Assistance Division, Georgia.

⁶ Ibid



regulate. Beyond compliance programs are one of the few effective ways to reach this industry.

BOX 1

Wastestreams Typical of the Commercial Printing Industry

- Waste photochemical solutions and films (i.e., some negative developers for lithography are classified as hazardous as products and may also be hazardous as wastes under state regulations).
- Waste inks containing hazardous components (often metallic pigments and solvents).
- Ink-contaminated solvents and rags used for cleaning.
- Lubricating oils from machinery.
- Spent solvents such as Carbon Tetrachloride, Perchloromethane, Ethanol, Isopropanol, 1,1,1-Trichloroethane, and Methylene Chloride.
- Strong acid/alkaline etch and counter-etch solutions.

Source: Pacific Northwest Pollution Prevention Resource Center

The study, “Analysis of Pollution Prevention Opportunities and Impediments in the Printing and Publishing Industry Sector in Georgia,” surveyed Georgia printers about their pollution prevention measures. While this study is not about the effectiveness of beyond compliance program incentives, its findings are helpful because of its analysis of printers’ barriers to practicing pollution prevention. These barriers closely mirror what program coordinators found in Alameda County and other SF Bay Area counties.

The office conducting the study, Georgia P2AD, found through interviews with owners that small businesses have a very tight profit margin and do not have the “economic flexibility of experimenting with new processes and meeting production demands.” Most owners said they were unable to afford the costlier, environmentally-friendly inks and solvents, and that their employees were unwilling to use new products. Additionally,

“Printers often see the use of environmentally friendly processes and chemicals as being in opposition to the production of high quality, low cost print.”

In order to better understand the needs of Alameda County printers, a survey was administered to gauge their attitudes and desires regarding regulation (i.e., a desire for a better working relationship with regulators), position on product replacement, and preferences for the incentives listed in Section One below.

Green Business Program History

The Bay Area Green Business Program (GBP) is committed to encouraging environmentally sound business practices. The goal of the program is to encourage public support and patronage of environmentally responsible businesses by recognizing those businesses that demonstrate compliance with environmental regulations and practice pollution prevention and resource conservation.



Initially focusing on automotive repair shops, the Bay Area Green Business Program was inaugurated in Alameda and Napa counties in 1996. Currently, five Bay Area counties participate in the program: Alameda, Contra Costa, Napa, Santa Clara and Sonoma.



In 1998, Alameda County implemented standards for printers, followed by Sonoma County in 1999 and Contra Costa County in 2000—however, despite vigorous outreach efforts by the GBP, printer participation remains low. Indeed, out of the over 200 printer shops in Alameda County, only ten are certified by the GBP, a participation rate of only five percent. Interest has been similarly low in Contra Costa and Sonoma. At the outset of this project, numerous barriers to participation had been tentatively identified, including: apprehension about penalties for past and current noncompliance, a distrust of government, and time constraints inherent in running a small business.

Facing these potential barriers, printers need countervailing incentives to participate in this program. As a result, the Bay Area Green Business Program and the Environmental Finance Center for Region IX commissioned this study to identify further incentives for and barriers to industry participation.

Section One of this report identifies the features of "beyond compliance" programs throughout the nation, and suggests ways to apply those incentives to the GBP.⁷ Section Two of this study discusses the implementation and results of the printer survey. Administered to thirteen print shops in Alameda County, the survey requested information about the business and sought the respondents' views on program incentives and barriers to their own participation. Section Three summarizes the recommendations for the Program resulting from research and survey findings.

⁷These programs were identified through the report, "Common Sense Compliance: Building Better Environmental Inspection Programs" by John Garn, Internet research, and word of mouth. Appendix A of this report lists contact information for each program.



SECTION ONE – POLLUTION PREVENTION PROGRAMS

The discussions below focus on incentives and barriers to industry participation in green business programs in the United States. In order to obtain this information the following programs were contacted:

- Green Star, Inc.,
- PACE,
- Gem Stars,
- Michigan Great Printers Project,
- EcoStar,
- Nebraska Printers Project,
- Eco-Logical, and
- Shop Sweeps.

Where applicable, the programs' involvement with the printing industry is also noted. Most programs are relatively small (having certified less than 30 businesses) and new. An exception is Green Star, Inc., which has chapters throughout the US and has certified over 150 businesses in Anchorage, Alaska alone.



1. Green Star, Inc. (Alaska)

Program Features

Founded ten years ago, this program has chapters throughout the US. The Alaska chapter is largely funded through grants, membership dues, and corporate sponsorships. In order to gain certification, a business must

comply with six mandatory rules, the most demanding of which is to conduct an annual waste assessment, and to use this assessment as a guideline to waste reduction. The business must select another six waste reduction measures out of twelve possibilities. Businesses pay an annual membership fee, which contributes to the advertising and overhead costs.

As with many other programs, businesses must recruit other businesses in order to join. In addition, owners of current member businesses may also serve on the board to review applicants to the program and advise Green Star, Inc. coordinators. In order to retain membership, businesses are obligated to submit the results of their annual waste assessment. However, businesses usually do not comply with this requirement and, in actuality, the program does not rescind membership if businesses fail to submit their report. As a result, there is no annual re-certification process, and businesses essentially become "lifetime" members upon induction.

