Memorandum

MIAMI-DADE COUNTY

Date: December 1, 2009

Agenda Item No. 12B3

To: Honorable Chairman Dennis C. Moss
and Members, Board of County Commissioners

From: George M. Burgess
County Manager

Subject: Report Regarding Miami-Dade County's "Buy Green" Purchasing Guide

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Sustainability is meeting the needs of current generations without compromising the ability of future generations to meet their own needs. As the County population grows, it becomes increasingly important to maintain a high quality of life for residents and to protect natural resources. To ensure a healthy environment for residents and visitors alike, the County has launched many programs and projects to improve sustainability.

The County has been a leader in field of sustainability since the 1990s. These efforts include a commitment to purchasing environmentally preferred products and services. Environmentally preferred procurement means purchasing materials, products, and services in a manner that integrates fiscal responsibility, social equity, and environmental stewardship. The State of Florida enacted legislation in 1988 requiring "Any State agency or agency of a political subdivision of the State which is using State funds... to procure products or materials with recycled content when those products or materials are available at reasonable prices" (Section 403.7065 of the Florida Statutes). The objective of the state legislation was to develop a guide that encourages waste minimization.

In April 2003, the Board adopted Resolution R-374-03, establishing a County policy favoring waste-reduction, environmentally based promotional activities and purchasing of commodities containing recycled or recyclable content. The resolution also reestablished the Recycling Management Committee as the Miami-Dade Resource Conservation Committee. Implementation of a Buy Green purchasing guide will build on the work of these programs, helping the County meet and exceed the goals of sustainability.

Green purchasing programs are not only environmentally friendly, but are often cost effective and improve productivity. Numerous municipalities, counties, states, and the federal government have developed environmentally preferred purchasing policies. Private sector organizations are also leading the way in green sourcing initiatives throughout the supply chain. These entities made a strong commitment to the environment and have realized related savings. The benefits are visible in both direct and indirect savings/benefits:

- King County in Washington State realized a savings of over $837,000 in 2008 by purchasing over $54 million dollars in "green" products and services.
- Lee County, Florida, eliminated hazardous waste production in its fleet maintenance facilities and is saving $17,000 annually.

- Santa Monica, California, switched to "green" cleaning products, eliminating 3,200 pounds of hazardous materials and reducing cleaning costs by five percent.
- Green purchases saved the Commonwealth of Massachusetts at least $544,362 in Fiscal Year 2001; representing more than three times the cost of managing the program.
- Northrop Grumman, a private sector provider of security and military equipment, noticed a 1-2% drop in employee absenteeism and a higher employee retention rate after changing to third party certified, non-toxic janitorial chemicals for their cleaning services contracts. This effort was cost-neutral.

These short-, mid-, and long-term economic, health, and environmental benefits or savings are positive and are highly desirable benefits of a concerted Green purchasing enterprise initiative.

The establishment of a "Buy Green" purchasing guide will provide guidelines and procedures to facilitate environmentally friendly purchasing. This guide is also consistent with Board Resolution R-1053-09, favoring the purchase of green products and services for the County.

The key goals for the Buy Green guide are to:

⇒ reduce greenhouse gas (GHG) emissions to combat climate change,
⇒ decrease the use of hazardous materials to improve community and environmental health, and
⇒ decrease waste and inefficiencies in electricity, fuel, paper, water, and other consumption to relieve pressure on natural resources.

The County will advance in achieving these goals by implementing the "Buy Green" purchasing guide. The guide's purpose shall be to:

- purchase products and services that reduce greenhouse gas emissions, are durable and long-lasting, include recycled content and plant-based, organic material, use unbleached or chlorine free manufacturing processes, and are lead-free, asbestos-free, and mercury-free
- purchase products and services that reduce hazards to worker and community safety and minimize environmental impacts, toxics, and pollution
- procure products and services that help the County reduce waste and increase the efficiency and effectiveness of the County's consumption of water, fuel, paper, electricity, and other resources
- implement procurement evaluation practices that consider full life-cycle impacts of the commodities and services purchased

Adopting a "Buy Green" procurement guide and an affirmative procurement program will reduce the amount of waste generated and will increase the overall demand for environmentally preferred products. The County will also benefit from improved employee and public health, reduction in energy consumption and GHG emissions, improved air and water quality, and conservation of natural resources. The development and implementation of a comprehensive Buy Green purchasing guide will serve as a model for other public entities and private sector companies.

