FOREST PRODUCTS
WORKING GROUP

GREENBLUE®

GUIDELINES FOR
SUSTAINABLE
PAPER PRODUCTS

VERSION 1.0

600 East Water Street, Suite C
Charlottesville, VA 22902
tel 434.817.1424 | fax 434.817.1425
www.greenblue.org | info@greenblue.org

a publication of GREENBLUE®

© 2013 GreenBlue

Table of Contents

Introduction

The world's forests support our environment, our economy, and our quality of life. They enhance biodiversity, provide clean air and water, preserve watersheds and estuaries, and significantly reduce the atmospheric concentration of greenhouse gases. Healthy forests also support a robust forest products industry, which provides nearly 1 million jobs in the United States and contributes $175 billion to the U.S. Gross Domestic Product (American Forest & Paper Association, 2012).

The Forest Products Working Group – a project of GreenBlue® – is a cross-industry collaboration with the goal of developing innovative solutions to support thriving forests and a thriving forest products industry. *The Guidelines for Sustainable Paper Products*, which were developed by GreenBlue staff and Forest Products Working Group members, are a statement of our core values. They articulate a common language and a framework for taking practical, profitable steps toward sustainability in the paper products industry.

As a whole, the Guidelines are intended to equip companies with the information they need to effectively evaluate the sustainability of their operations, identify opportunities for profitable improvement, and integrate life cycle thinking and sustainability criteria into business strategies. Ideally, informed corporate actions will create safe and profitable closed-loop flows of valuable materials, making the paper products industry an influential contributor to global sustainability.

How to Use the Guidelines

The Forest Product Working Group's approach to corporate sustainability is to bring together stakeholders across the supply chain to address unmet needs in the forest products sector. This approach wholly depends on a common language and foundation. According to a recent MIT / Sloan Management Review study, one of the most significant barriers to corporate action on sustainability is that "companies do not share a common definition or language for discussing sustainability—some define it narrowly, some more broadly, others lack any corporate definition" (Berns, et al., 2009). The Guidelines are intended to address this barrier by providing a widely shared definition of a "sustainable paper product," one that shapes and sustains mutual objectives and specific actions that will support environmental quality throughout the paper supply chain.

The Forest Products Working Group — a project of GreenBlue® — brings together leading companies that rely on paper, wood, and other forest products to share their knowledge and develop innovative solutions to support thriving forests and a thriving forest products industry.

The Guidelines

The Guidelines are not intended to *replace* any business's values, objectives, or actions. They are meant to be a touchstone and a source of credible information that may be used by companies, individually and collaboratively, to inform and support sustainability strategy. It is worth repeating: informed, responsive corporate actions are a catalyst of profitable innovation and long-term growth – they are good for forests and good for business.

Scope

The Guidelines were developed with an emphasis on North American practices; however, the criteria outlined in this document are applicable to all geographic locations. At the level of actionable strategy, they apply to every stage of the paper life cycle, with an emphasis on pulp and paper manufacturers, printers, merchants, and brand owners, and are of particular relevance to newsprint, printing and writing paper, and tissue.

Based on life cycle thinking, the Guidelines envision a paper products industry in which every product is designed to be safe and healthy for individuals and communities throughout its life cycle; sourced responsibly; manufactured, transported, and recycled using clean technology and renewable energy; and, after use, effectively recovered and recycled to provide a valuable resource for the next generation of products.

Sustainability is a journey. Accordingly, the guidelines are designed to be a living document that the Forest Products Working Group will update as information, industry breakthroughs, new thinking, and sustainability concerns evolve.

The Guidelines apply a life cycle approach to paper products, identifying ideal actions at each phase of the paper life cycle, all of which contribute to sustainability. Each of the following eight Guidelines includes questions to consider when pursuing sustainability goals.

Design for the life cycle

Source responsibly

Ensure material health

Optimize renewable energy

Embrace transparency

Use clean production technologies and best practices

Effectively recover and utilize

Create social and economic value

Design for the Life Cycle

Life cycle thinking takes a holistic approach to understanding impacts from products and product innovation. Designing for the life cycle is about understanding how innovation at one phase effects every other life cycle phase. It is intended to avoid burden shifting and result in true process advancements.

