eQ Insights

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Environmentally Responsible Paper Procurement Policies

The purpose of this brief is to provide guidance to our customers and stakeholders on the procurement of environmentally responsible paper. The information below can be used to develop an environmental policy or guidelines on paper procurement and to train staff. At the end of each section are suggestions on wording that can be included in a policy or guideline document.

The information presented is based on Sappi Fine Paper North America's environmental knowledge and expertise, as well as documents and other resources listed in the reference section.

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Why an environmental policy for paper procurement?

The development and implementation of a policy for environmentally responsible procurement is a sign of sustainable supply chain management. Many organizations consider such a policy to be good business practice because it can help reduce risk, costs and environmental impacts. The growing demand for sustainably produced paper can also lead to improved forest management and cleaner production methods.

Such policies outline environmental and social responsibility requirements for purchasing products and services, and allow organizations to select sustainable suppliers. Major corporations such as Walmart, Time Inc., JCPenney and Unilever are a few examples of companies that have developed environmentally responsible paper purchasing policies (1,2,3,4).

There are useful guidance documents available on environmentally responsible paper purchasing (5,6,7,8). One of the most thorough of these is produced by the World Business Council for Sustainable Development and the World Resources Institute (5).

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The sustainable life cycle of paper

2.1 Paper is uniquely sustainable

Paper has unique sustainability features:

- Its main raw material, wood fiber, comes from a renewable and natural resource—trees, the product of sunlight, soil, nutrients and water.
- Paper is recyclable. It is the most recycled product in North America, with recovery rates above 60% (9).
- It is often manufactured using a high percentage of renewable energy such as biomass (10).
- The paper industry promotes sustainable forest management, which provides many social, environmental and economic benefits. For example, sustainably managed forests help deter deforestation and are essential in the global carbon cycle – they take up carbon and help mitigate climate change (5).

Very few products today have such unique features, and many of those are dependent almost entirely on nonrenewable resources.

Like all products, paper has environmental impacts at all stages of its life cycle. The key steps in the life cycle of paper are forest management, manufacture of pulp and paper, and paper distribution and disposal. To lower the environmental footprint of paper products, the use of life cycle assessment (LCA) in the design and development of paper products is now becoming more common. Organizations are also using LCA as a way to create more innovative and sustainable products (11).

Paper suppliers may also have the following elements in place, showing integration of sustainability into their business practices:

- A strategy and policy on corporate sustainability or corporate responsibility
- Short-term and long-term measurable sustainability targets

The use of environmental product declarations or product scorecards is suggested as a tool to collect and evaluate the environmental and social performance of paper suppliers. The following tools are the most commonly used:

- Environmental Paper Assessment Tool (EPAT) (12)
- Paper Profile (13)
- Procter & Gamble, Sustainability Scorecard (14)
- World Wildlife Federation (WWF) Paper Scorecard (15)

2.1.1 SUGGESTED POLICY TEXT

We will incorporate sustainability into our paper purchasing decisions by considering the environmental and social impacts of our paper products over their life cycles, including sustainable forest management, proper use of recycled fiber, clean production, carbon footprint, and the social responsibility of suppliers.

We encourage continual improvement in environmental and social matters, and reward suppliers who achieve a lower environmental footprint and engage in more socially responsible practices.

We will use a life cycle-based product scorecard to evaluate the environmental and social performance of our suppliers.

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Key policy elements

3.1 Sustaining the global fiber cycle

Sustainably managed forests and recovered paper will continue to be the main sources of raw material for paper and paperboard manufacture. Global consumption of certain wood-based pulps and recovered paper-based pulp is expected to increase over the next 15 years due to the overall forecasted increase in global paper production from 392 to 504 million metric tons (16). Therefore, more paper recovery is needed in many regions of the globe, as well as more sustainable forest management. It is not a question of recycled fiber versus wood fiber, it is a question of a balance of both.

A sustainable paper purchasing policy should encompass responsible use of both recycled fiber and virgin fiber from sustainably managed forests. This will ensure that paper buyers are contributing to increased recycling and sustaining the paper cycle with wood fiber from sustainable sources.