Buy Green Guide Details

Most significantly, the guide requires environmental screening during solicitation development and prior to exercising any renewal to determine the availability of environmentally preferable alternatives. If environmentally preferable alternatives are available, the specifications may include both the traditional and green options.

Additionally, the guide identifies and defines commonly accepted environmental certifications for use in clearly identifying environmentally preferred products. The guide also emphasizes the importance of considering additional environmental attributes in making purchases.

The DPM Director shall develop and implement this guide for countywide purchasing. DPM will incorporate education into existing procurement training for County staff involved in the procurement process regarding the value of green purchases and environmentally preferable purchasing methods. Additionally, DPM will conduct vendor outreach to encourage contractors to provide green products and services.

Fiscal Impact

"Green" or environmentally-preferred products and services have less negative impacts on human health and the environment in comparison with competing products or services that serve the same purpose. In the long-term, many green products and services are more cost-effective than their conventional counterparts. Total cost of ownership analysis shows that environmentally preferred products and services can provide savings at different stages in the lifecycle:

- At time of purchase – remanufactured cartridges cost approximately 10% less
- During operation – Energy Star technology can save up to 75% in energy costs
- Over a product's lifetime – refillable pens, rechargeable batteries and bulk-packaged products end up costing much less than single-use disposables

Attachment

Assistant County Manager

MIAMI-DADE COUNTY
BUY GREEN
PURCHASING GUIDE

PURPOSE

This guide is established to provide environmentally preferable purchasing guidelines that support the County's progress towards comprehensive sustainability. The key goals of this guide are to:

- Reduce greenhouse (GHG) emissions to combat climate change
- Decrease the use of hazardous materials to improve community and environmental health
- Decrease waste and inefficiencies in resource use such as electricity, fuel, and water consumption in order to relieve pressure on natural resources.

To meet these goals, the County shall:

- purchase products and services that reduce greenhouse gas emissions, are durable and long-lasting, include recycled content and plant-based, organic material, and use unbleached or chlorine free manufacturing processes
- purchase products and services that reduce hazards to employee and community safety and minimize environmental impacts, toxics, and pollution
- procure products and services that reduce waste and increase the efficiency and effectiveness of the County's consumption of water, fuel, paper, electricity, and other resources

IMPLEMENTATION AND RESPONSIBILITIES

Department of Procurement Management (DPM)

- The DPM Director shall implement this guide in coordination with other DPM and client department personnel.
- DPM shall implement this guide in concert with the requirements of AO 11-3, Life Cycle Costing Procedure.
- DPM shall implement this guide in concert with the requirements of AO 8-8, Sustainable Buildings Program.DPM internal procedures shall reference this guide and incorporate best practices for soliciting products and services that meet the specifications of this guide.
- DPM shall conduct market research and include environmentally preferred options, when available, in all solicitation specifications and review with client departments
- Prior to exercising any Option to Renew (OTR), DPM shall conduct market research to ascertain the availability of environmentally preferred products of services. Should green products or services be identified, DPM shall evaluate the possibility of re-soliciting the contract to allow for inclusion of environmentally preferable product options.
- DPM shall develop and integrate standardized environmentally preferable procurement language into solicitation document templates and provide the standardized language to client departments so that they can be included in department-issued solicitations.
- DPM shall incorporate total life-cycle analysis into procurement evaluation practices.
- DPM shall incorporate training, education, and outreach programs regarding the Buy Green guide, including:
    - Education on the specifics of green products and services into existing procurement training for DPM staff, procurement liaisons and other relevant County staff.
    - Coordinate vendor outreach programs to encourage vendors to provide environmentally preferred products and services.

VENDORS

- Vendors shall certify that the sustainable attributes claimed in bids and proposals are accurate. Third party certification of products and services through reputable and nationally or internationally accepted certification programs is preferred when such certification programs are available for specific commodities or services.
- As applicable, vendors shall quantify and provide proof that LEED and/or alternative green building criteria could be met with their services and products.

EVALUATION

The DPM Director and the Office of Sustainability Director (or their designees) shall periodically evaluate the guide's effectiveness and recommend amendments to this guide as necessary.