The paper life cycle presents a unique and complex series of design questions, encompassing forest conservation, climate change, water stewardship and globalization, among many others. The design process for paper products, then, starts in the forest and works its way out, including in its scope everything from the source of fiber to the fuel efficiency of delivery trucks and the value of recovered paper. Included in that wide-angle view are careful considerations of performance, safety, cost effectiveness, and consumer behavior, as well as a product's environmental and social effects, such as its cumulative energy use, and the ways in which it meets people's needs or preserves the natural world.

The design phase sets principled action in motion, using life cycle thinking to identify strategic, meaningful steps toward sustainability. The actions the Guidelines suggest offer opportunities to generate measurable improvements along the entire value chain, optimizing sourcing, material health, manufacturing, product quality, and end of life options. Through continuous improvement at each phase, the forest products industry can lead change toward sustainability, creating products that are beneficial, safe and healthy for individuals and communities throughout their life cycles.

Questions to consider when designing for the life cycle:

- Is there coordination throughout the entire supply chain?

- Is there transparent communication with vendors, buyers, suppliers, etc.?

- Has a life cycle assessment been performed for this product?

- Does the final product inhibit responsible sourcing, manufacturing, use, or end of life in any way?
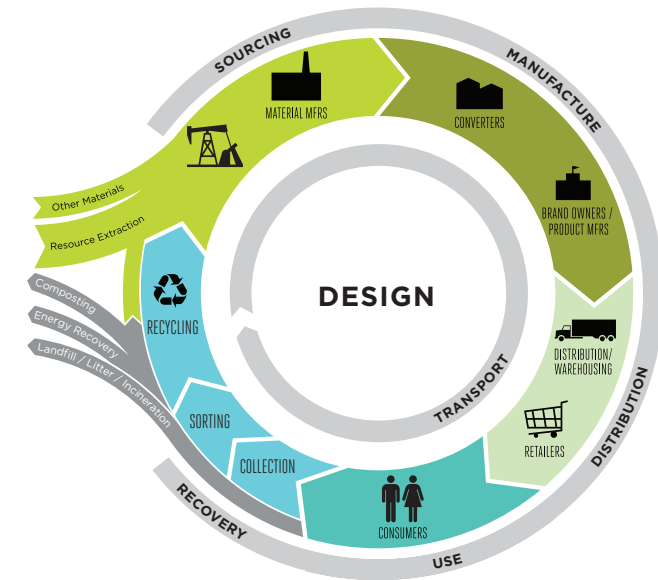
Figure 1 GreenBlue Illustration: implementing life-cycle thinking to make products more sustainable

Source Responsibly

Companies choosing paper products with virgin or recycled content have many options and environmental trade-offs to consider. Recycled paper has well-known environmental benefits, and as a result, the assumption is often made that recycled paper should replace virgin in every instance. This is not possible, however, because there is a finite amount of recovered paper available for recycling, virgin fiber inputs will always be needed to maintain production, and the use of recovered paper in certain grades is more efficient than in others. Understanding these realities, a company pursuing sustainability will identify the most responsible source for their products.

In the paper products industry, companies with responsible sourcing policies procure fiber from recycled sources or sustainably managed forests. Tools such as forest certification, life-cycle analysis, and chain-of-custody certification can be used to verify the origin, provenance, and environmental profile of paper products, tracing them from one sustainable supplier to another, back through the supply chain. Taken to scale, responsible sourcing encourages environmentally sound forestry, helps establish sustainable material flows, and preserves valuable resources for future generations.

Responsible Forest Management

The United Nations Food and Agricultural Organization (UN FAO) defines responsible forest management as "the stewardship and use of forests and forest lands in a way, and at a rate, that maintains their biodiversity, productivity, regeneration capacity, vitality and their potential to fulfill, now and in the future, relevant ecological, economic and social functions, at local, national, and global levels, and that does not cause damage to other ecosystems" (Food and Agriculture Organization of the United Nations, 2011).