3.2 Sustainable forest management

Long-term sustainable management of forests in all parts of the world will be needed to provide economic and social benefits, mitigate climate change, preserve biodiversity and protect air and water resources. Promoting and supporting forest certification and traceability of wood fiber will help ensure sustainable forest management and legal logging. The most widely used forest certifications systems are:

- The Forest Stewardship Council (FSC®) (20).
- The Sustainable Forestry Initiative (SFI®) and Canadian Standard Association (CSA), used in North America and also endorsed by The Program for the Endorsement of Forest Certification (PEFC) (18,19).
- The Program for the Endorsement of Forest Certification (PEFC), a global program used in most European countries as well as growing use in other regions of the world (17).

These standards outline sustainable forestry practices as well as a chain-of-custody methodology to ensure traceability of fiber to known sources.

Compliance with the Lacey Act in the United States is another measure to prevent illegal logging (21). This Act is the oldest wildlife protection statute in the U.S. and was amended in 2008 to expand its protection to a broader range of plants and plant products. The Act makes it unlawful in the U.S. to import, trade or possess trees, or products derived from trees, that have been illegally harvested. Companies are obliged to

identify wood species and country of origin for any wood fiber contained in the products they import.

The following points are also examples of how pulp and paper companies ensure sustainable forest management:

- Ensuring compliance with regulatory permits related to forest management.
- Implementing a biodiversity strategy and policy and assuring integration into daily forestry practices.
- Policies on natural forest conversion to plantations.
- Setting aside high-value conservation forests for protection.
- Implementing environmental guidelines for procurement of wood, fiber and pulp.

3.3 Recycling and use of recovered paper

The key environmental benefits of recycling paper products are: 1) the avoidance of landfill space use, and longer life of landfill sites, and 2) the avoidance of paper degradation in landfills and the resulting release of methane during that process (methane is a powerful greenhouse gas and contributes to climate change).

There are a few basic facts that are important to know when considering recovered paper as a raw material:

1. In the papermaking process, wood fiber can be recycled an estimated 4 to 7 times, after which the fiber breaks down and can no longer be used to make paper. To make the global fiber cycle work, a continual input of 35 to 65% of fresh wood fiber is needed depending on the grade of paper manufactured (22).

2. Most recovered paper is used as a raw material in packaging grades such as carton board and paper board because the manufacture of these grades does not typically involve deinking and/or bleaching (16). Therefore, the processing is generally less costly and may also have less environmental impacts than when deinking and bleaching are required.

3. The distance between the recovered fiber source (usually areas of large population density) and the mill site is a key factor to consider for cost and environmental reasons.

4. To achieve top product quality in certain grades, paper needs to print well and run without breaks on high-speed printing presses. These quality requirements often require the use of fresh wood fiber as a raw material, instead of deinked pulp from recovered paper.

5. When product environmental evaluations are conducted, which consider most elements of the paper life cycle, it becomes apparent that the fiber type (i.e., recycled or wood fiber) plays a secondary role in determining the environmental footprint of paper products. Simply looking at the type of fiber does not explain key aspects of environmental performance since it takes no account of other raw materials, production impacts, logistics and chemicals used, for example.

Sustainable use of recycled fiber means using it in the right locations and the right grades, based on economic and environmental consequences.

Whether buyers purchase wood-based or recycled paper, it is equally important to ensure the final product is recycled after use. One way to promote this is to use currently available "Please Recycle" logos and claims, and participate in recycling initiatives with end users, as well as in programs in your local community (23,24,25,26).

3.3.1 SUGGESTED POLICY TEXT

We consider both recycled fiber and wood fiber from sustainably managed forests as equally important raw materials for papermaking. We will consider economic and environmental criteria throughout the product life cycle to ensure both fiber types are used sustainably to help lower the overall footprint of paper products we purchase.

We will support sustainable forest management practices by purchasing certified paper products based on recognized forest certification schemes, such as FSC®, SFI®, PEFC, and CSA. To ensure that the origin of all fiber is known and legal, our paper products will comply with the Lacey Act.

We will support suppliers who have implemented voluntary biodiversity programs to protect biodiversity in managed forests, and ensure protection of valuable forest habitats.

We will not purchase paper with fiber from converted natural forests.

We will promote recycling of our paper products by raising awareness and engaging with key stakeholders.

We will use proper environmental claims that encourage recycling of our products.

