The California Sustainability Alliance

(the Alliance) is a market transformation program managed by Navigant Consulting, funded by California utility customers, and administered by Southern California Gas Company under the auspices of the California Public Utilities Commission. The Alliance leverages action on environmental initiatives such as climate, smart growth, renewable energy, waste management, water use efficiency and transportation planning to help the State of California achieve its aggressive energy efficiency goals more effectively and economically. In partnership with public and private organizations throughout California, the Alliance precipitates widespread market transformation by tackling major barriers to sustainability.

An expert group of advisors from both the public and private sectors have joined the Alliance to develop, test and deploy creative strategies to transform sectors with high energy efficiency potential. Initial pilots targeted the greening of local government, commercial office space, new mixed use communities, multi-family housing, and the water and wastewater sectors. The Alliance’s extensive network of environmental sustainability leaders include leading public and private entities and State agencies responsible for implementing California’s landmark environmental initiatives.

The Alliance program is guided by a Steering Committee comprised of leaders in sustainability policy, programs and initiatives:
• Richard S. Cohen, Managing Director, Environmental Strategic Investments, Bank of America
• Mark Cowin, Deputy Director for Regional Water Planning and Management,
• California Department of Water Resources
• Gary Gero, President, California Climate Action Registry
• Rob Hammon Ph.D., Principal, Consol, Inc.
• Bridgett Luther, Director, State of California Department of Conservation
• Laurie Park, Senior Consultant, GEI Consulting, and President, Public Sustainability Partnership
• Timothy Tutt, California Energy Commission
• Laurie Weir, Portfolio Manager, CalPERS Global Real Estate Investment

For information about the California Sustainability Alliance, visit the website at:

www.sustainca.org
Table of Contents

EXECUTIVE SUMMARY 4
INTRODUCTION 6
GREENING AN ORGANIZATION’S PROCUREMENT PROCESS 7
  1. Form a Green Purchasing Team 7
  2. Conduct Baseline Inventory 8
  3. Establish Desired Environmental Criteria for Purchases 8
  4. Develop “Green” Bid Specifications 9
  5. Take Advantage of Opportunities with the State Government 10
  6. Model Green Procurement Policy 11
  7. Educate Organization Staff and the General Public 11
  8. Review Policy Regularly 12
CASE STUDY: SANTA MONICA, A PIONEER OF GREEN PURCHASING 13
TOOLS, DATABASES AND RESOURCES FOR GREEN PURCHASING 14
APPENDIX A: SAMPLE GREEN BID SPECIFICATIONS 16
APPENDIX B: MODEL GREEN PROCUREMENT POLICIES 20
Executive Summary

Decisions made by local governments play a significant role in California’s demand for natural resources and the associated pollution, air emissions, and waste from use of those resources. One important way local governments can reduce their impact on human health and the environment is through green procurement, or environmentally preferable product (EPP) purchasing programs. By weighing not only the purchase price of a product but also its full lifetime cost, green procurement policies can help local governments save money, create local green jobs and improve overall sustainability in their day to day operations.

This guide discusses the key steps for implementing a green procurement program, which include:
1. Forming a green purchasing team
2. Conducting a baseline inventory
3. Establishing desired environmental criteria for purchases
4. Developing green bid specifications
5. Taking advantage of partnership opportunities with the state government
6. Establishing a green procurement policy
7. Educating organization staff and the general public; and
8. Reviewing policy regularly.

This guide also provides local governments with a suite of tools to aid in the process, including resources and guides for identifying and buying environmentally preferable products and services, draft policy language for green procurement programs, detailed sample green bid specifications, and case studies detailing successful programs.

Implementing a green procurement program does not have to be a difficult or resource intensive task. One of the easiest things local governments can do is link their own existing programs and processes to the state’s green procurement process, which mandates that state agencies purchase recycled-content products (RCPs) meeting specified environmental criteria. The California Department of General Services (DGS) administers this process and maintains an online list of links to products with positive environmental attributes.¹ Utilizing existing state programs reduces the need for local governments to develop their own criteria, and can save money through the bulk purchasing enabled by statewide criteria.

There are also numerous resources, listed in this guide, which serve as tools for local governments looking to develop green purchasing policies and procedures. CalRecycle for example, publishes a list of thousands of recycled content products, manufacturers, and vendors, while the EPA maintains comprehensive procurement guidelines for recycled content levels for dozens of products.²

1  http://www.green.ca.gov/EPP/Sources/products.htm
Finally, local governments looking to develop green procurement programs are not alone, and can rely on policies developed by dozens of other California cities and counties. The Alliance has developed case studies for the cities of Ontario, San Francisco, Berkeley, and Santa Monica as well as San Diego County, Alameda County, and Los Angeles County. Additional case studies are available on the California Sustainability Alliance website at http://sustainca.org/tools/green_procurement_toolkit.