Incentives

- Green Star provides extensive advertising, including two full-page newspaper ads per year, press releases and radio advertisements.
- Partnerships with companies to employ environmentally preferable purchasing with Green Star businesses when possible. Participating companies include oil companies and the Alaska Railroad, which gives preference to Green Star construction companies.
- Anchorage school district uses Green Star membership as a "tie-breaker" in equal bids when possible.

2. PACE (Boulder, Colorado)

Program Features

Printers must complete three out of 13 print-shop-specific criteria to obtain advertising, and



all 13 criteria to become a full PACE member, which entitles the business to a window decal. The program operates throughout the County and ten out of 70 print shops are certified. Compliance with regulatory agencies is not verified; a business must only state, to the best of its knowledge, that the shop is in compliance with regulations. This process has created problems with businesses that were found to be out of compliance and operating without proper licenses, and at least three businesses have been de-certified as a result. In addition, annual re-certification is not a standardized process--sometimes there are on-site inspections, sometimes a simple call to the business.

Experience with Printers

According to PACE coordinators, certifying print shops has been difficult. They attribute this difficulty to the enormous changes, and corresponding training, printers must undergo to become green. Specifically, printers are most resistant to reducing the VOC's in blanket and roller washes, because they believe it reduces print quality.

In addition, while trade associations were active in the implementation stage five years ago, they are no longer enthusiastic supporters. Part of this stems from the feeling on the part of printers that they already "know everything" about P2 and don't need special training or education anymore.

Incentives

- Both County and City of Boulder have preferential purchasing policies with PACE businesses, as does an energy education non-profit organization in the area. This NPO's purchasing policy has prompted at least 3 businesses to get PACE certified.
- Advertising in business journals and newspapers is the program's media of choice. PACE encourages other businesses to use PACE businesses as their suppliers and for businesses to consider

environmental concerns when purchasing. This in turn causes other businesses to want to be certified.

- PACE campaigns with graphic artists to use PACE printers. Printers have felt pressure from them as well to get "green."
- PACE offers a "buddy" business system whereby certified businesses provide advice and support to businesses attempting certification.
- PACE heavily advertises the benefit of reduced worker sick days.

3. Gem Stars (Idaho)

Program Features

A previous franchise of Green Star, Inc., Gem Stars has certified 22 businesses in Idaho and it operates out of the governor's office. According to program coordinators, since it is not affiliated with a regulatory agency, businesses are more receptive to their overtures. The program is open to both public and private sectors.

Incentives

- Gem Stars provides recognition and advertising for its participants.

4. Michigan Great Printers Project

Program Features

The project is part of a regional pollution prevention program, with projects in Michigan, Illinois, Minnesota, and Wisconsin. The Project "seeks to influence factors ... which can constrain the business' environmental decisions"⁸, including customer demands, regulatory requirements, and access to technology and financial resources. To

⁸ *The Great Printers Project: Recommendations to Make Pollution Prevention a Standard Practice in the Printing Industry: Executive Summary.*
www.deq.state.mi.us/ead/p2sect/migpp/gpexsum.html.



participate, printers must be in compliance with environmental regulatory agencies, follow three broad pollution prevention guidelines, establish a written environmental policy and annual pollution prevention goals, and conduct an annual review of pollution prevention progress. This program focuses not only on printers, but also on print buyers, suppliers and distributors, government regulators and government and private assistance organizations.

Incentives

- Program recipients receive a certificate of recognition, press release, references in printing industry publications and a commendation from a state official.
- Program provides technical assistance from the Retired Engineers Technical Assistance Program.
- Participants have access to Project mailing lists for advertising
- Participants are preferred buyers with over twenty government agencies and private companies.
- Program markets to print buyers encouraging them to request environmentally sound printing, and providing an environmental fact sheet with questions to ask the printer

5. EcoStar (Montana)

Program Features

The program, in existence for four years, has 22 businesses certified statewide. To become certified, the business is visited by a program coordinator, and must demonstrate that it is beyond compliance in a number of different areas. The program does not have an affiliation with a regulatory agency, and businesses need not be concerned about punitive measures if they are not in compliance. In order to recruit new businesses, the program works with trade associations and direct mail. The coordinator attributes all of

the program's success to working with trade associations.

Incentives

There are few incentives in this program, attributed to a lack of funding. There is no free advertising or press releases, just the right to use the EcoStar logo in a business' own advertising.

6. Nebraska Printers Project

Program Features

Funded by a grant from the EPA's Design for the Environment, this program operates in conjunction with the University of Omaha and the Nebraska Business Development Center. The Project offers technical assistance through an on-site, confidential waste reduction assessment and is open to all printers. It is not a certification program. In its two years of operation, the Project has assisted 72 of the 395 Nebraska printers. Participation and interest in the program have been low, despite direct mail and trade association partnerships. The Project works with the Print Industries of America (PIA), one Nebraska trade association, and one Omaha trade association. Printers do not have to agree to a waste reduction assessment for access to the incentives below.

Incentives

- Participants are granted access to a product information database through the University of Omaha which reports on products' effectiveness and toxicity.
- Business Development Center provides notification about government contracts.
- Program runs website with links devoted solely to the printing industry.
- The email forum, *Printers*, is for Nebraska printers to share problems and solutions.
- Grants, funded by the state, to assist printers with buying pollution prevention equipment are also offered. Grants are



awarded up to \$50,000. Low interest loans for pollution prevention purchases are also available.

