Developing an Environmental Approach to Paper Procurement at the World Bank

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Abstract

In November, 2007 the decision was made to review paper purchases at the World Bank Group (hereinafter referred to as the 'Bank') headquarters in Washington, D.C. to reflect the environmental commitment of the organization. A significant initiative was undertaken over the next year and a half to develop a more sophisticated approach to environmentally sustainable paper procurement. A major challenge was the establishment of a formal approach that balanced environmental criteria and commercial business criteria while focusing on value to the Bank. This paper focuses on the procurement and relationship challenges of developing and implementing an innovative approach to formal practices.

Keywords

Environmental, paper, sustainable procurement, relationships, World Bank

Educator and practitioner summary

This paper looks at the development of a significantly more sophisticated approach in terms of environmentally sustainable paper procurement. After the application of some of the more standard approaches such as duplex printing, reducing paper use and increasing the percentage of recyclable content, the next challenge became: how can we do even better? The level of environmental sophistication of suppliers was not sufficient to get the Bank's print shop where they wanted to be. Tracking the chronology from conceptualization to supplier selection and results provides a useful insight into the process whereby a large multi-national and very prominent public sector institution manages to achieve significant environmental improvement. Key to the approach was a strong interdepartmental partnership among groups with different expertise.

Introduction

Concern over the environment and sustainability has increased considerably over the past decades. That supply chain performance and the environment are closely connected has been amply demonstrated in both academic and practitioner literature.

This paper focuses on the process of developing a new, sustainability-focused approach to paper procurement at the Bank. After providing a brief overview of the Bank, the Corporate Procurement Unit (GSDPR), the Corporate Responsibility Program (CR), and the Printing, Graphics and Map Design Unit (GSDPG), the three Bank parties involved in this procurement, the existing paper requirements and procurement practices are identified. Extensive information gathering and criterion development, REI, and the RFP evaluation led to a technical evaluation of environmental impact and award. Some reflections on this process form the conclusion.

The World Bank Group

The Bank is made up of five agencies: the International Bank for Reconstruction and Development (IBRD), the International Development Association (IDA), the International Finance Corporation (IFC), the Multilateral Investment Guarantee Agency (MIGA), and the International Center for Investment Dispute Resolution (ICSID). The IBRD was formed in 1944 to rebuild Europe and Japan after World War II. It is a cooperative, owned by 186 member countries. Its mission is to fight poverty with passion and professionalism for lasting results and to help people help themselves and their environment by providing resources, sharing knowledge, building development capacity, and forging public and private partnerships. Today, the Bank has approximately 11,000 staff, from 161 countries, working in 120 countries.

Environmental degradation and the challenges of climate change are major and urgent development challenges affecting the Bank's owners and clients. In Fiscal Year 2009, the Bank made new loan commitments to developing countries of $47 billion, of which 11 percent was for environment and natural resources, and 13 percent was in the energy sector. The Bank has made a commitment to dramatically scale up its renewable energy and energy efficiency loan portfolio and to strengthen the capacity and resources available within the development community to fight climate change.

In an effort to 'bring the talk home', the Bank measures, reports, and offsets the greenhouse gas emissions associated with its global business operations. It also has committed to reduce its emissions through energy efficiency initiatives and business behavior changes. It currently offsets its emissions through the purchase of renewable energy certificates for new wind installations and verified emissions reductions (carbon credits) associated with independent energy efficiency and alternative energy projects in client countries. Much of this success in reducing our global impact has been accomplished in partnership between the Bank's General Services Department, including Corporate Procurement and Printing, Graphics and Map Design units, and the Bank Corporate Responsibility team in the Environment Department.

The World Bank Corporate Procurement Unit

The Bank's Corporate Procurement Unit (GSDPR) spends approximately $900 million a year for goods, works and services for its own internal requirements. Most Bank procurement is conducted by GSDPR. Very small purchases may be made directly by Bank managers. GSDPR's goal is to obtain the best overall value for the Bank through competitive processes that are transparent and fair to all vendors. The Bank is a socially and environmentally responsible organization. As such, the Bank addresses, in its procurement process, vendors' commitment to appropriate wages and benefits, safety, environmental programs, and diversity in its supply chain. Corporate Procurement has 51 staff working out of Washington, DC, with 15 staff working out of a satellite office in Chennai, India.

The Environment and World Bank Business Operations

In 2004 the Bank introduced environmentally and socially responsible (sustainability) guidelines governing procurement policies for administrative goods and services.

Environmental Procurement

The Bank's policy states that the Environmentally Responsible Procurement policy "will be reflected in Requests for Proposals (RFPs), Invitations for Bids (IFBs), and solicitations issued by General Services Department, Corporate Procurement Unit (GSDPR) will reflect the policy. Applicable environmental evaluation criteria will be included in the technical evaluation and considered in the cost analysis of all quotations, bids and proposals received in determining the successful bidders/offerors…. Given that many environmentally preferred products and services can produce a variety of tangible benefits, full consideration should be given to the long-term and complete costs and benefits of environmentally responsible procurement."