Well-managed forests provide plentiful environmental, social, and economic benefits. Healthy forests provide clean air and water, maintain soil quality, preserve biodiversity and habitats, and sequester CO_2, among many other ecosystem services. They provide a reliable and sustainable supply of the raw materials that support the forest products industry, a source of quality products, meaningful employment, and economic development. Each of these is also a social benefit, and the standards that guide sustainable forestry are meant to extend them throughout the value chain, from retail customers to the workers and communities who depend directly on forest resources for their livelihoods.

Certified Forests and Fiber

Forest certification, a third-party evaluation system, is designed to encourage sourcing from responsibly managed forests. Forest certification organizations, such as the Forest Stewardship Council (FSC) and the Sustainable Forestry Initiative (SFI) set robust, verifiable standards for sustainable forestry. Compliance with laws and treaties, respecting the property rights of indigenous people, conserving biodiversity and ecological integrity, and enhancing economic efficiency are a few of the oft-cited principles of responsible forest management. Forest operations seeking certification are monitored by independent auditors, who formally recognize those that satisfy the stewardship requirements. Certification makes responsible sourcing possible, providing assurance to consumers and supply chain partners that virgin fiber has been sustainably sourced and directly supports responsible forestry.

Responsible sourcing improves sustainability at all levels of the supply chain.
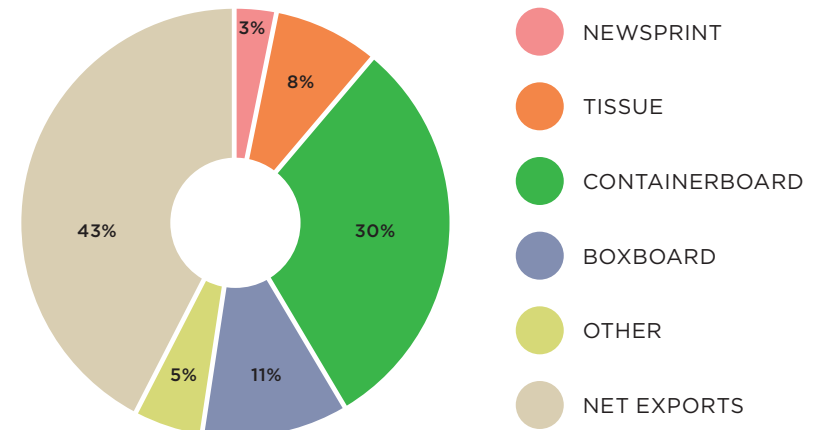
Source Responsibly

Along with FSC, the Program for the Endorsement of Forest Certification Schemes (PEFC) is the most prominent certification system. PEFC is an umbrella organization that endorses national forest certification programs, including the Sustainable Forestry Initiative (SFI) and the American Tree Farm System. As of May 2012, FSC and PEFC had endorsed 394 million hectares globally. Roughly 9% to 12% of the world's forests are certified under a third-party system. Just over half of all certified forest area is found in North America (United Nations Economic Commission for Europe and Food and Agriculture Organization of the United Nations, 2012).

With only a fraction of global forests certified, certified paper that meets quality and cost requirements may sometimes be scarce. To meet responsible sourcing objectives, companies purchasing from uncertified suppliers should seek transparency throughout the fiber supply, being sure to avoid sources linked to illegal logging or controversial forestry practices. At a minimum, sourcing should be in compliance with the criteria outlined in laws such as the U.S. Lacey Act and the European Timber Regulation (Forest Legality Alliance, 2009).

Chain-of-custody certification ensures the transparency of the supply chain, tracing processed finished products and co-products from forest to consumer, or, in the case of reclaimed/recycled materials or products containing them, from the reclamation site to the consumer. It traces each change of independent custodianship beginning with raw fiber and extending through the processing, transformation, manufacturing, storage, and transport of forest products.

Figure 2 Recovered fiber applications (paperrecylces.org, 2011)

NEWSPRINT

TISSUE

CONTAINERBOARD

BOXBOARD

OTHER

NET EXPORTS

With only a fraction of global forests certified, certified paper that meets quality and cost requirements may sometimes be scarce.