7. Eco-Logical (Oregon)

Program Features

Conducts a one-time certification program for auto-repair shops, and manages an on-going educational outreach with printers. Involves regulators only as a last resort (e.g., with businesses that, after repeated warnings, still refuses to make the changes necessary to be in compliance).

Experience with Printers

Eco-Logical decided not to certify printers because the trade association was not able to provide the support and involvement that the program directors felt was sufficient to attract printers. In addition, when surveyed, printers were not overly enthusiastic about the program. Part of the explanation lies in the fact that printers were not aware of all of the benefits of the program, and that their primary market was not individuals, but rather industry and government.

Ultimately, the program concluded that the auto repair shop strategies were not conducive to print shops; they then decided to focus on other industries more similar to auto shops in consumer make-up.

Incentives

- Provides educational materials to businesses.
- Actively promotes businesses in print ads.

8. Shop Sweeps (Olympia, Washington)

Program Features

Rather than a certification program, this statewide Program, run by the Department of Ecology (the state's environmental department) offered on-site technical assistance and pollution prevention education at no cost to the print shop. Over 1,300 print shops accepted the offer and the program succeeded in its P2 goals. Its success is attributed to its non-regulatory nature--the Department of Ecology has no regulatory or punitive powers, and can only urge the non-complying businesses to change its ways. The high number of participating businesses is also attributed to this fact.

Incentives

The incentive of free technical assistance for compliance mandates, plus the absence of punitive powers, made for few barriers to implementing P2 measures.

The Local Perspective

Finally, to obtain a more local perspective, California counties were surveyed about their pollution prevention programs. Of the eight counties surveyed⁹, less than half had any pollution prevention program or education service; of those that did, most programs focused on improving air quality. San Bernardino County is unique in that it offers a reduced fee schedule (a savings of up to \$90/year) for those businesses that are consistently beyond compliance. Other than this program, California counties did not prove to be a resource in discovering effective incentives and solutions to barriers.

⁹ The Counties of Fresno, Imperial, Kern, King, Los Angeles, Orange, San Diego and San Bernardino were surveyed.



Analysis of Programs and Incentives

The Bay Area Green Business Program already uses many of the incentives identified above. While the program budgets do not allow for extensive advertising, visibility in the local print media is gained through newspaper and newsletter articles about the program and about individual Green Businesses. For example, in Alameda County, articles related to the Green Business Program have appeared in local newspapers and organization newsletters with some regularity.

Cost savings is already an incentive advertised by the GBP to potential printers, and did not appear as frequently on the promotional materials of other programs. As in the PACE Program, promoting the benefit of reducing the number of worker sick days might be a benefit to which print shops – whose resources and time are tight – respond.

The prospect of partnering with companies and local government agencies to offer environmentally preferred purchasing is the most appealing incentive by far. The Michigan Great Printers Projects aggressively promotes preferred purchasing for its printers. According to the Green Star, Inc. coordinator, their preferred purchasing program was relatively easy to adopt with the oil companies and railroads because they are eager to improve their “green” image with consumers. If possible, a similar industry in Northern California, also seeking to improve its image with green consumers, might be the best way to build a partnership with other businesses. In the PACE program, the county and city were pressured into adopting an Environmentally Preferred Policy (EPP), but the non-profit organization (NPO) did so without an approach from PACE. Partnerships with environmentally-minded NPO’s is another avenue worth investigating.

In conjunction with contacting companies and government agencies, outreach to graphic

artists is another option to consider. The PACE program in Colorado campaigns to graphic artists. Working with the Graphic Arts Technical Foundation (GATF) may be a way to accomplish this inexpensively.

The Nebraska Printer’s Project and PACE’s business connection program might also be worth pursuing in regard to printers. A GBP printer mentioned that printers may want to operate in an environmentally friendly manner, but feel they don’t have the time and resources to test out new, more “green” products. Referring businesses with questions to other businesses interested in providing assistance could increase the participation rate. Additionally, like Nebraska’s Printer Project, developing a database of dependable, environmentally friendly products and product companies, could be the encouragement that these businesses need.

Its close affiliation with regulatory agencies is a barrier the GBP faces which many other programs do not. This affiliation upholds the integrity of the GBP seal, ensuring that each business is in compliance with all agencies, and imparting faith in its word on the part of the public. However, this advantage also creates an undeniable barrier in working with the print industry. The industry’s distrust of government agencies and the tendency of small business owners to avoid contact with regulators, the prospect of inviting inspectors into their business is not appealing to many. It is also likely that fewer businesses qualify for the GBP than for similar programs above because the GBP verifies compliance with all regulatory agencies; there may be many businesses that are certified with other P2 programs that are not in compliance with all agencies.

While this is a standard the GBP does not wish to relax, its implications must be understood – the program must offer even more compelling incentives than other programs for participation to be worth the cost of compliance and beyond. As a result, alliances with large companies, NPO’s and government



agencies to offer preferred bidding status may play a significant role in increasing business participation.