Establishing a green procurement program is a simple and straightforward way for local governments to streamline their purchasing programs, save time and money, improve their sustainability, and set a positive example for local residents. The multitude of resources discussed here show that doing so need not be costly or overly burdensome.
Introduction

California’s growing population continues to increase the state’s demand for energy, water, and materials, straining our transportation infrastructure and land resources, and increasing pollution, air emissions, and waste. As significant contributors to California’s resource demand, local governments must purchase and use resources responsibly and effectively to minimize environmental and health impacts.

One way local governments can do this is through the use of green procurement or environmentally preferable product (EPP) purchasing programs. By weighing not only the purchase price of a product but also its full lifetime cost, green procurement policies can help local governments save money, create local green jobs and improve overall sustainability when compared to using similar products.

Generally, such programs consider:
• Impacts to human, animal, and plant life
• Energy and water efficiency
• Resource conservation
• Recycled content
• Waste prevention
• Renewable materials
• Air, water, and land impacts
• Hazardous materials
• Toxicity; and
• Effects of packaging and transporting products and services.

This guide provides local governments interested in green procurement with a suite of tools, including recommendations on establishing local programs, and resources for identifying and buying environmentally preferable products and services. This guide also includes:
• Recommended steps for greening a local government’s procurement process
• Draft policy language
• Detailed sample green bid specifications
• Case study of the city of Santa Monica’s green procurement program
• Tools, databases, and resources for identifying green products, vendors and suppliers
Greening an Organization’s Procurement Process

Many local governments have found that adopting official green procurement policies provides a helpful framework for implementing environmental purchasing practices. However, formal policies are not always necessary. For example, the city of Santa Monica is widely recognized for its environmental purchasing program, but it does not have a formal environmental purchasing policy. Conversely, having a detailed environmental purchasing policy does not always guarantee the emergence of a successful program.

More important than adopting an official policy is the allocation of time and resources to greening the procurement process as a whole.

The eight steps for successfully greening an organization’s procurement process are:

1. Forming a green purchasing team
2. Conducting a baseline inventory
3. Establishing desired environmental criteria for purchases
4. Developing green bid specifications
5. Taking advantage of partnership opportunities with the state government
6. Establishing a green procurement policy
7. Educating organization staff and the general public; and
8. Reviewing policy regularly.

I. FORM A GREEN PURCHASING TEAM

An environmental purchasing effort requires the involvement of multiple participants from various departments throughout the local government. Therefore, facilitating communication and partnerships between these individuals and departments is key to the successful development and implementation of a green purchasing effort. Some local governments have facilitated these efforts by forming a green purchasing team, which is tasked with reducing the environmental impacts of the organization’s purchasing practices.¹

For example, Kansas City, Missouri established a Coordinating Committee on Environmentally Preferable Procurement which consists of a city council member, a local environmental organization, a local business representative, and the directors of the four largest city departments.

While there is not one specific way of forming and organizing a green purchasing team, the team

---

typically includes a senior manager and representatives from the purchasing department, environmental department, and end users in other departments. The team can develop an implementation plan, make connections with other relevant departments, and provide periodic updates to the City Council and staff on the program’s progress.

2. CONDUCT BASELINE INVENTORY

One of the first steps in developing green purchasing practices is determining what products the organization is currently purchasing and evaluating whether they can be substituted with safer and greener products of equal price and quality. Completing a baseline survey, a questionnaire, or a simple checklist can be helpful in collecting relevant information with minimal time and resource burden on city staff.

3. ESTABLISH DESIRED ENVIRONMENTAL CRITERIA FOR PURCHASES

It is important to establish environmental criteria for purchases that reflect the local government’s environmental priorities. These criteria will help determine which products and services to target for substitution, and will shape the development of product specifications. Local government policies may include a list of environmental attributes sought in products and services procured. Alameda County, for example, seeks products that include “recycled content, are durable and long-lasting, conserve energy and water, use agricultural fibers and residues, reduce greenhouse gas emissions, use unbleached or chlorine free manufacturing processes, and use wood from sustainably harvested forests.”