More specifically, in order to contribute to waste reduction and to increase the development and awareness of environmentally sound purchasing, wherever possible, Contractors will perform the Work by using durable products, reusable products and products (including those used in services) that contain the maximum level of post-consumer waste, post-industrial and/or recyclable content, without significantly affecting the intended use of the goods or services. It is recognized that a cost analysis may be required in order to ensure that such products are made available at competitive prices.

The Bank views striving toward environmental best practice as central to assuming its corporate responsibility as a global citizen, to being a model for country client partners, and to positioning itself as an environmentally sustainable investment choice for its bond holders, particularly for investors who are part of the Sustainable Investment community.

The Corporate Responsibility (CR) Program[1]

The Bank Corporate Responsibility (CR) Program is a partnership of the Bank's Environment, Treasury, and General Services Departments and focuses on three key areas— promoting greater corporate transparency in the Bank through sustainability reporting, working with our Treasury Department in its strategic effort to develop new 'green' funding products and to reach out to the sustainable investment community, and supporting the reduction of the environmental footprint of our corporate operations through the Corporate Greening Program, which supports the General Services Department (GSD).

The **Corporate Greening Program** partners with GSD and other champions around the Bank through research, communications, and training initiatives to:

- Measure, manage and report our greenhouse gas emissions;
- Promote GSD's energy conservation initiatives through efficiency upgrades and green building commitments, such as meeting LEED and Energy Star standards;
- Minimize waste through source reduction, reuse, and recycling;
- Promote the use of local and sustainable products; and
- Educate staff on environmental issues.

[1] Judith Moore is the head of the Corporate Responsibility Program and has worked on World Bank environmental projects and initiatives since 1990. She has a PhD from the Massachusetts Institute of Technology in Regional Planning, specializing in environmental policy and planning, and a degree in forest science from Yale University. She is supported by a team of two environmental and sustainability specialists, Monika Kumar and Adam Rubinfield, who worked with Jane Bloodworth to develop the guide and scoresheet for paper procurement. Monika has an MA in Environmental Management from Yale and Adam has an MS in Conservation Science from Oxford Brookes University, UK.

The program has previously partnered with GSDPR to incorporate environmental standards into computer purchases and to heighten environmental initiatives in the most recent food services contract. The program supported with research and tool design, the initiative of the GSDPG unit's innovative step to scale-up consideration of environmental criteria in its latest paper procurement.

General Services Department Printing, Graphics and Map Design Unit[2]

The Printing, Graphics and Map Design (GSDPG) unit's mission is to be the provider of choice for leading-edge, cost effective and environmentally preferred, in-house printing, and associated graphic arts products and services for the Bank. GSDPG provides over 160 million print impressions annually, primarily operational documents, publications, and conference and meeting materials. Additionally, GSDPG produces 45 million other graphic arts and digital products each year, including graphic design, maps, large format posters, business cards, photographs, CDRoms, DVDs, and digital files for various electronic media uses. With the exception of the Bank's operational documents, Bank units can use any printer (in-house shop, or external commercial printer) to obtain services. GSDPG operates on a fully loaded chargeback basis and do not have first right of refusal. They strive to provide cost effective, high-quality products, value added, environmentally differentiated products and services at a market competitive price.

GSDPG utilizes leading edge capabilities to provide a mix of traditional and emerging technologies including cut-sheet and web, offset and digital presses, as well as various non-print services. Revenue through chargeback is approximately $12 million annually utilizing a staff of 33 Bank and 32 Contract employees. Strategically, they strive to help the institution reduce paper usage by printing only what makes sense, reducing waste, using environmentally friendly processes and products. This has resulted in a 2/3 reduction in paper usage in the institution over the past 10 years.

Paper Requirements

Since her arrival at the Bank, Jane Bloodworth had been actively involved in the pursuit of environmentally sound printing and paper procurement. Prior to 2007, Jane had undertaken various initiatives to advance both the Bank's and her personal environmental concerns as they applied to paper and printing. Influenced by Rachel Carson's book The Silent Spring at the age of 13, Jane had made concern for the environment and sustainability a strong value in both her personal and professional life.

[2] Jane Bloodworth manages the Printing, Graphics and Map Design unit at the Bank. She holds a post graduate degree in Music from the University of Central Florida. Her responsibilities include strategic planning, technology planning and implementation, sustainability initiatives, as well as daily oversight for the Bank's photography, mapping, graphic design, offset and digital printing, electronic products, mailing and distribution services and photocopier programs. Prior to joining the Bank in 1996, Jane was the Director of Travel Publishing Operations at AAA National Headquarters in Heathrow, Florida. She has over 30 years experience in a broad cross section of the Graphic Arts industry with emphasis on strategic planning, technology implementation, change management, process improvement and environmental/sustainability initiatives.