3.4 Clean production

Paper manufacturing is a key part of the environmental life cycle of papermaking because it uses raw materials and resources including fiber, energy and water, and also generates emissions to air, water and landfills. The following is an example of how impacts can be controlled and reduced at pulp and paper mill sites:

- Ensuring compliance with environmental laws and regulations.
- Utilizing best-available-technologies to reduce water and energy use, control and reduce emissions to air, treat wastewater, and reduce solid waste to landfills.
- Using or switching to renewable energy sources instead of using fossil fuels.

Environmental management systems, such as described in the ISO 14001 standard and the EU Eco-Management Scheme (EMAS), allow more efficient management of activities and processes to reduce environmental impacts (27,28). Companies can become certified to ISO 14001 and EMAS to demonstrate continuous improvement in environmental management and performance. Certification requires the standard to be met based on regular audits from independent accredited bodies. Today, a number of pulp and paper companies have integrated their management systems to include standards of quality (ISO

9000 series), occupational health & safety (OHSAS 18001), and environment (ISO 14001).

3.4.1 SUGGESTED POLICY TEXT

We require our suppliers to be in compliance with all relevant laws and regulations that apply to their business operations.

We will track and follow the environmental performance of our supplier production facilities and promote continuous improvement in energy efficiency, water use, and emissions to air, water and landfills.

We will give preference to suppliers who demonstrate effective environmental and health and safety management; for example, by being certified to standards such as ISO 14001 and OHSAS 18001.

3.5 Climate change and carbon footprint

Given that climate change is a critical global environmental issue, more and more companies are developing energy and climate strategies, and calculating the carbon inventories of their products and supply chains. The most common methods used for greenhouse gas inventories in the pulp and paper industry are those of the World Resources Institute (29), the British Standards Institute (30), and Confederation of European Paper Industries (CEPI) (31).

The carbon footprint of paper can be defined as greenhouse gas emissions emitted to the atmosphere during the entire life cycle of paper production and distribution. The scope of carbon footprint calculations varies between studies but can include the following elements: raw material production and transportation, pulp and paper mill site, landfills, wastewater treatment facilities, purchased power, paper transportation, final products transportation, disposal and recycling.

The major contributor to the carbon footprint of paper is carbon dioxide generated from combustion of fossil fuels (i.e., coal, oil, gasoline, diesel, natural gas). However, disposing of paper in landfill sites, and the subsequent breakdown of paper with the resulting production of methane (a potent greenhouse gas) can also add to the carbon footprint of paper products. This is another reason why paper recycling is beneficial for the environment.

A recent life cycle assessment study (32) has shown that greenhouse gas emissions of pulp and paper production (i.e., at pulp and paper mill sites) typically makes up 43 to 66% of the carbon footprint of four North American printing and writing paper grades (i.e., office paper, catalogs, magazines, and telephone directory grades). Transportation after production makes up 0.5 to 2%, and end of life (disposal) makes up 19 to 37%. The balance comes from fiber procurement (5 to 18%) and converting (15 to 43%). Hence, depending on the grade evaluated, paper production, converting and disposal make up the highest contribution to global warming and transportation the lowest. The same study also confirms that paper recovery, instead of landfilling, can reduce the global warming potential of paper products by 15 to 25%. Using paper as a source of biomass for energy production was also identified as an alternative to landfilling in order to reduce the global warming impact.

Given the above results, it becomes clear that pulp and paper mill sites that use a high percentage of renewable energy such as biomass and “green” power from the grid can significantly reduce the carbon footprint of their paper products.

The carbon footprint of a company or product can be reduced by the following initiatives:

- Promoting sustainable forestry as a way of deterring deforestation, and ensuring that forests continue taking up carbon and mitigating climate change.
- Efficient use of wood raw material.
- Energy efficiency of operations and logistics.
- Use of biomass and other renewable or low carbon fuels.
- Waste reduction and recycling.

3.5.1 SUGGESTED POLICY TEXT

We will track and measure the carbon footprint of the suppliers of our paper products using recognized and accepted protocols.

We will encourage continuous improvement in energy efficiency, fossil fuel reduction, use of renewable fuel sources, and a reduction of organic and paper waste to landfill sites.

3.6 Environmental marketing claims and labels

The foundation of solid environmental claims and labeling rests on two pillars: they must be true and they must be substantiated. Labels developed by credible third party certification programs, such as those listed below, offer assurance and transparency to marketers that choose to use them. There is no third party certification for recycled content or recyclability. However, both the Federal Trade Commission (FTC) and the CSA have offered guidance in the use of recycled symbols and claims (33,34).