GUIDE SPECIFICATIONS

DPM staff shall include available sustainable products or services as options in solicitation specifications and review with client department(s). Pursuant to the key goals of this guide, the following are guidelines to work toward achieving those goals:

1. Energy and Water Savings
   A. Where applicable, energy-intensive products shall be purchased with the most up-to-date energy efficiency functions
      I. All products purchased from product categories for which the Energy Star certification is available shall have a Energy Star certification. When Energy Star labels are not available, the County shall choose energy-efficient products that are in the upper 25% of energy efficiency as designated by the Federal Energy Management Program.
      II. This includes, but is not limited to, lighting, commercial and industrial equipment, food service equipment, office equipment, electronics, appliances, and residential equipment.
      III. Energy/fuel from renewable sources is preferable.
   B. Water-intensive products shall be purchased with the most up-to-date water-saving features.
      I. All products purchased from product categories for which the EPA WaterSense certification is available shall meet WaterSense certification standards, whenever practical.
      II. This includes, but is not limited to, high-performance fixtures like toilets, low-flow faucets and aerators, and upgraded irrigation systems.
   C. Electricity and fuel utilized during product or service delivery shall be minimized to reduce related emissions.
   D. Bulk ordering is encouraged instead of smaller, more frequent deliveries.
   E. Consider how the purchase of a product or service can help the County reduce fuel, electricity, and water consumption or GHG emissions.

2. Toxics and Pollution
   A. The County shall purchase or require janitorial contractors to supply industrial and institutional cleaning products that meet Green Seal or EcoLogo certification standards for environmental preference and performance.
   B. Compostable plant-based products, such as bags, film, food and beverage containers, and cutlery, which are broken down by bacterial decomposition and leave no toxic residue, e.g. methane gas, are encouraged.

C. All surfactants and detergents shall be readily compostable or biodegradable and, when possible, shall not contain phosphates.
D. The County shall reduce or eliminate the use of products that contribute to the formation of dioxins and furans. This includes, but is not limited to:
   I. Purchasing paper, paper products, and janitorial paper products that are unbleached or that are certified to be processed without chlorine or chlorine derivatives, whenever possible. The County will accept the Processed Chlorine Free (PCF) certification for recycled paper and Totally Chlorine Free (TCF) certification for virgin paper.
   II. Prohibiting purchase of products that use polyvinyl chloride (PVC) such as, but not limited to, office binders, furniture, flooring, and medical supplies whenever practical.
E. The County shall purchase products and equipment with no lead, mercury or other heavy metals whenever possible. For products that contain lead or mercury, DPM shall give preference to those products with lower quantities of these metals and to vendors with established lead and mercury recovery programs. When evaluating the costs of purchasing items that contain lead or mercury, the costs of disposing them at the end of their useful life shall be included in comparison with alternate products that do not contain heavy metals.
F. The County shall purchase products and equipment without asbestos whenever possible.
G. The use of chlorofluorocarbon and halon-containing refrigerants, solvents and other products shall be phased out and new purchases of heating/ventilating/air conditioning, refrigeration, insulation and fire suppression systems shall not contain them.
H. When maintaining buildings, the County shall use products with low amounts of volatile organic compounds (VOCs), high recycled content, and low or no formaldehyde when purchasing materials such as paint, carpeting, adhesives, furniture and casework.
I. When purchasing vehicles, the County shall consider highest efficiency vehicles and those fueled by less-polluting alternatives such as, sustainably-sourced bio fuels, hybrids, electric batteries, and fuel cells, as available.

3. Source and Waste Reduction
   A. Refers to products and services that result in a net reduction in the use of initial resources or generation of waste compared to their previous or alternate version and includes durable, reusable and remanufactured products; products with low GHG emissions; products with no, or reduced, toxic constituents; and products marketed with no, or reduced, packaging.
   B. Buyer Considerations
      I. County Departments shall institute practices that reduce waste and result in the purchase of fewer products and cost-effectiveness, but without reducing safety or workplace quality.
      II. All buyers shall consider short-term and long-term costs in comparing product alternatives. This includes an evaluation of total cost of ownership, including, but not limited to, acquisition, extended warranties, operation, supplies, maintenance, disposal costs and expected lifetime compared to other alternatives.
      III. All buyers shall consider short-term and long-term environmental impact in comparing product alternatives. This includes a total life cycle analysis, including, but not limited to, environmental impact of raw material extraction, GHG emissions of transportation of raw materials to production, manufacturing

processes, packaging, disposal of packaging materials, the distribution channel's GHG emissions, operation, maintenance, and ultimate disposal.

IV. Products that are durable, long lasting, reusable or refillable are preferred.

V. Products that are remanufactured such as toner cartridges, tires, furniture, equipment and automotive parts are preferred, but without reducing safety, quality or effectiveness.

C. Vendor considerations

I. Packaging that is reusable, recyclable or compostable is preferred.

II. Vendors shall be encouraged to take back and reuse pallets and other shipping and packaging materials and products that have reached the end of their useful life.