GSDPG is responsible for the acquisition of copy as well as printing paper. All paper is acquired from local distributors in the Washington D.C. area, because volumes are low and quick turn of small deliveries are required since the Bank print shop does not warehouse large amounts of paper eliminating the ability for direct dealings with paper mills. In 2007, GSDPG had four suppliers under contract, of which one had the bulk of the business. Total annual paper purchases for the Bank amounted to about $1.7 million.

Some of the Bank print shop's previous environmental initiatives included the elimination of blank pages in documents, the reduction of paper waste, the elimination or reduction in the use of plates and film, the use of soy inks and digital printing equipment, the recycling of packaging and waste materials, use of default settings for double sided printing on copiers, and requirements that printers and copiers must be able to run recycled content papers. Another interesting effort included alternative communication media such as CD Roms.

It was Jane's conviction that an increase in the usage of post-consumer fibre in purchased papers would further reduce the environmental footprint and enhance sustainability. Jane had over the years tried to encourage the mills to produce paper with higher post-consumer content and was always ready to test a new product for its printing viability. The American market changed slowly over the years to about 30% post-consumer content on some papers, led primarily by the government sector after then-President Bill Clinton's issuance of Executive Order 13101 in 1998 mandating use of recycled papers by Federal agencies.

By the start of 2008 Jane had found and successfully tested several brands of 100% recycled papers and wanted the procurement group to contract, without the benefit of competition, specific quantities with specific suppliers based on the Environmental Procurement Policy. However, the procurement team assigned to paper was reluctant to accept Jane's advice because of the need for fair and open supplier access, and the apparent lack of proof of environmental impact. Therefore, Jane engaged in extensive consultation with major paper purchasers, attended conferences on green practices and identified several helpful industry documents. "A Common Vision for Transforming the Paper Industry: Striving for Environmental and Social Sustainability" was particularly useful as it confirmed Jane's perspective gained from her years of experience in the industry. This document was ratified at the Environmental Paper Summit in 2002, with the accompanying documents: "Guidance to Best Practices for Advancing Environmentally and Socially Sustainable Papers" and "Environmentally Preferable Paper Purchasing Guidance". All three documents affirmed Jane's belief that the use of post-consumer fiber content in paper was both environmentally preferable and available.

Partnership with the Corporate Responsibility Program

In April, 2008, Jane contacted the Corporate Responsibility (CR) team to ask whether CR had any guide for evaluating the environmental impacts of paper. Monika Kumar, of the CR team, contacted a sustainability colleague, Suzette Carty, Manager of Environmental Stewardship Programs, at Brown-Forman Corporation. Suzette shared a basic, easy-to-use guide. The guide drew from various sources, but primarily built upon Monadnock Paper Mills' *A Field Guide to Eco-friendly, Efficient, and Effective Print*. The Guide color-coded various environmental impacts of paper and printing into Good (Green), Ok (Yellow), and Reconsider (Red). The CR team modified the document, splitting the paper impacts from the printing impacts, as Jane needed a guide specifically for the paper industry.

Procurement Perspective

Corporate Procurement Contracts Officers are responsible for the development and management of a formal solicitation process that meets the Bank's requirements for being fair, transparent and competitive while achieving the best total value. Contracts Officers are tasked to design a process that best suits the needs of the business and are held to a high standard by the Chief, Corporate Procurement.

In the past, formal paper procurements were typically completed through an Invitation for Bid (IFB) process, with responsive and responsible vendor bids being evaluated on price only. Spot market purchases were used in periods of high price volatility or where supply allocations restricted market availability. The Bank had over the years entertained both short term and long term contracts, with mixed results. Contract terms were typically reflective of the current and expected market conditions. The Bank was sensitive to the cost of paper fluctuations and reflected this by establishing a maximum price increase allowable that was tied to the RISI index as published in Pulp and Paper International (PPI) for the respective paper types.

By early spring of 2008, Jane had successfully tested a number of papers from different suppliers and was using products that contained higher post-consumer-fibre content. Her current price reflected recycled content market pricing through the spot market purchases. Jane was prepared to recommend specific suppliers capable of producing high post-consumer fibre content papers that would run well on her equipment. She had proposed evaluating criteria other than price to previously, and she escalated the request to the Chief, Corporate Procurement for further discussions. In March 2008 Liang Wang, Contracts Officer in the Procurement Group was assigned the paper portfolio and from then on Liang worked with Jane to lead a formal solicitation for paper and to assure Bank procurement policies and procedures were followed.