In conclusion, incentives the GBP may be able to offer are as follows:

- Preferred purchasing for GBP businesses by local governments,
- Preferred purchasing for GBP businesses by companies and NPO's,
- Advertising in business-oriented publications,
- Encouraging graphic artists to use GBP printers, and
- Creating a "buddy" system and/or product database.

In addition to offering the above incentives, the GBP may be able to overcome barriers by working closely with trade associations.



Green Markets and Green Consumerism

Individuals

Many studies have been conducted to characterize the "green consumer." The report *Forty-Four Million Americans Can't Be Wrong: the Market is Ready for Socially Responsible Business* finds that almost 25% of Americans are making "value-based" (including environmental) choices about their products and services. Most of these consumers are forty-year-old, upper middle

class women who are "information junkies." However, despite this group's stated commitment to environmental values, price is still the determining factor in product choices, while the environmental message plays a secondary role. Thus, sales to this market requires satisfaction with both price and environmental/social message.

A King County, WA, study corroborates these findings. This study focused on the obstacles consumers face in trying to be "green." They don't trust business self-promotion or government as an accurate source of what is truly environmentally-friendly. The good news is that almost 60 percent of consumers claim they want to be better to the environment; however, many don't know whom to trust for information. These are the consumers to whom industries, where individuals – as opposed to corporations or government – occupy a large share of their customer base, are interested in marketing themselves. However, the printing industry's market segment consists largely of government and other industries. We must not only understand and market to "green" individual consumers, but environmentally-minded businesses and government agencies as well.

Government Buyers

Executive Order 13101, signed by President Clinton on September 14, 1998, strengthened the federal government's commitment to buying environmentally preferable products. It is likely that this order will cause a trickle-down effect within state governments and local agencies. California already has the "State Agency Buy Recycled Campaign," which requires State departments, boards, commissions, offices, agency level offices, and cabinet level offices to buy recycled materials whenever possible. These offices must submit an annual report and certify the recycled content of all their suppliers. While state guidelines are not as specific about services as they are about recycled content, this campaign could be useful in encouraging state agencies



to use certified Green Businesses, especially printers. Specifically, the California Integrated Waste Management Board, which played an integral role in creating the campaign, has a commitment to creating a demand for recycled products and supporting businesses which practice pollution prevention.

Many local governments and state agencies surveyed have some sort of environmentally preferred purchasing policy (EPP) (see Appendix D). However, EPP implementation was uneven and many purchasers seemed unsure of how to fulfill the policy. Most offices used the EPP when there was time to research what was truly environmentally-friendly. The EPP was mostly used as a tiebreaker between products of equal price and/or quality. Purchasers pointed out that the EPP was but one aspect of their work and the many requirements they must follow everyday. Some purchasers felt the GBP seal would be useless because they don't know enough about the program and they would still have to conduct their own independent research. Educating purchasers about the GBP could help these governments fulfill their EPP goals and promote Green Businesses in the process.

Corporate Buyers

Many well-known large corporations have EPP's and are committed to pollution prevention and resource conservation. However, these companies, such as the Bank of America and Sprint, often print their materials in-house. For more local environmentally-friendly businesses, the Peninsula Conservation Center foundations' Business Environmental Network (BEN) is a resource. BEN helps Bay Area environmentally-conscious companies improve their environmental performance, and connect with other concerned businesses. Encouraging these companies to purchase from GBP printers could be a productive starting place. Advertising in their bimonthly newsletter, *Eco-Opportunities*, and attending their breakfast meeting are two opportunities to raise

awareness about the GBP with private companies. Modeling Michigan's outreach program, the GBP could invite many businesses throughout the Bay Area to prefer GBP Printers when possible.





SECTION TWO – SURVEY IMPLEMENTATION AND RESULTS

Sixty-three businesses were contacted through direct mail and telephone, including the ten GBP participants. The businesses were informed that they would be entered in a raffle for free Oakland A's tickets if they completed the survey. Forty-five agreed to receive the fax survey or have it administered in person. Thirteen businesses completed the survey, five of them GBP participants. A response rate of fifty percent was initially expected; however, the actual response rate was twenty-one percent.

Comprised of twelve questions, the survey requested information about the respondent's business and business affiliates, and their preferences for a list of possible incentives and barriers. The survey for GBP participants was the same as it was for non-participants except that the term "incentive" was changed to "benefit" and questions about barriers used the past tense, since these businesses had obviously overcome these barriers sufficiently to be able to participate in the program. Both versions of the survey are available in Appendix B.

Survey Results

Discussion

The survey results confirmed much of what county coordinators already suspected. The two primary barriers to participation in the program are concerns about time and cost. Sixty percent of respondents indicated that lack of detailed knowledge of the program was their primary barrier to participation, yet program recognition was a high: seventy-one percent. This indicates that businesses know of the program vaguely, but they don't know the details that would pique their interest, suggesting the need for further marketing.

Additionally, working with regulators was not a main concern, as originally hypothesized.

As expected, businesses are printers' primary customers. The printers surveyed range from large, with 120 employees and gross revenue over ten million dollars, to one employee and gross revenue under three hundred thousand dollars. Using number of employees and annual gross revenue, the print business size was fairly equally distributed. Sixty percent of printers belong to PINC and all printers used offset press for their printing process.