Examples of some of the most commonly cited environmental attributes include:

- Bio-based
- Biodegradable
- Carcinogen-free
- Chlorofluorocarbon (CFC)-free
- Compostable
- Durable
- Energy efficient
- Lead-free
- Less hazardous
- Locally managed
- Low volatile organic compound (VOC) content
- Low toxicity
- Mercury-free
- Persistent bioaccumulative toxics (PBT)-free
- (Rapidly) renewable materials
- Recyclable
- Recycled content
- Reduced greenhouse gas emissions
- Reduced packaging
- Refurbished
- Resource efficient
- Upgradeable
- Water efficient

2 Alameda County (California) Waste Management Authority and Source Reduction and Recycling Board, Environmentally Preferable Purchasing Policy. 9 July 2003.
3 Case, ibid.
4. DEVELOP GREEN BID SPECIFICATIONS

Many state and local government policies require purchasing agents to develop competitive specifications for the products they acquire. In developing specifications, it is important to identify and prioritize a list of requirements into a biddable document. This list of requirements should include a description of the physical and performance characteristics of the product, including any or all of the environmental requirements of the product. Examples of sample bid specifications are available in Appendix A.

When developing performance requirements, expectations for the product must be specific, obtainable, measurable, and verifiable. Rather than using general language like “Low VOC” a specific level of Volatile Organic Compounds (VOCs) should be identified. Performance measures should identify existing environmentally friendly standards and specify product compliance with these standards. Many reliable sources of existing environmentally friendly standards are currently available, including:

- **Consumer Reports** ([www.greenerchoices.org](http://www.greenerchoices.org)) : Evaluates the growing number of environmental labels against objective criteria used to measure the validity of the label and the independence of the standard setting and certification organizations that are developing them.

- **ENERGY STAR** ([www.energystar.gov](http://www.energystar.gov)) : Develops energy efficiency guidelines for consumer products in more than 35 categories.

- **Eco Logo** ([www.terrachoice-certified.com](http://www.terrachoice-certified.com)) : Establishes environmental standards and awards its eco-label to products meeting its standards; currently has more than 120 standards and hundreds of certified products.

- **Forest Stewardship Council** ([www.fscus.org](http://www.fscus.org)) : Sets standards for forest friendly practices and, through independent verifiers, certifies forests that are managed consistent with its standards; forest-based products that originate from FSC-certified forests are also eligible for FSC-certification.

- **Green Seal** ([www.greenseal.org](http://www.greenseal.org)) : Has developed environmental standards for more than 30 product categories and awards its “green seal of approval” to qualifying products; the organization also publishes the Choose Green Report, which evaluates the environmental impact of selected products and provides product recommendations.

- **PowerSmart** ([www.bchydro.com/powersmart](http://www.bchydro.com/powersmart)) : Identifies energy efficient products and strategies to reduce energy consumption.

- **U.S. Environmental Protection Agency** ([http://www.epa.gov/waste/conserve/tools/cpg/index.htm](http://www.epa.gov/waste/conserve/tools/cpg/index.htm)) : Comprehensive Procurement Guidelines recommend minimum recycled content levels for dozens of products

- **U.S. Department of Agriculture** ([http://www.ars.usda.gov/bbcc](http://www.ars.usda.gov/bbcc)) provides guidance on purchasing bio-based products

- **Responsible Purchasing Network** ([http://www.responsiblepurchasing.org/purchasing_guides/all/](http://www.responsiblepurchasing.org/purchasing_guides/all/)) maintains a database of bid specifications for 13 different types of commonly purchased supplies

These standards cover a large percentage of products on the market today and ensure that products purchased will have the least impact on the environment both during product development and throughout their useful lives. Many local governments now have policies that require purchasing agents to review existing specifications to remove language that might conflict with the desire to buy more sustainable products. Examples of this policy language are available in Appendix B of this document; additionally, the Responsible Purchasing Network has an excellent database of bid specifications: [www.responsiblepurchasing.org/purchasing_guides/all/](http://www.responsiblepurchasing.org/purchasing_guides/all/)
5. TAKE ADVANTAGE OF PARTNERSHIP OPPORTUNITIES WITH STATE GOVERNMENT

To reduce the amount of waste shipped to California landfills, state agencies are mandated by the Integrated Waste Management Act to purchase recycled-content products (RCPs). They must meet environmental criteria in the following eleven product categories, with varying minimum recycled content levels required.