From a procurement perspective, there were a number of issues at play which impacted the procurement process. Jane's motivation was to improve the sustainability of the Bank's paper usage by moving beyond recycled content and chlorine processing being the only environmental considerations, and move to quantifying and evaluating all the environmental aspects of paper manufacturing that are delineated in the "Common Vision for Transforming the Paper Industry" – a body of knowledge and recommended practice that is broadly recognized and accepted as good environmental policy. She wanted to use the Bank's Environmental Procurement Policy to facilitate that effort, however, that proved difficult initially because the Policy did not include implementation guidelines. Therefore, this procurement became a process of working with procurement and environmental professionals to develop a working, measureable framework. Liang, on the other hand, was focused on developing a process which would meet Jane's objectives while meeting policy requirements for open competition. Liang was responsible for ensuring that any technical evaluation methodology would achieve an outcome that was in the best interest of the Bank and would stand up to the scrutiny of the vendor community. Since Liang was new to the portfolio, he had not had the opportunity to build a strong relationship with Jane personally, or had the required subject technical expertise to support Jane's vision. Both recognized the need to find out what other paper alternatives and paper suppliers still unknown to the Bank were available in the market. After lengthy discussions it was agreed to adopt a more formal approach by proceeding more slowly and developing a more sophisticated environmental rating process. Thus, the use of an Expression of Interest (EOI) gave Liang the ability to understand the market's ability to respond to the environmental questions posed as well as the opportunity to validate the evaluation criteria.

Suppliers were invited to respond to an EOI first to alert them to the Bank's more formal environmental approach and to seek information on product options. It took a considerable degree of effort to prepare the EOI document to get it into a shape that both Jane and Liang were comfortable with.

In the past, Corporate Procurement had discussed the opportunity of running a joint solicitation for paper with another International Financial Institution (IFI) located in Washington, DC. The IFI was invited to join in this environmental initiative to make the total procurement volume more attractive and subsequently a Memo of Understanding was signed between the two organizations and a joint procurement for paper was embarked upon.

Expression of Interest

On July 23, 2008 Liang sent out an EOI to determine the availability of various papers suitable for the print shop and for which samples could be obtained for testing. The second intent was to determine potential suppliers. This EOI was posted on GSDPR's website, the United Nations Development Business online (UNDB) and sent to potential bidders to direct them to the websites. Nine firms responded by the August 5, 2008 deadline. The EOI requested each potential supplier to identify alternate products for the 83 different paper items currently used by the Bank and the IFI. The EOI included:

Section A General Information and Mandatory Criteria
Section B Printing Paper Specifications *(bound separately)*
- Annex A. Paper Procurement Guidelines *(bound separately)*
- Annex B. "A Common Vision for Transforming the Paper Industry: Striving for Environmental and Social Sustainability" *(bound separately)*
- Annex C. "The World Bank Group Responsible Paper Purchasing Guidelines" *(bound separately)*
- Annex D. "Paper & Printing Selection Practices" *(bound separately)*
- Annex E. Environmental Paper Data Sheet *(bound separately)*

Section C Certificate and Affidavit

The additional documentation on environmentally desirable papers provided general background, a document ranking desirable environmental features into three ranks: recommended, good or reconsider for nine paper printing categories. These categories included fibre type, fibre source, chemical processing, certification when sourcing ink, energy source, transportation mode and distance, printing and finishing. Additional references were to a paper calculator developed by the Environmental Defense Group, The Conservation Guide from San Francisco and the Green Press Initiative. The last document was the World Bank Paper Group Procurement checklist which each supplier was to fill out for each non-specified paper on which the supplier intended to bid (See Exhibit 1). The EOI indicated that the Bank's intention was to develop a two year contract with two one-year renewable options.

The EOI was sent to distributors as the Bank did not have sufficient volume to go direct to mills. Nine distributors responded to the request. Considerable supplier contact was required after the EOI to gather additional information not supplied by the seven responding suppliers. Also the Bank and the IFI tested all alternative papers offered with which they had no prior usage

experience. A small Technical Evaluation Committee that included Jane and an IFI representative went carefully through all supplier submissions and identified information and testing gaps.

The EOI identified a number of issues. The lack of sophistication relating to environmental factors was apparent from distributor responses. The relationship between the distributors and the mills with respect to environmental factors was underdeveloped, as reflected in the responses. The readiness of the market to participate was immature in its development, as information was neither readily available nor presented in a way that could serve the industry responding to environmental considerations. Thus, a great deal of back and forth communication was required.

Ranking Environmental Factors

The supplier information sheet identified the factors shown on Exhibit 1. However, there was no indication yet as to how important each of these factors was from an environmental perspective. One of the internal sustainability experts at the Bank worked with Jane in an attempt to translate the information contained in the three key documents from the Environmental Paper Summit into a paper environmental ranking scheme. Using documentation from the Environmental Summit, in alignment with the hierarchy outlined in the "Common Vision" and the thinking of the Bank's Environmental Department, Jane and the sustainability experts estimated the environmental impact of each factor. For example, since both the Common Vision and the Bank were particularly conscious of energy use and its carbon footprint, energy was given special attention. After considerable discussion and thought, the allocation agreed to was as shown in Exhibit 2 for all lots except for lot B.

Only lot B was pre-specified by the Bank as 100% post-consumer fibre content. This lot accounted for more than half of the total dollar volume and included copy paper. Four of the B sub lots were in rolls and four were cut sheet. Because lot B was prespecified as 100% recycled the environmental ranking fibre type no longer were a rating factor and the 20% allocated for fibre type in the other five lots was distributed across the other six environmental rating factors. Based on the EOI responses, the lot compositions were adjusted to reflect market availability for all lots and sub lots as well as the environmentally most desirable papers.