Source Responsibly

Recycled Fiber

Recycling paper has numerous important environmental benefits, which is why every effort should be made to recover paper and return to the paper fiber life cycle. The benefits of sourcing and effectively using recovered paper fiber includes helping to extend a valuable fiber supply worldwide, reducing greenhouse gas emissions released to the atmosphere by avoiding emissions from landfills, and saving substantial space in already overcrowded landfills. There are many uses for recovered paper and it is far too valuable a resource to waste.

There is a robust market for paper products with high recycled content. More than three-quarters of the paper mills in the U.S. now use recovered fiber, and approximately 113 mills use recovered paper exclusively (American Forest & Paper Association, 2012). The demand is driving improvements in fiber recovery. According to the American Forest & Paper Association (AF&PA), 66.8 % of paper consumed in the US – roughly 54 million tons – was recovered for recycling in 2011. In 2012, the AF&PA set a goal to increase the recovery rate to 70 percent by 2020 (American Forest & Paper Association, 2012).

These are promising improvements, but supply is not meeting demand. Not all recovered paper generates usable fiber and some is discarded during reprocessing. Global markets also compete for recovered fiber. In 2011, the US exported more than 23 million tons, roughly 42% of the total paper recovered (Industry Intelligence, 2012).

The limited supply puts a premium on sourcing recycled fiber. The constraints of recycled fiber applications; the longevity of fiber by grade; the additional costs of collecting, sorting, and transporting recovered fiber; and the limited capacity to de-ink, bleach, and pulp it into certain grades of paper all influence best-use. These factors also help determine whether virgin or recycled fiber is the most fitting choice for a particular paper product.

Questions to consider for responsible sourcing:

- What is the percentage of pre-consumer and post-consumer content?

- Has virgin fiber been certified by a credible third-party system?

- Does the product follow a Chain–of–Custody protocol?

- Has the product been evaluated for originating from high conservation value forests?

- Is recovered fiber being optimally used to balance performance, cost, and impacts?

Ensure Material Health

All companies should select and specify the safest materials available to meet performance requirements. Tracking legislation, material bans, and substances of concern identifies compliance issues and minimizes risk. Increasingly, material health is a criterion of product quality and many innovative companies are striving to drive product design beyond compliance toward sustainability.

Making an environmentally safe product requires a thorough assessment of its material chemistry, which has implications across the value chain. Identifying and eliminating problematic chemicals in the design phase sets a positive course for the life of the product. It helps ensure clean manufacturing, and protects human and environmental health throughout its life cycle. Eliminating chemicals of concern often requires a suitable alternative to be available. Alternatives must be considered and tested with the same rigor to confirm material safety.

Material health evaluations scientifically assess the presence or release of harmful substances through production, use, and end-of-life. Evaluating the chemistry of recycled content and ancillary applications such as ink and coatings is particularly important. Chemicals and compounds used for forest management and paper manufacturing operations can also have material health implications.

Questions to consider for ensuring material health:

- Do product and manufacturing operations comply with applicable regulations and relevant restricted substance lists?

- Are there known or suspected carcinogens, mutagens, reproductive toxins (CMRs), or persistent bioaccumulative and toxic substances (PBTs), found in the product or used in this product's life cycle?

- Are there viable replacements for substances of concern that are identified in products or processes?

Optimize Renewable Energy

Integrating renewable energy into sourcing, manufacturing, transporting, and recycling will advance and reinforce the sustainability of the paper products industry. The transition has already begun, with biofuel feedstock (fuel produced from organic matter of combustible oils produced by plants) and other renewable sources meeting nearly two-thirds of the industry's energy demand.

Solar, wind, hydroelectric, biofuels, tidal, and geothermal sources of energy can power economic growth while reducing the social and environmental burdens of fossil fuels. Many companies, in fact, are developing strategies for a successful transition to a low – or zero-carbon economy.

The wide-scale use of fossil fuels is a principal factor contributing to numerous local, regional, and global environmental issues, including climate change, acidification, mercury deposition, photochemical ozone, particulates, and the severe local impacts of mining or drilling. The finite supply of fossil fuels further undercuts its sustainability.