In addition to lack of information, printers identified time and money as their two main barriers to participation. Interestingly, an unwillingness to deal with regulators was a concern to only sixteen percent of respondents. As one respondent said, "Why should that stop me? I already have to deal with them anyway." This indicates that the threat of fines may not be the primary barrier. One print business owner, however, said that he did not want to participate in the program because of that very fear. It should be noted that, given the limitations of this survey, these results are more illustrative than they are conclusive.

Reduced business fees and preferred purchaser status with private businesses are the two main incentives printers said would cause them to consider participating in the GBP.

Recommendations

A new marketing campaign could solve many of the misconceptions currently existing about the Green Business Program. Most respondents seemed to feel that the program was "not for them," for a variety of reasons. A campaign addressing those specific issues could mobilize these printers. Clarifying the GBP's relationship with regulators would also ease the anxieties of businesses unsure of what GBP certification entails. One printer said that the GBP material stating that "we don't want to fine you" means to him that the program can and will fine you, even if the coordinators don't want to.



Small printers, with less than five employees, reported that this program was not for them because their businesses were too small. They thought that the program was only for larger businesses, “real” businesses. Ads and brochures explaining that the program is for everyone, and is in fact designed to help smaller businesses that can’t afford to hire their own environmental management specialist, could correct these misconceptions.

Other businesses refused the survey and information about the program because they said they didn’t need the assistance of the GBP since they were already in compliance. One owner was insulted at the implication that his business would need our help. The “know everything” phenomenon noted in PACE’s experience materialized in the Bay Area as well. For those businesses that assert that the program is not for them because they are already in compliance, the recognition aspect of the program should be stressed. Since they are already in compliance, the time investment for GBP certification should be relatively low compared to other businesses.

One aspect that was strongly apparent from the survey is that printers want resources—namely, money and information. One printer said he wanted his shop to become more environmentally-friendly, but he couldn’t afford the newer equipment that would allow him to do so. He wants a low-interest loan that would allow him to buy new equipment. Offering low-interest loans, or even grants, for environmentally-friendly print presses could encourage printers to change their print processes. The Nebraska Printers Project offers these types of loans and grants through the state Business Development Center.

A “toolkit” for printers with the resources they need to find environmentally compliant and/or preferable services and products could also be useful. One respondent mentioned that every attempt his small business made to reduce and recycle their waste had been thwarted. He described his efforts as “a waste of time.” He wants to know the reputable businesses that

will buy his waste paper, take his silver, and give him the correct information about the equipment he needs to be in compliance. Developing such a toolkit could provide printers with the resources they need to practice pollution prevention and waste reduction measures. Enlisting the help and experience of current GBP printers, and attending CIWMB trade shows are two ways to begin collecting this information.

In response to printers’ strong desire for tax breaks, the GBP should enter into discussions with the cities and agencies in the county to determine the probability of reducing business fees for certified GBP printers. This monetary incentive could help to compensate for the cost and time printers feel certification will require. Similarly, printers want to see the GBP encourage their business customers with EPPs to offer Green printers a bidding preference. By finding which area businesses already have EPP’s, the program could focus its efforts on companies with a prior commitment to the environment. Modeling itself after the Michigan Great Print Buyer Project, the GBP could ask companies to commit to using GBP printers.

Local governments and agencies are also potential partners for preferential purchasing agreements. Government EPPs tend to focus almost exclusively recycled paper and little mention is given to other products or services. This indicates that government purchasing departments must evolve their own purchasing directives before they would be comfortable with preferring GBP printers for their printing needs. However, the GBP could organize a conference or develop a booklet that would show purchasers how to use the EPPs they already have. Indeed, the City of Pittsburg’s EPP even requires the use of soy-based inks.

Currently the only governmental entity in Alameda County with a purchasing policy specifically favoring certified Green Printers is the Alameda Countywide Clean Water Program (ACCWP). At the June 22, 1999 Management Committee meeting, the ACCWP



adopted the following resolution: "The ACCWP will use Green Businesses for all new printing jobs that it initiates, unless the quality of the printing is not comparable or the costs of the printing exceed by 20 percent or more the costs for using a non-Green Business." While several of the Alameda County GBP partner agencies are supportive of the Green Printers, their organizations' procurement policies make it difficult to overlay an EPP at the staff level. More work must be done at the Board or City Council levels to change policies to support purchasing from Green Businesses.



Conclusions

In conclusion, the GBP should pursue the following recommendations.

- Further marketing should be geared toward small businesses and shops who believe they are in compliance.
- Materials clarifying the GBP's relationship with regulatory agencies should be provided. Outline what businesses don't need to worry about and what they do— i.e., which agencies may fine the print shop at what point during certification.
- Grants and low-interest loans for environmentally-friendly equipment should be available.
- A "toolkit" for printers listing area resources for recycling and waste disposal needs should be prepared.
- The GBP should obtain local business tax reductions.
- The GBP should identify area businesses with EPP's.
- The GBP should educate local government and agency purchasers about the Program.



SECTION THREE – SUMMARY OF STUDY AND RECOMMENDATIONS

This study analyzes Alameda County printers' barriers to participation in the GBP and identifies ways to overcome these barriers and incentives to participation. These incentives were identified through research of existing green business programs throughout the US, Bay Area Green Business Program printer project committee meetings, and through the printers' survey administered as part of this project.