Although there are numerous schemes and labels available, here are some of the most common certifications used in the pulp and paper industry:

- Sustainable forest management standards from:
  - Forest Stewardship Council (FSC®) (20)
  - Sustainable Forestry Initiative (SFI®) (18)
  - Program for the Endorsement of Forest Certification (PEFC) (17)
  - Canadian Standard Association (CSA) (19)
- Electricity generated from renewable resources, Green-e® logo by the Center for Resource Solutions (35)
- Environmental management system standard (ISO 14001, Eco-management Audit Scheme or EMAS) (27,28)
- Occupational health and safety standard (OHSAS 18001) (36)
- Eco-labels for overall environmental performance (EU Eco-label, Ecologo - Canada) (37,38)
- Reporting standard (EMAS, Global Reporting Initiative) (39)

In some cases, eco-labels can be applied to the final products, and in other cases claims can be made as long as they are factual and verifiable. For example: "This paper was manufactured at a mill facility that has an ISO 14001 certified environmental management system." Paper scorecards such as the ones listed in Section 2 will often award points for being certified under the above schemes.

3.6.1 SUGGESTED POLICY TEXT

We will only use environmental labels and claims that are factual and verifiable to demonstrate our environmental commitment to sustainable paper procurement.

3.7 Social responsibility

Companies typically outline their position on social matters through written codes of conduct, policies and procedures. Corporate social responsibility is made up of many elements that can be divided into the following broad categories (40):

- Corporate citizenship/philanthropy
- Labor practice indicators (e.g., labor and human rights)
- Human capital development (e.g., human resource practices, non-discrimination/diversity, equal remuneration male/female, talent attraction & retention, layoffs)
- Social reporting (e.g., occupational health & safety, stakeholder impacts, needs of local communities and indigenous people)

In the forest industry sector, health and safety performance is one of the most important elements of social responsibility. To manage and reduce health and safety risks, companies have developed and implemented occupational health & safety management systems, such as the one described by the OHSAS 18001 standard (36).

The business integration of the following standards and guidelines is also a good indicator that social responsibility is being considered:

- UN conventions such as The UN Universal Declaration of Human Rights (41)
- ILO convention on human rights (42)
- AA1000 AccountAbility Principles Standard (43)
- SA8000 International standard for social accountability (44)
- The World Bank Equator Principles (45)

3.7.1 SUGGESTED POLICY TEXT

We will require our suppliers to report on corporate social responsibility initiatives and evaluate their engagement using our paper scorecard system.

3.8 Reporting

Open and transparent environmental reporting is a sign of sustainability leadership. Annual environmental or sustainability reports are produced by many companies, either at the facility level, corporate level, or both. Guidelines of the Global Reporting Initiative (GRI) are often cited as a standard for sustainability and environmental reporting (39). Third party independent verification of reports can add credibility to reporting initiatives, as done under GRI and EMAS (28). External accredited auditors can also be hired to certify specific studies or reporting initiatives such as, for example, greenhouse gas inventories.

In addition to annual reports, sustainability information can also be reported on a voluntary basis to outside organizations that will rank companies based on their sustainability performance and/or reporting. As an example, these include:

- Carbon Disclosure Project (46)
- Forest Footprint Disclosure Project (47)
- Dow Jones Sustainability Indexes (40)
- FTSE4Good Index Series (48)
- UN Global Compact Initiative and United Nations CEO Water Mandate (49,50)

3.8.1 SUGGESTED POLICY TEXT

We will consider annual sustainability reports and voluntary reporting initiatives by our paper suppliers, as a tool to gauge engagement in sustainability matters.

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Sappi Fine Paper North America is providing the sample policy texts in this *eQ Insights* to stimulate discussion and thought on these issues. These sample policies are not necessarily suitable for all situations. Before implementing any of these sample policies, readers are strongly encouraged to consider their individual legal, procurement, financial, and accounting situations and needs, and to consult with their own legal and other professional advisors.

All web links validated as of April 11, 2011

We invite you to share your thoughts so that we can all benefit from innovative thinking and best practices. For questions and comments on this document, please email us at eQ@sappi.com.