The benefits are substantial and include reductions in greenhouse gas emissions and other airborne pollutants that pose regulatory and financial risks, and strengthen relationships with customers, local communities, and shareholders (World Resources Institute and The Climate Group, 2007).

Questions to consider for optimizing renewable energy:

- What actions have been taken to improve the energy efficiency of facilities, manufacturing processes, and transportation fleets?

- Is renewable energy purchased directly from providers or via Renewable Energy Certificates, which support renewable energy development when local sources are unavailable?

- Is renewable energy produced on-site, using solar, wind, geo-thermal, or bio-based technologies?

- Can renewable energy complement your strategy to achieve goals around cumulative energy demand?

There is a robust market for paper products with high recycled content. More than three-quarters of the paper mills in the U.S. now use recovered fiber, and approximately 113 mills use recovered paper exclusively.

Embrace Transparency

Sharing data on forestry practices, fiber origins, manufacturing performance, and material health with supply-chain partners helps develop sustainable material flows. Collaborative networks can advance environmental quality, identify opportunities for innovation, and connect new products to existing markets.

Buyers and sellers of paper products are encouraged to evaluate, and publicly report, the environmental performance data of the entire supply chain. Reporting enhances accountability, builds trust, and helps to benchmark and track efficiency gains within production flows. Choose a reporting mechanism that includes comprehensive metrics and standardized data gathering methodologies, such as ISO or ASTM International standards, with a purchasing framework that considers life-cycle impacts, including mill-level data for energy and water use, end-of-life options, certified forest management, human health and safety, and other performance indicators.

The Environmental Paper Assessment Tool (EPAT)® is one such mechanism. Managed by GreenBlue, EPAT is a material-specific assessment that offers a shared reporting format for communication between buyers and sellers of paper. The data collected from the assessment supports sustainable sourcing, manufacturing, purchasing, and selling (GreenBlue, 2013). When all supply chain partners have access to information on the environmental performance of a product, decision-makers can confidently take steps to improve sustainability.

Questions to consider for embracing transparency:

- Is there compliance with industry standards?

- What credible reporting mechanisms have been adopted (Global Reporting Initiative, Carbon Disclosure Project, etc.)?

- Is there independent verification for certifications and legal compliance?

- Has sustainability information been reported publicly?

Use Clean Production Technologies and Best Practices

Companies and suppliers that meet best-practice standards for responsible production and worker safety link manufacturing performance to sustainability. That is, clean production is good for people, the planet, and profit. By responding to environmental and human health concerns, a business that uses clean technology achieves multiple goals. It minimizes risks, improves environmental performance and compliance, and enhances product quality, all of which boost long-term profitability.

Clean production refers to the continuous application of "an integrated preventive environmental strategy to increase overall efficiency and reduce risks to humans and the environment" (United Nations Environmental Programme, n.d.). It includes better management and housekeeping as well as process modifications that conserve raw materials, water, and energy; eliminate toxic and dangerous raw materials; and reduce the quantity and toxicity of all emissions and waste at their source.

Clean production can be adopted in a single mill or a family of mills. Though the initial investment may raise cost concerns, process improvements can be incremental and bring higher returns overtime. These may be small steps, but technological advancements are steadily reducing the environmental impact of manufacturing in many industries, and as these technologies evolve, they should continue to be integrated into paper manufacturing.

Questions to consider for using clean production technologies and best practices:

- Have life cycle assessments been conducted?

- What is the level of monitoring for emissions (air, water, soil)?

- How is wastewater management handled?