Financial versus Environmental Ranking

One further hurdle remained. Since proposals would be evaluated financially as well as environmentally, what percentage of the evaluated score points should be allocated to each? The procurement group advocated a 30% environmental weighting and 70% financial. To assist in this matter, the team contacted a variety of public paper purchasers and Liang along with his Team Leader, Francine Holloway, benchmarked with other organizations and determined that a 70% financial weight was acceptable. Based on interim bids issued, the Bank had already extended the use of 100% white free sheet paper from the offset and high speed digital production and copy centers to all of the copy and printer paper used in the organization. As such, any premium in the price of the 100% post consumer products was reflected in the current pricing. This gave the Bank the strength of conviction and commitment to flip the numbers in order to make a strong 70% commitment to the value of the environmental side of the equation.

The RFP

The RFP of January 23, 2009 was posted on the Bank's Bidding Opportunities website. Each potential bidder received a copy of the environmental criteria and weights attached (See Exhibit 2) as well as a summary sheet of the technical proposed evaluation (See Exhibit 3).

Five of the nine firms invited to bid responded to the RFP after having requested additional information on the specifications, which were responded to in three additional addenda. The new deadline requested by suppliers became February 24, 2009, one week later than the original deadline in the RFP.

RFP Evaluation

For this part of the procurement process the Technical Evaluation Committee was expanded to seven individuals – two from GSDPG, one from the IFI print organization, two from CR, plus two non-voting members, one from GSDPR and one from the IFI procurement division. The RFP indicated that Mandatory Criteria would be scored on a pass/fail basis. Next the Technical Proposals would be evaluated followed by the Financial Proposals. Five bids were submitted by the February 24 deadline. Subsequently, it took considerable time to clarify responses. As pointed out earlier, one of the lessons from the EOI was a lack of integration and communication between the mill and the distributor. In an attempt to address this in the RFP, the questionnaire was redesigned to differentiate the roles of each participant. In spite of this, the RFP responses continued to demonstrate the difficulties in collecting individual data. It was also understood that actual responses would be dynamic and differ depending upon the individual supply chains, however, it was believed that this would not significantly impact the evaluations. The seven key evaluation criteria remained relevant for all supply chain models presented.

The mill information was easier to obtain than the distributor's information. The issue was that distributors had sent the Annex used to collect the technical information to the mill to complete. The mill completed their information, however, the distributor was reluctant to add information since the sheet had been already signed by the mill. It was known that a great amount of detail from both the mill and the distributor relating to their part in the supply chain was necessary.

It was difficult to gather information from both distributors and mills. There was some confusion where both the mill and the distributor information were requested, such as transportation and logistics, processing methods, and packaging materials. In some cases, multiple responses were given when only one was requested. Additional clarifications were sought throughout the evaluation process, adding an unusual amount of time to the evaluation process.

Since all five bidders were found to be compliant on the mandatory requirements, the bid evaluation on the Technical Requirements began. The final evaluation phase of financial rating was also relatively simple as standard practice was followed. The evaluation results ranked one supplier superior on both technical and price on the significant majority of paper volume. Three other suppliers split the remaining contract volume for contract awards. In only three cases was a sub lot not awarded to the lowest bidder as the volume was small and it made sense to consolidate with one of the other awards.

During the May 2008 – July 2009 period, during which the new environmental approach to paper procurement was developed, the Bank used spot market purchases to assure the Bank's paper supply. Fortunately, this was a period of relative price stability due to a soft overseas

market. As a result, the Bank was successful in securing favorable prices for high post-consumer fibre content paper.

The final award recommendation had to be submitted to the Procurement Review Committee (PRC). The purpose of the PRC is to provide an independent review of the GSDPR recommendations for all major awards (exposure value of $1 million or more) and selected other awards that may present special risks to the Bank. Liang prepared this submission for July 7, 2009 and after approval from the PRC actual contracts were awarded on July 11, 2009. In the submission to the PRC Liang outlined the background for this paper contract, the criteria used and the recommended suppliers. Also included was an estimate of the annual environmental benefit achieved (See Exhibit 4) and an estimate of overall financial savings of about four percent.

The four suppliers awarded paper contracts on July 11, 2009 were the same suppliers that held the previous contracts. However, a major shift in percentage of business took place. The former prime supplier slipped to third place, while the former third place supplier became prime under the new contract. Moreover, compared to the contracts in place in 2007, the type of papers purchased changed drastically to very high post-consumer fibre content. Additionally, the overall profile of papers shifted to a more sustainable position based on transportation distances and modes, manufacturer's energy sources, chemical processing methods, and other key environmental factors considered in the RFP process. The RFP ensures that the Bank is using the greenest products available in the North American market at a competitive price. It moves the Bank into a leadership position in the greening of print and environmental procurement processes, and supports the Bank's Millennium Development Goals to ensure environmental sustainability by reducing the environmental footprint of development.