III. DPM shall encourage vendors to provide environmentally safe recycling and reuse options.

4. Recycled Content Products

A. All products for which the EPA has established minimum recycled content standard guidelines in the Agency's Comprehensive Procurement Guidelines, such as those for printing paper, office paper, janitorial paper, construction, landscaping, parks and recreation, transportation, vehicles, miscellaneous, and non-paper office products, shall contain the highest recycled content practical.

B. The County shall procure wood products such as lumber and paper for printing, office, or janitorial purposes that meet the standards of the Forest Stewardship Council (FSC) certification, or an equivalent/stricter third-party certification system.

I. The County encourages purchasing FSC-certified products that contain 100% post-consumer recycled material. This is known as the "FSC 100% Recycled" label.

II. If "FSC 100% Recycled" products are unavailable or do not meet cost differential guideline, the County shall purchase FSC-certified products that contain the maximum possible percentage of post-consumer recycled material and material from FSC-certified sustainably managed forests. This is known as the "FSC Mixed Sources with Recycled Content" label.

III. If "FSC Mixed Sources with Recycled Content" products are unavailable, the County encourages purchasing products that contain 100% material from FSC-certified sustainably managed forests. This is known as the "FSC 100%" label.

C. Paper, paper products and construction products made from non-wood, plant-based materials such as plant-based material or other recycled/recovered material are also encouraged.

D. Recycled content shall be included in products that also meet other specifications, such as chlorine free or certified sustainable.

E. Copiers and printers purchased shall have duplexing capabilities and shall be compatible with the use of recycled content and remanufactured products.

F. When specifying asphalt concrete, aggregate base, or Portland cement concrete for road construction projects, the County shall use recycled, reusable or reground materials.

G. The County shall specify and purchase recycled content transportation products, including signs, cones, parking stops, delineators, channelizers and barricades, which shall contain the highest recycled content practical, but no less than the minimum recycled content standards established by the U.S. EPA Comprehensive Procurement Guidelines.

H. All informational, marketing, and educational materials distributed by the County that contain recycled content shall include a statement that the paper has recycled content.

The statement should indicate the percentage of pre and post-consumer recycled content it contains and the certifications it has been awarded.

I. DPM shall identify all applicable sustainable products and services on its award sheets.

GUIDE EXCEPTIONS

Conventional products or services may be purchased if it is determined that:

- The environmentally-preferred product or service does not meet the client department's requirements; or
- The Price Premium Differential is over ten percent 10% for the life cycle of the good or service; and it is determined that the good or product is essential to the operation of the Department. Written justification from the Department director shall be required; or
- DPM finds that the purchase of the environmentally preferred product or service would crate a financial burden; or
- The environmentally preferred product or service is unavailable; or
- The environmentally preferred product or service is not safe; or
- For emergency purchases fully justified as such.
- Nothing contained in this guide shall be construed as requiring a department to procure products that do not perform adequately for their intended use or are not available at a reasonable price in a reasonable period of time.

Appendix 1

DEFINITIONS

Biodegradable: Organic material that is broken down by living organisms. Material can be degraded aerobically, with oxygen, or anaerobically, without oxygen.

Buyer: Anyone authorized to purchase or contract for purchases on behalf of Miami-Dade County.

Compostable: Organic material that is broken down by bacterial decomposition, in the presence of oxygen, at a reasonable rate of decomposition (usually 90 days or less), leaving no toxic residue.

Dioxins and furans: A group of chemical compounds that are classified as persistent, bioaccumulative, and toxic by the United States Environmental Protection Agency (EPA).

Chlorine-Free (or Processed Chlorine Free): Products processed without chlorine or chlorine derivatives.

Energy-intensive Products: Products, where its use or its manufacturing process, utilize an extensive amount of energy.

Environmentally Preferable Products/Services: A product or service that has a reduced negative effect or increased positive effect on human health and the environment.

Postconsumer Recycled Material: A material or finished product that has served its intended end-use (completed its life as a consumer item) and then diverted or recovered from the waste stream to be utilized for another end-use (i.e. recycled). Postconsumer recycled materials are part of the broader category of recovered materials.

Preconsumer Recycled Material: Material or by-products generated after manufacture of a product is completed but before the product reaches the end-use consumer. Preconsumer recycled material does not include mill and manufacturing trim, scrap, or broke which is generated at a manufacturing site and commonly reused on-site in the same or another manufacturing process. Preconsumer recycled material includes items such as print overruns, over issue publications, and obsolete inventories.