- Is it made in compliance with all applicable water and air quality regulations and laws?
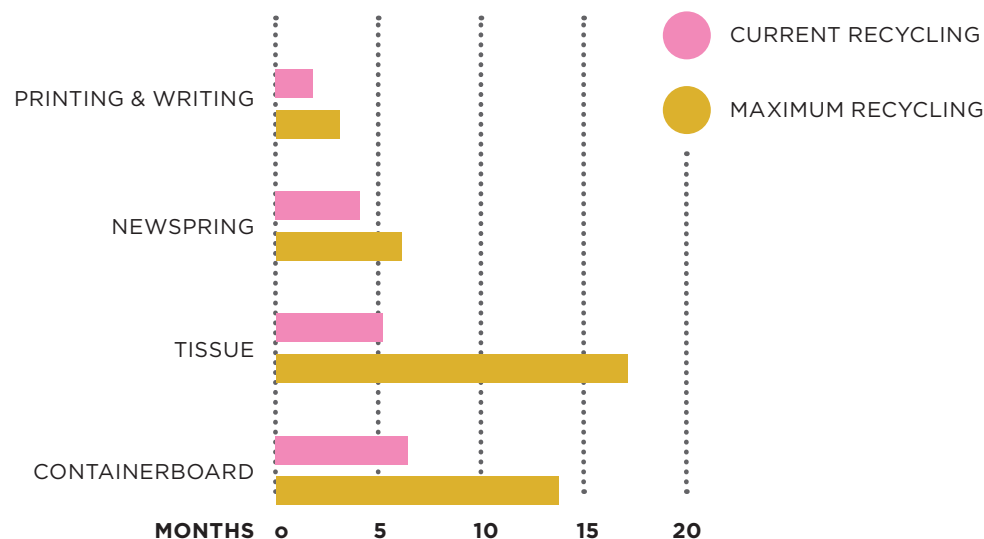
Effectively Recover and Utilize

Paper products, at end-of-life, carry embodied value as well as the cumulative environmental impacts of upstream decisions. Effective recovery, including re-use, preserves embodied value, providing resources for the next generation of paper products. A systems approach to recovery can significantly improve the supply of re-usable paper fiber and bring order and coherence to material flows.

Coherent paper recovery systems are built upon coordinated, strategic actions at many phases of the life cycle. Among many factors, effective and profitable material flows depend on products' material and technical specifications; clear labeling; consumer education; standardized collection infrastructure; investment in efficient processing technology; and support from retailers, consumers, and municipalities.

Static recovery rates suggest the scope of the challenge. While paper recovery in the US is above 60 percent, corrugated boxes make up a significant percentage of the recycling flow, while many writing and packaging grades are below this rate (American Forest & Paper Association, 2012; U.S. Environmental Protection Agency, 2011). In addition, the amount of recovered paper is not directly equivalent to the amount of recovered fiber available for re-use and some is lost in re-processing. A variety of recycling platforms and inconsistent recovery policies across jurisdictions adds to the challenge.

Biological recovery and technical recovery are established methods of product recovery. Biological recovery captures the embedded nutrient value of bio-based materials through managed composting and anaerobic digestion. Engineered systems recapture the value of technical, man-made materials. Technical recovery can be extended to include energy recovery, which should be considered a viable alternative when recycling is not a feasible option. Ideally, biological and technical recovery closes the loop on material flows. Looking ahead, there are tremendous opportunities to capture value in the fiber life cycle.

Longevity Using Only Recycled Fiber By Grade

Figure 3 Metafore study "The Fiber Cycle in the United States and Canada" (2006)

Questions to consider for effective recovery and utilization:

- Are end-of-life flows for internal operations being monitored?

- What is the pre-consumer and post-consumer content utilization?

- Is proper product disposal effectively communicated?

Create Social and Economic Value

Paper products provide extraordinary benefits to society. Nearly 400,000 people in the US alone are employed by the industry (American Forest & Paper Association, 2012). The world communicates, prints, and conducts business on paper. Books and packaging, reading and writing, health and comfort; there is purpose and profit in being sure those goods and services are available to future generations.

The companies that take on that challenge – that source, produce, and sell a full range of sustainable paper products – will thrive. By embracing the principles of sustainability and embedding them in business practice, agile businesses will improve quality, performance and profitability – essential components of sustainable development. The result: safe, healthful products that generate value for companies, customers, and communities throughout their life cycle - shared value.

As sustainable business scholars Michael Porter and Mark Kramer have written:
"At a very basic level, the competitiveness of a company and the health of the communities around it are closely entwined. A business needs a successful community, not only to create demand for its products but also to provide critical public assets and a supportive environment. A community needs successful businesses to provide jobs and wealth creation opportunities for its citizens…The result is a positive cycle of company and community prosperity, which leads to profits that endure"
(Kramer & Porter, 2011).