While the responses from Alameda County printers were lower than anticipated, they indicate that scarcity of time and money are the top two barriers to participation. Incomplete information about the program also lowered the participation rate. Printers desire reduced business fees and preferential purchasing agreements with businesses and government agencies, and indicate these incentives will cause them to strongly consider participating in the program.

In summary, these are the recommendations, resulting from this study, to increase printer participation in the GBP:

- Promote preferred purchasing for GBP businesses by local governments.
- Promote preferred purchasing for GBP businesses by companies and NPO's.
- Advertise in business-oriented publications.

- Encourage graphic artists to use GBP printers.
- Create a “buddy” system and/or product database.
- Provide additional marketing geared toward small businesses and shops who believe they are in compliance.
- Produce materials clarifying the GBP's relationship with regulatory agencies.
- Offer grants and low-interest loans for environmentally-friendly equipment.
- Prepare a “toolkit” for printers listing area resources for recycling and waste disposal needs.
- Obtain local business tax reductions.
- Identify area businesses with EPP's.
- Educate local government and agency purchasers about the Program.





APPENDIX A

Program Contact Information

1. Green Star, Inc.

Anchorage, AK Chapter
Shaun Scaling
415 "E" Street, Suite 210
Anchorage, AK 99501
(907) 278-7827
email: sean@greenstarinc.org
url: www.greenstarinc.org.htm

2. PACE

Anne Kaufman
Boulder County Health Department
3450 Broadway
Boulder, CO 80304
(303) 441-1146
email: amkhe@co.boulder.co.us
url:
www.ci.boulder.co.us/environmentalaffairs/business/print_overview.html

3. Gem Stars

Heather Cataldo
(208) 364-4038

4. Michigan Great Printers Project

Anita Singh
Environmental Assistance Division
Michigan Department of Environmental
Equality
P.O. Box 30457
Lansing, MI 48909
(517) 335-2356
url:
www.deq.state.mi.us/ead/p2sect/migpp.html

5. EcoStar

John Hudson
Montana P2 Program
Montana State University Extension Services
Taylor Hall
P.O. Box 173580
Bozeman, MT 59717-3580
(406) 994-3451
url:
www.montana.edu/~wwwated/ecostar.html

6. Nebraska Printers Project

Tory Duncan
2505 North 24th St., Suite 103
Omaha, NE 68110
(402) 595-3812
url: p2ric.unomaha.edu/test/print/index.htm

7. Eco-Logical

Kevin Masterson
2020 S.W. 4th Ave.
Suite 400
Portland, OR 97201
(503) 229-5615
email: masterson.kevin@DEQ.state.or.us

8. Shop Sweeps

Laura Schleyer
Ecology Southwest Regional Office
Hazardous Waste And Toxics
(360) 407-6463
email: lsch461@ecy.wa.gov



APPENDIX B.I

Surveys

Green Business Program Survey of Printers

Business Name:

Name and Position of Responder:

Date:

Contact Information

Phone Number:

Email:

Address:

The purpose of this survey is to find out about printers' needs and concerns directly from the source. We will use the results to determine how to better serve you. If you have any questions, please contact Julia Laurin, Green Business Program Intern, at (650) 274-8360.

To schedule a survey time, call (650) 274-8360. You can also fax the completed survey to (401) 679-8824.

As a thank you for your time you will be entered in a raffle to win 2 Oakland A's tickets!

I. Business Characteristics

1. Who are your customers? (as a percentage of gross sales)

_____ % Individual customers

_____ % Government customers/contracts

_____ % Private businesses and organizations

100%

2. Please provide some of your business/government customer names (optional).

3. What percent of your work is:

One-time purchase: _____ %

On-going or contract work: _____ %

100%

4. What is the annual gross revenue of your business?

- Less than \$500,000/yr.
- \$500,000 to \$3 million
- \$3 million to \$10 million
- Greater than \$10 million

5. How many employees do you have?

6. Do you belong to a business or trade association? If so, which one(s)?

II. Printing Process

7. Which of the following processes does your business use? Check as many as apply.

- Lithography
- Flexography
- Offset press
- Photoprocessing
- Binding
- Screenprinting
- Other (please describe):

III. Barriers

8. Do you know about the Green Business Program?

- Yes
- No

The GBP offers these benefits:

- Free promotion as a certified Green Business
- Environmental compliance assistance
- Assistance in pollution prevention and resource conservation

9. What reasons have prevented you from participating in this program?



10. Please indicate if the following concerns have also been barriers to your participation:

(Check if yes)

- Unwillingness to deal with regulatory agencies
- Difficulty in obtaining permits
- Too costly (changing processes, buying new equipment, etc.)
- Time constraints
- Privacy concerns
- Product replacement concerns (for example, changing inks)
- Process disruption concerns (re-training employees)
- Maintaining high quality printing products
- Losing customer base

IV. Incentives

11. In addition to the incentives listed above (free promotion as a certified Green Business, environmental compliance assistance, and assistance in pollution prevention and resource conservation), what other benefits could the GBP offer that would cause you to consider participating?