- Paper products
- Printing and writing paper
- Compost, co-compost and mulch
- Glass
- Oil
- Paint
- Tires
- Tire-derived products
- Metal
- Plastic products
- Antifreeze

In determining procurement specifications for state purchases, all legislative procurement and purchasing specifications must be established in a manner that results in the maximum procurement and purchase of RCPs. To encourage the use of RCPs, state specifications require recycled product contracts be awarded to the bidder whose product contains the greatest percentage of recycled material, so long as the fitness, quality, and price match those of products made from virgin materials. Additionally, state agencies may establish “recycled product-only bids, cooperative purchasing arrangements, or other mechanisms” to meet state recycling requirements.

The California State Department of General Services (DGS) develops and administers contracts for goods and services that promote RCPs and other environmental attributes, such as energy and water efficiency and reduced toxic materials. The Department also maintains an online list of links (http://www.green.ca.gov/EPP/Sources/products.htm) to products with positive environmental attributes, for use by government agencies.

While the DGS contracts were originally developed for state agencies, local governments in California also have access to them. Local governments can easily “piggy-back” on existing green procurement contracts between the state and the suppliers of specified products and services. However, before adopting a state contact, each local governmental agency should determine whether the contract is consistent with its own procurement policies and regulations.

Piggy-backing onto the State’s procurement process can be extremely beneficial for local governments. Not only can piggy-backing help local governments purchase green products and services, it can reduce the time and resources required to develop specifications and identify and select the appropriate bidders during the solicitation process. Additionally, because bulk-purchasing is usually less costly, utilizing state contracts can be a particularly cost-effective approach for local governments.
6. MODEL GREEN PROCUREMENT POLICY

Green procurement policies provide a helpful framework for implementing environmental purchasing practices. Ideal green purchasing policies describe the importance of environmental purchasing, identify desired environmental product attributes, and designate initial commodities on which to focus. A number of entities have attempted to develop model green procurement policies for official adoption including Alameda County (http://www.stopwaste.org/home/index.asp?page=439), and the Center for a New American Dream (http://www.newdream.org/work/rpn.php).

However, it is important to keep in mind that a model policy for one organization may not be the best policy for others. Policies are highly dependent on the current needs, structure, and opportunities available within an organization. Only individuals closely familiar with an organization’s policies, operating procedures, culture, and willingness and ability to change are capable of determining which policy language is most appropriate for the organization. More specific policy language is generally preferable to language that is generic, though for some organizations, less specific language may provide greater flexibility.

7. EDUCATE ORGANIZATION STAFF AND THE GENERAL PUBLIC

Educating all local government staff, the end-users of all purchased products and services, is important to successfully adopting a green procurement policy. However, education of and support from the senior managers, purchasing department, and product specifiers is particularly essential in ensuring that a green purchasing policy will be effective and successful over a long-term period, as these individuals are responsible for many of the purchasing activities throughout an organization. For example, to ensure widespread adoption of its environmental purchasing policy, Nevada County, CA, requires purchasing departments to:

"inform other agencies, departments, and divisions of their responsibilities under this [environmental purchasing] policy and provide agencies, departments, and divisions with information about recycled products and environmental procurement opportunities;… [and to] develop and implement an ongoing promotional program to educate and inspire County of Nevada staff to implement this policy. Information concerning this policy will be added to the new employee orientation process."4

While educating staff is vital to promoting an effective green procurement policy, it is equally essential to educate external stakeholders, most importantly the vendors and suppliers who provide goods and services to the organization. Educating these individuals will increase acceptance of alternative products and avoid purchase of products that do not meet performance needs or expectations. For example, the California State Department of General Services works with the California State University to coordinate and deliver half-day workshops on environmentally preferable purchasing (EPP) (http://www.pd.dgs.ca.gov/Cal-PCA/workshops.htm). The workshop trains state buyers and other interested parties in California’s EPP program and State Agency Buy Recycled Campaign. Participants learn about the elements of EPP, how to identify key environmental attributes of products, how to specify environmentally friendly or green products, and what green products are available on state contracts.

4 Case, ibid.
8. REVIEW POLICY REGULARLY

After initial implementation, green procurement policies and programs should be reviewed regularly to assess overall effectiveness. Reviews should ensure that policies and programs are meeting the organization’s current needs and continue to reflect the organization’s environmental goals. Regular reviews can strengthen a green procurement policy by incorporating new information (products, services, vendors, technology, etc.) that becomes available, updating goals, and shifting roles and responsibilities of staff and departments to increase the efficiency and effectiveness of the program. San Jose County requires that its procurement policy and program be reviewed every three years, for example. Santa Monica has always been at the forefront of the environmental movement, adopting policies and programs that protect the environment and save money. These policies and programs include environmentally preferable purchasing; two examples of this are Santa Monica’s green purchasing policy for cleaning products and its green power purchasing program.
Case Study:
Santa Monica, A Pioneer of Green Purchasing