Value creation, then, is about "expanding the total pool of economic and social value." The Guidelines are intended to deepen and sustain it.

Each represents a business opportunity and an opportunity to build and support successful communities, from those that depend of forests for their livelihood to those shaped and supported by paper products companies. Creating shared value throughout the paper life cycle, harmonizing actions and strategies along the supply chain, will protect our forests and support a thriving forest products industry.

Questions to consider for creating social and economic value:

- Are labor and human rights laws followed?

- Are human health and safety laws followed?

- Is a company engaged in community investments?

- Does a company effectively engage with stakeholders?

Glossary of Terms

Alternative fiber: Referred to as any non-wood fiber that can be used as material for paper products. These fiber materials are also called "tree-free" and consist of fiber sources often grown as a primary crop (kenaf and hemp) and agricultural residues (wheat straw and bagasse).

Biofuel: Fuel produced from organic matter of combustible oils produced by plants. Examples of biofuel include alcohol, black liquor from the paper-manufacturing process, wood, and soybean oil.

Biological diversity: The variety of living organisms from all sources including terrestrial, marine and other aquatic ecosystems, as well as the ecological complexes of which they are part. This includes diversity within species, between species, and of ecosystems.

Biomass: The total mass of living organisms in a given area or volume.

Carbon Sequestration: The various processes through which carbon is removed from the atmosphere and stored in soil, biomass, geological formations, and oceans.

Certified Forest Management: A third-party evaluation system that sets, and measures compliance with, sustainable forestry standards.

Chain of Custody (CoC): The systematic tracking of wood-based products from their origin in the forest to their end use, demonstrated through chronological documentation or paper trail.

Deforestation: The permanent clearing of forest for other uses such as agriculture and urban development.

Life cycle: Consecutive and interlinked stages of a product system, from raw material acquisition or generation from natural resources to final disposal.

Life cycle assessment (LCA): Compilation and evaluation of the inputs, outputs, and the potential environmental impacts of a product system throughout its life cycle.

Newsprint: Uncoated paper used for the printing of newspapers, traditionally made from a furnish containing at least 65% mechanical pulps, unsized or very lightly sized having a smoothness on each side not exceeding 200 seconds Bekk, weighing not less that 40g per square meter and not more than 65g per square meter, and having an ash content by weight not exceeding eight percent. This does not include printing papers of types generally used for purposes other than newspapers, such as mechanical printing papers for catalogs, directories, inserts, etc.

Paper: The name for all kinds of matted or felted sheets of fiber (usually vegetable, but sometimes mineral, animal, or synthetic) formed on a fine screen from a water suspension. Paper derives its name from papyrus, a sheet made by pasting together thin sections of an Egyptian reed (Cyperus papyrus) and used in ancient times as a writing material. Paper and paperboard are the two broad categories of paper. Paper is usually lighter in basis weight, thinner, and more flexible than paperboard. Its largest uses are for printing, writing, wrapping, and sanitary purposes, although it is employed for a wide variety of other uses.

Paperboard: Paperboard is heavier in basis weight, thicker, and more rigid than paper. Sheets 12 points (0.012 inch) or more in thickness are classified as paperboard. There are exceptions. For example, blotting papers, felts, and drawing paper in excess of 12 points are classified as paper, while corrugating medium, chipboard, and linerboard less than 12 points are classified as paperboard.

Paper Products: As defined in *The Guidelines for Sustainable Paper Products*: newsprint, printing and writing, tissue, and paperboard.

Printing and Writing Papers: Coated or uncoated paper used primarily for the purpose of printing, writing, or other type of communications. This includes bristols manufactured for non-packaging uses but does not include newsprint.

Pulp: Fibrous material prepared from wood, cotton, grasses, etc., by chemical or mechanical processes for use in making paper or cellulose products.