12. Please indicate if the following incentives would also cause you to strongly consider participating:

(Check if yes)

- Reduced permit fees

- Streamlined permitting
- Reduced business tax
- Being a preferred supplier for private businesses and organizations
- Being a preferred supplier for government
- Access to an information clearinghouse on environmentally preferred products and materials (inks, papers, solvents)

Thank you for participating!

Be sure to fax your completed survey to (401) 679-8824 or call (650) 274-8360 to be entered in a raffle for FREE tickets to an Oakland A's game.

*For more information about the program, contact:
Alameda County Coordinator Pamela Evans at
(510) 567-6770*



APPENDIX B.2

Surveys

Green Business Program Survey of Green Business Printers

Business Name:

Name and Position of Responder:

Date:

The purpose of this survey is to find out about printers' needs and concerns directly from the source. We will use the results to determine how to better serve you. If you have any questions, please contact Julia Laurin, Green Business Program Intern, at (650) 274-8360.

Please fax the completed survey to (401) 679-8824 or mail to 909 Clipper Lane, Foster City, CA 94404.

As a thank you for your time you will be entered in a raffle to win 2 Oakland A's tickets!

I. Business Characteristics

1. Who are your customers? (as a percentage of gross sales)

_____% Individual customers
 _____% Government customers/contracts
 _____% Private businesses and organizations
 100%

2. Please provide some of your business/government customer names (optional).

3. What percent of your work is:

One-time purchase: _____%
 On-going or contract work: _____%
 100%

4. What is the annual gross revenue of your business?

- Less than \$500,000/yr.
 \$500,000 to \$3 million

- \$3 million to \$10 million
 Greater than \$10 million

5. How many employees do you have?

6. Do you belong to a business or trade association? If so, which one(s)?

II. Printing Process

7. Which of the following processes does your business use? Check as many as apply.

- Lithography
 Flexography
 Offset press
 Photoprocessing
 Binding
 Screenprinting
 Other (please describe):

III. Barriers

The GBP offers these benefits:

- Free promotion as a certified Green Business
- Environmental compliance assistance
- Assistance in pollution prevention and resource conservation

8. What were your initial concerns, if any, about participating in this program?

9. Please indicate which of the following concerns, if any, you had about participating:

(Check if yes)

- Unwillingness to deal with regulatory agencies
 Difficulty in obtaining permits



**ANALYSIS OF BARRIERS AND INCENTIVES TO PRINTERS' PARTICIPATION IN THE BAY AREA
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- Too costly (changing processes, buying new equipment, etc.)
- Time constraints
- Privacy concerns
- Product replacement concerns (for example, changing inks)
- Process disruption concerns (re-training employees)
- Maintaining high quality printing products
- Losing customer base

IV. Incentives

10. In addition to the incentives listed above (free promotion as a certified Green Business, environmental compliance assistance, and assistance in pollution prevention and resource conservation), what other benefits would you like to see the GBP offer?

11. Please indicate if you desire the GBP to offer the following benefits:

(Check if yes)

- Reduced permit fees
- Streamlined permitting
- Reduced business tax
- Being a preferred supplier for private businesses and organizations
- Being a preferred supplier for government
- Access to an information clearinghouse on environmentally preferred products and materials (inks, papers, solvents)

Thank you for participating!

Be sure to fax your completed survey to (401) 679-8824 or call (650) 274-8360 to be entered in a raffle for FREE tickets to an Oakland A's game.



APPENDIX C.I

Survey Responses

Non-GBP Participant Responses

I. Business Characteristics

1. Customer Base (8 respondents)

13%	Individual customers
4 %	Government customers/contracts
<u>85%</u>	Private business & organizations
100%	

2. Customer Names

Nokia (1)
Dango PE (1)
Sega (1)
Chapel Times (1)
UC Berkeley (1)

3. Type of Work (8):

One-time purchase:	35%
On-going or contract work:	<u>65%</u>
	100%

4. Annual Gross Revenue (7):

28.5%	Less than \$500,000/yr.
28.5%	\$500,000 to \$3 million
28.5%	\$3 million to \$10 million
14.5%	Greater than \$10 million

5. Number of Employees:

25; standard deviation = 39.76 (8).

6. Do you belong to a business or trade association? If so, which one(s)?

PINC (5)
NAPL (1)
IWW (1)

II. Printing Process

7. Printing Processes (8)

28.5%	Lithography
0%	Flexography
100%	Offset press
0%	Photoprocessing
43%	Binding
0%	Screenprinting
0%	Other

III. Barriers

8. Do you know about the Green Business Program? (7)

71%	Yes
29%	No

9. What reasons have prevented you from participating in this program?

Don't know much/anything about program (5)
Selling business (1)
No time (1)
Lack of training records (1)
Don't want to get fined (1)

10. Please indicate if the following concerns have also been barriers to your participation (6):

(Check if yes)

16.6%	Unwillingness to deal with regulatory agencies
16.6%	Difficulty in obtaining permits
17%	Too costly (changing processes, buying new equipment, etc.)
70%	Time constraints



16.6%	Privacy concerns
33%	Product replacement concerns (for example, changing inks)
16%	Process disruption concerns (re- training employees)
16%	Maintaining high quality printing products
16%	Losing customer base

IV. Incentives

11. What other benefits could the GBP offer that would cause you to consider participating?

- Business tax reduction (1)
- Low-interest loans for new equipment (1)
- Access to network of firms who purchase used goods for recycling (1)