Reflections

One of the special aspects of the Bank paper purchase is the strong partnership forged among the user and specifier, the Printing, Graphics and Map Design Manager, the Procurement group and the Corporate Responsibility team. The manager with strong personal convictions about sustainability and extensive research efforts reached her goal of finding a more environmentally friendly solution by a relentless pursuit of the market over many years. In her spot buying of paper in 2007, 2008 and the beginning of 2009 she accomplished her goals. Further, her personal goal will be met going forward through the actual contract awards that resulted from the RFP. The Procurement group, concerned about supplier access, the Bank's environmental policies and the need to measure environmental impact persuaded GSDPG manager to develop a set of clear metrics and turn them into a viable supplier evaluation tools. In collaboration with the Environment department, a model for evaluation and financial criteria was developed. The CR team, with expertise in environmental sustainability, worked quickly to climb the learning curve on key aspects of the paper industry's footprint, and then translated the extensive information on environmental impacts into easy-to-use tools. Their broad view of sustainability helped expand the boundaries of issues considered in this environmentally sustainability procurement. Given the shortage of resources on all sides, this was a remarkable accomplishment.

In this particular procurement, the Bank also partnered with another IFI. There was a potential risk that defining a new process would impede a successful outcome for both partners. In this case, the IFI concurred that the Bank procurement process was satisfactory and in fact benefitted directly from the work of the Bank, improving their procurement capability and their ability to

measure the impact of their paper consumption on the environment, something that they were previously not able to do.

Even with all of the pre-solicitation work and testing, the technical evaluation team had to invest significant time in the clarification process of both the EOI and the RFP. The EOI, although necessary in this particular case, would likely not be required in the future, since the subsequent process confirmed that the model presented was appropriate to the marketplace and to achieving the goals of the buying organization.

Jane's proposed methodology was seen as critical not only from an environmental perspective, but also would allow GSDPG sales growth opportunities. The RFP financial savings of approximately 4% was primarily driven by savings in copy paper, the cost of which was paid through direct charge back to internal clients, so savings did not have a significant budget impact on the printing operation. Jane had increased the recycled content of paper on a gradual basis, with corresponding production efficiencies to offset any premiums paid for recycled paper. In some requirements, it was mandatory that staff use GSDPG, but for some jobs Jane competes with external suppliers. The Bank spends approximately $7.7 Million per year on external suppliers for print publications and business cards, with GSDPG revenues at approximately $12 million. Jane's cost model does not include profit or sales commissions in overhead calculations which affords her the ability to invest in technology and process efficiencies to further grow her business.

Some of GSDPG's clients were early adopters of environmental initiatives. Some had embraced sustainable procurement due to the recent 'going green' trend in the US. The opportunity for Jane and the Corporate Responsibility team to jointly engage the Bank in an open dialogue on the tangible impact of using recycled paper reinforces GSDPG's support for the Bank's sustainability objective.

It was interesting to note that a few distributors were reluctant to invest the time in presenting a thorough and complete response to the bidding opportunity. There was a significant amount of time spent clarifying responses since the required information was technical and very specific in nature. Distributors had to engage the mills to respond to some of the questions. Due to the variety of requirements, paper sourcing was required through multiple mills. It was identified also that the sustainability of the distributor, their knowledge of the program and their willingness to pursue the objectives, impacted responses from the mill's perspective. Upon further investigation, factors such as formal distributor agreements with paper mills, the interest and pursuit of distributor representatives, and Jane's relationship with the distributors were believed to have an impact on responses. Procurement required technical information that was not available through traditional market research. Specific technical information was required from multiple layers in the distribution channel so the supply network needed to be integrated, with a strong communication system. In some cases, new mill alliances were needed by the distributor.

It was clear that some distributors saw the opportunity to leverage this work to obtain more business. In fact, new opportunities to test environmentally friendly paper in two other multinational agencies have arisen. In their search for more environmental paper choices, other multinational agencies have come to the Bank to leverage what we have learned through the paper procurement. This has resulted in distributors benefiting from the opportunity to obtain more business. Going forward, further sustainability work to conserve resources, generating additional revenue through the recycling of waste and the reduction of water, air and ground

pollution through an alliance with the mills and distributors will continue to be considered in order to optimize the supply network. In the future, any positive impact on the environment through the distributor and mill supply relationship will result in additional positive opportunities for the Bank to leverage environmental improvements.

Procurement's meaningful involvement in a process that evaluated technical and commercial criteria assured that good value was achieved by GSDPG. Procurement can now evaluate the opportunity to leverage existing contracts to include all Bank paper requirements with internal Clients bidding out printing and finishing processes only. The quantification of environmental impact will also provide a solid base for future procurement initiatives to balance the value achieved by the client in addition to supporting the Bank objective of sustainable procurement.