Recovered content: A measure of how much recycled material is in the paper. This includes both pre- and post-consumer recycled content. It also includes agricultural residues (left-over material from an existing agricultural land use such as wheat straw) that may also be used as fiber input.

Recycled fiber: Cellulose fiber reclaimed from waste material and reused, sometimes with a minor portion of virgin material, to produce new paper.

Supply chain: The different steps (from tree harvesting to product distribution) that wood and paper-based products go through, from harvest to end product.

Tissue: Includes sanitary grades, such as toilet, facial, napkin, toweling, sanitary napkins, wiper and special sanitary papers, waxing, wrapping, wadding, and miscellaneous grades.

Bibliography

40 CFR Part 503.14. 2012. TABLE 3 OF § 503.13—POLLUTANT CONCENTRATIONS. (2012). Retrieved from http://www.gpo.gov/fdsys/pkg/CFR-2012-title40-vol31/pdf/CFR-2012-title40-vol31-chapI-subchapO.pdf

American Forest & Paper Association. (2012, December). *Brochure - Sustainability Highlights.* Retrieved 2013, from American Forest & Paper Association: http://www.afandpa.org/sustainability

American Forest & Paper Association. (2012). *Our Industry*. Retrieved 2013, from American Forest & Paper Association Web Site: http://www.afandpa.org/our-industry/economic-impact

American Forest & Paper Association. (2013). *Recovery and Use of Old Corrugated Containers (OCC)*. Retrieved 2013, from Paperrecycles: http://paperrecycles.org/stat_pages/recovery_use.html

Berns, M., Townend, A., Khayat, Z., Balagopal, B., Reeves, M., Hopkins, M., et al. (2009). *The Business of Sustainability: Findings and insights from the first annual business of sustainability survey and the global thought leadres' research project*. Massachusetts Institute of Technology.

European Commission. (2001, December). *Integrated Pollution Prevention and Control. Reference Document on Best Avaialble Techniques in the Pulp and Paper Industry*. Retrieved June 13, 2011, from European Commission: ftp://ftp.jrc.es/pub/eippcb/doc/ppm_bref_1201.pdf

Food and Agriculture Organization of the United Nations. (2011, July 6). *Towards sustainable forest management*. Retrieved 2012, from Food and Agriculture Organization of the United Nations website: http://www.fao.org/forestry/sfm/en/

Forest Legality Alliance. (2009). *Forest Legality Alliance U.S. Lacey Act*. Retrieved 2012, from Forest Legality Alliance: http://www.forestlegality.org/laws-policies/lacey-act

GreenBlue. (2013). *About EPAT*. Retrieved 2013, from Environmental Paper Assessment Tool: www.epat.org

Industry Intelligence. (2012). *i2dashboard*, Benchmark: US Recovered Paper Exports. Retrieved 2013, from Industry Intelligence: http://www.industryintel.com/i2dashboard

International Finance Corporation. (2013). *IFC Footprint Commitment*. Retrieved 2013, from International Finanace Corporation Web site: http://www1.ifc.org/wps/wcm/connect/Topics_Ext_Content/IFC_External_Corporate_Site/FP_Home/Environment/Environment_PaperPrinting/

Kramer, M., & Porter, M. (2011). Creating Shared Value. *Harvard Business Review*.

U.S. Environmental Protection Agency. (2011, November). *Municipal Solid Waste in the United States: Facts and Figures*. Retrieved December 2011, from US EPA: http://www.epa.gov/osw/nonhaz/municipal/pubs/msw_2010_data_tables.pdf

United Nations Economic Commission for Europe and Food and Agriculture Organization of the United Nations. (2012). *Forest Products Annual Market Review 2011-2012*. New York: United Nations.

United Nations Environmental Programme. (n.d.). *Resource Efficient and Cleaner Production*. Retrieved 2013, from United Nations Environment Programme Sustainable Consumption and Production Branch: http://www.unep.fr/scp/cp/

World Resources Institute and The Climate Group. (2007, October 2). *The Climate Group Green Power Market Development Group - Europe: Brochure*. Retrieved 2012, from The Climate Group: http://www.theclimategroup.org/_assets/files/wri_gpbrochureeurope-p9b.pdf