Practical (includes terms "available," "feasible," or "possible"): Without reducing safety, quality, or product effectiveness; available in a timely manner at a reasonable price and sufficient in performance.

Price Premium Differential: The price difference between a comparable sustainable product or service and a conventional product or service.

Recovered Material: Waste materials and byproducts that have been recovered or diverted from solid waste, but do not include materials and byproducts generated from, and commonly reused within, an original manufacturing process.

Recycled Content Product: A product that contains recovered materials or either preconsumer or postconsumer recycled materials.

Remanufactured Product: Any product diverted from the waste stream by refurbishing and marketing said product without substantial change to its original form.

Sustainable or Sustainability: Meeting the needs of current generations without compromising the ability of future generations to meet their own needs

Total Life Cycle Analysis: The comprehensive examination of a product or service's total life cycle impact on the environment. This examination includes all environmental and economic factors of a product or service throughout its lifetime, from the acquisition of raw materials, packaging, transport, use and final disposal.

Water-intensive Products or Services: Products or services where the use of the product or the manufacturing process of the product utilizes a taxing amount of water or is wasteful in its use of water.

Appendix 2

STANDARDS AND CERTIFICATIONS

Comprehensive Procurement Guidelines: The EPA provides Comprehensive Procurement Guidelines (CPG) that are updated every two years. Through the CPG, the EPA designates items that must contain recycled materials when purchased with appropriated federal funds by federal, state, and local agencies. www.epa.gov/cpg

Energy Star: Sponsored by the US Department of Energy and the EPA, Energy Star labels products such as computer components, electronic devices and many other products that exceed energy efficiency standards. www.energystar.gov

Federal Energy Management Program: A program of the US Department of Energy that issues a series of *Product Energy Efficiency Recommendations* that identify recommended efficiency levels for energy-using products. The Federal Energy Management Program (FEMP) facilitates the federal government's implementation of sound, cost-effective energy management and investment practices to enhance the nation's energy security and environmental stewardship. www.eere.energy.gov/femp/

Forest Stewardship Council (FSC): A globally recognized non-profit organization devoted to encouraging the responsible management of the world's forests. The FSC certification system endorses sustainably managed forests and the products that those forests produce according to rigorous standards developed by a broad variety of stakeholder groups. http://www.fscus.org/

Green Seal: Green Seal is a nationally recognized nonprofit organization that certifies a variety of environmental products that pass stringent testing standards. Approved products carry a Green Seal logo that is well recognized throughout industry and government as a leading environmental standard. Green Seal bases its work on thorough, state-of-the-art scientific evaluations using internationally accepted methodologies. Product evaluations are conducted using a life-cycle approach to ensure that all significant environmental impacts of a product are considered, from raw materials extraction through manufacturing to use and disposal. www.greenseal.org

Leadership in Energy and Environmental Design (LEED): Developed by the U.S. Green Building Council (USGBC), LEED is an internationally recognized green building certification system, providing third-party verification that a building or community was designed and built using strategies aimed at improving performance across all the metrics that matter most: energy savings, water efficiency, CO2 emissions reduction, improved indoor environmental quality, and stewardship of resources and sensitivity to their impacts. http://www.usgbc.org

Processed Chlorine Free (PCF): A certification for recycled content paper. PCF papers have not been rebleached with chlorine containing compounds. PCF certified paper must have a minimum of 30% post-consumer content. http://www.chlorinefreeproducts.org/marks.htm

Totally Chlorine Free (TCF): A certification for virgin fiber papers. TCF papers do not use pulp produced with chlorine or chlorine containing compounds as bleaching agents. http://www.chlorinefreeproducts.org/marks.htm

United States Environmental Protection Agency (EPA): The EPA develops and enforces regulations that implement environmental laws enacted by the United States (US) Congress. The EPA is responsible for researching and setting national standards for a variety of environmental programs, and delegates to states and tribes the responsibility for issuing permits and for monitoring and enforcing compliance. www.epa.gov

The U.S. Green Building Council (USGBC)- A non-profit community of leaders working to make green buildings available to everyone within a generation. http://www.usgbc.org

WaterSense: A partnership program sponsored by the EPA that seeks to protect the nation's water supply by promoting water efficiency and enhancing the market for water-efficient products, programs, and practices. The WaterSense label indicates that the products meets water efficiency and performance criteria. WaterSense labeled products will perform well, help save money, and encourage innovation in manufacturing. http://www.epa.gov/watersense/index.htm