Exhibit 1: World Bank Paper Procurement Checklist

World Bank Group Paper Procurement Checklist 07/23/2008

ENVIRONMENTAL PAPER DATA FORM

Please fill out this form completely for each non-specified paper you plan to bid.

Mill Location (City, State, Country): _____

Vendor Name: _____

Product Name: _____

Manufacturer: _____

Post-Consumer Waste Recycled Content _____ %

Pre-Consumer Waste Recycled Content _____ %

Tree Free? ☐ Yes ☐ No

Is Fiber Source: ☐ Processed and Shipped Locally (<500 Miles) ☐ Processed and Shipped Regionally (<1000 Miles) ☐ Processed and Shipped Nationally (<3000 Miles) ☐ Processed and Shipped Globally (>3000 Miles)

Fiber Source Location (City,State, Country): _____

Transporation Mode: ☐ Rail short-distance ☐ Rail long distance ☐ Trucked short distance ☐ Ocean Shipped Long Distance ☐ Air Transport

Chemical Processing:

☐ Process Chlorine Free (For Recycled Content Paper Only) ☐ Totally Chlorine Free (For Virgin Content Paper Only) ☐ Enhanced Elemental Chlorine Free (E-ECF) w/ Ozone. ☐ E-ECF w/ extended or oxygen delignification ☐ Elemental Chlorine Free

Certifications When Sourcing: ☐ FSC 100% ☐ FSC <100% ☐ FSC Recycled ☐ FSC Mixed Sources ☐ Rainforest Alliance Certified ☐ Sustainable Forestry Initiative Certified ☐ Green Seal ☐ No Certification

Certification #: _____

Primary Mill Energy Source:

☐ On-Site Renewable Energy Generation ____% ☐ Direct Purchase of Renewable Energy ____% ☐ Renewable Energy Certificates(Green-e Certified) ☐ Carbon Offset Credits Purchased ☐ No renewable energy used or purchased ☐ No carbon offset credits purchased

I certify that the above information is true to the best of my knowledge and will notify the World Bank if it comes to my attention that any of the information is incorrect.

Signed: _____

Date: _____

Other Sustainability Related Info/Comments:

Exhibit 2: Evaluation of Technical Proposal

EVALUATION OF TECHNICAL AND FINANCIAL PROPOSAL

6.1 TECHNICAL PROPOSAL EVALUATION (70 Points)

6.1.1.1 Technical Proposal evaluation is focused on the evaluation of environmental considerations as detailed below.

6.1.1.2 Only Offerors meeting the mandatory criteria will advance to the technical evaluation in which a maximum possible 70 points may be awarded. An evaluation committee appointed by the Bank/IFI will carry out the technical evaluation applying the evaluation criteria and awarding points as listed below. Detailed description of the environmental features preferred by the Bank/IFI can be found in Attachment A, The World Bank's Paper and Printing Selection Practices.

Lot/Sublot Description	Maximum point	Technical Evaluation Criteria - - Environmental/Sustainability Preference Features						
		1	2	3	4	5	6	7
		Fibre Type	Transportation – Pulp to Mill and Mill to Bank/Fund	Chemical Processing	Certifications When Sourcing	Energy Source at the Mill	Packaging	Compliance & Other Sustainability Considerations
Lot A - Miscellaneous Offset/Digital Cut Sheet Cover, Text & Rolls								
SUBLOT A-1 Uncoated Cut Sheet	70	20	12	8	5	15	2	8
SUBLOT A-2 Coated Cut Sheet	70	20	12	8	5	15	2	8
SUBLOT A-3 Miscellaneous Rolls	70	20	12	8	5	15	2	8
Lot B - Uncoated White 100% PC Cut Sheet & Rolls								
SUBLOT B-1 Uncoated Web Rolls	70	0	16	12	8	20	3	11
SUBLOT B-2 Uncoated Cut Sheet	70	0	16	12	8	20	3	11
Lot C - Coated Cut Sheet Offset/Digital Print and Web Roll Papers								
SUBLOT C-1 Coated Web Rolls	70	20	12	8	5	15	2	8
SUBLOT C-2 Coated Cut Sheet Text & Cover	70	20	12	8	5	15	2	8
Lot D - Colored Copy, Laser and Index Tabs								
SUBLOT D-1 Colored Copy Paper	70	20	12	8	5	15	2	8
SUBLOT D-2 Laser Paper	70	20	12	8	5	15	2	8
SUBLOT D-3 Index Tabs	70	20	12	8	5	15	2	8
Lot E - Miscellaneous Items: Crack and Peel, NCR,								
SUBLOT E-1 Crack & Peel	70	20	12	8	5	15	2	8
SUBLOT E-2 NCR Paper	70	20	12	8	5	15	2	8
Lot F – Miscellaneous NO SUB Items								
Lot F – Miscellaneous NO SUB Items	70	20	12	8	5	15	2	8