12. Please indicate if the following incentives would also cause you to strongly consider participating (4):

(Check if yes)

50%	Reduced permit fees
25%	Streamlined permitting
75%	Reduced business tax
50%	Being a preferred supplier for private businesses and organizations
50%	Being a preferred supplier for government
25%	Access to an information clearinghouse on environmentally preferred products and materials (inks, papers, solvents)



APPENDIX C.2

Survey Responses

GBP Participant Responses

I. Business Characteristics

1. Customer Base (5 respondents)

18%	Individual customers
9%	Government customers/contracts
<u>73%</u>	Private business & organizations
100%	

2. Customer Names

Nokia (1)
Dango PE (1)
Sega (1)
Chapel Times (1)
UC Berkeley (1)
City of Alameda (1)
Oakland Housing Authority (1)
City of Oakland (1)

3. Type of Work (5):

One-time purchase:	40 %
On-going or contract work:	<u>60 %</u>
	100%

4. Annual Gross Revenue (5):

20%	Less than \$500,000/yr.
40%	\$500,000 to \$3 million
20%	\$3 million to \$10 million
20%	Greater than \$10 million

5. Number of Employees (5):

24

6. Do you belong to a business or trade association? If so, which one(s)?

PINC (4)
Chamber of Commerce (2)

NAPL (1)
ISO 9000 (1)

II. Printing Process

7. Printing Processes (8)

40%	Lithography
0%	Flexography
100%	Offset press
60%	Photoprocessing
80%	Binding
0%	Screenprinting
0%	Other

III. Barriers

8. What were your initial concerns, if any, about participating in this program?

- Cost and time involved (1)
- How it was going to benefit the business (1)
- If there were annual membership fees (1)
- Missing a regulation and being penalized despite attempts to be in compliance (1)

9. Please indicate if the following concerns have also been barriers to your participation (5):

(Check if yes)

16.6%	Unwillingness to deal with regulatory agencies
16.6%	Difficulty in obtaining permits
17%	Too costly (changing processes, buying new equipment, etc.)
70%	Time constraints
16.6%	Privacy concerns



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- 0% Product replacement concerns (for example, changing inks)
- 0% Process disruption concerns (re-training employees)
- 0% Maintaining high quality printing products
- 0% Losing customer base

IV. Incentives

10. What other benefits would you like to see the GBP offer?

- Make it mandatory for state and local agencies to use GBP printers (1)
- Access to an information clearinghouse on environmentally preferred products and materials (inks, papers, solvents) (40%)

- Reduced fees (1)
- Discount preferences by local and state government agencies (2)

11. Please indicate if you desire the GBP to offer the following benefits (5):

(Check if yes)

- 80% Reduced permit fees
- 40% Streamlined permitting
- 60% Reduced business tax
- 100% Being a preferred supplier for private business & organizations
- 100% Being a preferred supplier for government



APPENDIX D

Environmentally Preferred Purchasing Survey of Local Governments and Agencies

Government or Agency	Contact	EPP	Features	Application to Printers
Alameda Countywide Clean Water Program		Yes		ACCWP will use GB Printers for all new printing jobs unless quality is not comparable or cost of printing exceeds by 20 percent or more the cost for using a non-GB.
AC Waste Management Authority	Brad Duggan (510-618-2124)	No	There is no official EPP; however, environmental issues are considered in all purchases.	The WMA uses an environmentally-friendly printer.
City of Berkeley	Fran David, Finance Director (510-665-7401)	Yes	Berkeley has 105 unintegrated environmental policies which are difficult and time-consuming to understand and use.	Does not consider policies when choosing printers, but is open to doing so.
Caltrans	Procurement (916-227-6000), Ed Walker, Recycling / Products (x6008)	Yes	Caltrans uses the State Agency Buy Recycled Campaign guidelines. They do not have their own EPP.	N/A
CIWMB	Andrew Hurst, Integrated Waste Management Specialist (916-255-2624)	Yes	Focuses on waste reduction and recycled product procurement and prefers suppliers who use pollution prevention measures.	GBP Printers practice pollution prevention.
East Bay MUD	Pat Ward, Purchasing Manager (510-790-0100 ext. 241)	No		N/A
City of Fremont	Marsha Bradford (510-494-4742)	Yes	Only relating ordinance requires 30% post-consumer recycled paper for copiers	N/A
City of Pittsburg	Laura Wright, Purchasing Dept. (925-252-4114)	Yes	Policy requires use of recycled paper, playground equipment, lumber, etc.	Printers are required to use soy-based inks on recycled paper. There is no verification process--the City uses only one printer in town.
City of San Leandro	Kelly Haners, Environmental Services (510-577-3401) and Darryl Sweet, Purchasing Manager (510-577-3377)	Yes	City uses the State Agency Buy Recycled Campaign guidelines to buy recycled paper and other environmentally-friendly products.	All materials must be printed on recycled paper. Try to choose the most environmentally-oriented supplier on a case-by-case basis.
City of San Ramon	Pat Perry, Purchasing Director (925-973-2504) & Kevin Carunchio, Env. Services (925-973-2552)	Yes	Policy mandates the purchase of recycled paper and products whenever possible.	N/A