Exhibit 3: Evaluation of Technical Criteria

Criteria	Weight	
Fiber Type	**100% Recycled Specified**	**Other**
Post-Consumer Waste Recycled Content	100%	2 pts for every 10% PCW, Tree Free, TRF - above the minimum specified
Tree Free		
Totally recycled fiber (TRF)		
Pre-consumer waste content	0	1 pts for every 10% PCW, Tree Free, TRF - above the minimum specified
Virgin paper	0	0
Maximum points	**Pre-Requisite**	**20**

Fiber Certification	**100% Recycled Specified**	**Other**
FSC 100%	8	5
FSC Recycled	7	4
FSC Less Than 100%	6	3
FSC Mixed Sources	6	3
Rain Forest Alliance Certified	4	2
CSA	4	2
PEFC	4	2
Green Seal	4	2
SFI	1	1
Other	1	1
No Certification	0	0
Maximum Points	**8**	**5**

Chemical Processing	**100% Recycled Specified**	**Other**
Process Chlorine Free	12	8
Totally Chlorine Free	12	8
Enhanced elemental Chlorine Free	9	6
E-ECF w/ extended or oxygen delignification	9	6
Elemental Chlorine Free	1	1
Processed w/ Chlorine	0	0
Maximum Points	**12**	**8**

Energy Source at Mill	**100% Recycled Specified**	**Other**
On-Site Renewable Energy Generation	2 pts for every 10%	1.5 pts for every 10%
Direct Purchase of Energy	1.5 pts for every 10%	1 pts for every 10%
Renewable Energy Certificates (Green-e)	1 pts for every 10%	0.5 pts for every 10%
Carbon Offsets (CER/VER)	1 pts for every 10%	0.5 pts for every 10%
Renewable Energy Certificates (other)	0.5 pts for every 10%	0.25 pts for every 10%
No renewable energy certificates	0	0
No carbon offsets	0	0
Maximum Points	**20**	**15**

Source of Pulp and Distance traveled (Pulp to Mill)	**100% Recycled Specified**	**Other**
Rail	8	6
Trucked <300 mi	8	6
Trucked 300 - 2300mi	4	4
Shipped	4	4
Trucked 2300<	1	2

Exhibit 3: Evaluation of Technical Criteria (continued)

Air	1	2
Maximum Points	8	6

Source of Product and Distance traveled (Mill to Customer)	100% Recycled Specified	Other
Rail	8	6
Trucked <300 mi	8	6
Trucked 300 - 2300mi	4	3
Shipped	4	3
Trucked 2300<	1	1
Air	1	1
Maximum Points	8	6

Recycled/Recyclable Packaging	100% Recycled Specified	Other
100% recycled content paper wrapper, no pla	3	2
All other paper wrapper	2	1
Plastic wrapping/plastic coated	0	0
Maximum Points	3	2

Compliance	100% Recycled Specified	Other
No violation of any environmental regulation	1	1
Attached a Code of Conduct policy	1	1
Maximum Points	2	2

Sustainability Criteria	100% Recycled Specified	Other
Publish Sustainability Report Established Greenhouse Gas (GHG) emissions inventory and reduction target - discuss below Established strategies or procedures at the mill to reduce energy, water and material use Member of EPA Smartway Transport Program Use alternative fuel in transport fleet Distribution warehouse is LEED certified Established GHG emissions reduction target a Work with NGO partners / community stakeholder groups Receive any Sustainability Awards (or rank on sustainability listings).	1 point for each sustainability criteria met	
Maximum Points	9	6
Total Points	70	70

Exhibit 4: World Bank Environmental Impact Expected

Lifecycle Environmental Impact	**Impact by The Bank** Switching 614 ton copy paper from 30% to 100% post consumer recycled	**Impact by The IFI** Switching 55 ton copy paper from 0% to 40% post consumer recycled	**Total Impact**
Wood Use:			
Use/Produce Less (Tons)	1,589	81	1,670
Equivalent Of Number Of Trees	11,120	569	11,689
Net Energy:			
Use/Produce Less (Million BTU's)	3,524	180	3,704
Equivalent Of Homes/Year	39	2	41
Sulphur Dioxide (SO2):			
Use/Produce Less (Pounds)	1,057,246	54,117	1,111,363
Equivalent Of 18-Wheelers/Year	96	5	101
Greenhouse Gases:			
Use/Produce Less (Lbs CO2 Equiv.)	5,091,923	260,638	5,352,561
Equivalent Of Cars/Year	8	<1	>8
Wastewater:	309,152	15,824	368,277
Use/Produce Less (Gallons)	11	<1	>11
Equivalent Of Swimming Pools			
Solid Waste:			
Use/Produce Less (Pounds)			1,670
Equivalent Of Garbage Trucks			11,689
Biomass Fuel Vs Standard Paper Facility Fuel Sourcing			
CO2:			
Use/Produce Less (Lbs CO2)	1,057,246		
Equivalent Of Cars/Year			
SO2:			
Use/Produce Less (Lbs SO2)	448		
Equivalent Of Semi Trucks/Year			

The paper calculator chart is run from the website of the Environment Defense Fund
http://www.edf.org/papercalculator/