Santa Monica was one of the first local governments in the nation to apply environmental criteria to cleaning product purchases. After adopting its green purchasing policy in the early 1990s, Santa Monica developed environmental criteria for janitorial products as the first phase of its Toxic Use Reduction Program. As part of this process, the City performed a 10-month pilot study on janitorial cleaning products before switching to alternative cleaners citywide. The pilot project enabled the City to test numerous alternative cleaning products, exposed custodial staff to alternative products through special training, and helped ease the transition to using green cleaners. The City’s low-toxicity cleaning product purchases avoid the use of 3,200 pounds of hazardous materials annually and reduce spending on custodial products by five percent.\(^5\)

In June 1999, Santa Monica became the first U.S. municipality to purchase 100 percent renewable electricity for its facilities. Santa Monica buys approximately five megawatts of electricity produced by geothermal plants, which generate electricity from the heat of the earth’s crust. Based on its 1998 energy consumption, the City expects the switch to renewable energy to reduce greenhouse gas emissions by 13,672 tons, NOx emissions by 16.2 tons, and SOx emissions by 14.6 tons annually.\(^6\)

---


Tools, Databases and Resources for Green Purchasing

Below are references to various tools, vendor and product databases, and other resources to aid local governments in their green procurement process. In addition, many state and local government websites contain useful information about green practices and procurement.

**National Institute of Standards and Technology, BEES 2.0**
Measures the environmental and economic performance of 65 building products based on ISO 14000 and ASTM standards. This flexible tool was designed for use by architects, interior designers, builders, and product manufacturers.

**Alameda County, A Resource Guide for Environmentally Preferable Products**
List of over 100 environmentally preferable products by product category and environmental standards that can be incorporated into purchasing requirements.

**Metro, Buyer’s Guide to Recycled Products**
([www.oregonmetro.gov/index.cfm/go/by.web/id=2728](www.oregonmetro.gov/index.cfm/go/by.web/id=2728))
Online guide listing more than 1,000 recycled products as well as the retailers, manufacturers, and distributors who produce or sell the products in the Portland, Oregon region. The guide provides information on products that are available retail and/or wholesale at stores, by catalog, and online.

**U.S. Environmental Protection Agency (EPA), Comprehensive Procurement Guidelines (CPG)**
([cpg.epa.tms.icfi.com/user/cpg_search.cfm](cpg.epa.tms.icfi.com/user/cpg_search.cfm))
The CPG Supplier Database, which is a searchable database of vendors who sell or distribute CPG-designated products with recycled content, allows users to search for vendors of a specific CPG product, product category, or type of material. The CPG program is distinct from the EPP program in that it focuses solely on promoting the use of materials recovered from solid waste, or recycled-content products.

**U.S. Department of Energy and EPA, ENERGY STAR**
([www.energystar.gov](www.energystar.gov))
Lists the U.S. government’s Energy Star standards and identifies all of the products earning the energy-efficiency designation.

**EPA, Database of Environmental Information for Products and Services**
([yosemite1.epa.gov/oppt/eppstand2.nsf](yosemite1.epa.gov/oppt/eppstand2.nsf))
Environmental attribute information and specifications for more than 600 environmentally preferable products based on over 330 environmental standards and 45 government contracts.
Minnesota Solid Waste Management Coordinating Board, Environmentally Preferable Purchasing Guide (www.swmcb.org)

Environmental purchasing information including recommended specifications for more than 30 product categories, including paper, printing, office equipment, vehicles and road maintenance, outdoor furnishing, and ground and building maintenance. Provides an environmental purchasing overview, case studies, and vendor information for each product category.

GreenSpec Directory (www.buildinggreen.com/ecommerce/cat.jsp?s=11)

Lists information on more than 1,650 green building products in more than 250 categories screened by the editors of Environmental Building News. Includes product descriptions, environmental characteristics and considerations, manufacturer contact information, and guideline specifications.

U.S. Green Building Council, LEED (Leadership in Energy and Environmental Design) (www.usgbc.org)

Describes the process and requirements for evaluating the environmental performance of a building. Many state and local governments are incorporating the LEED criteria into their construction and renovation projects.

EPA, Promoting Green Purchasing: Tools and Resources to Quantify the Benefits of Environmentally Preferable Purchasing (www.epa.gov/epp/tools/epp_metrics.pdf)

Identifies a series of existing tools and resources that can be used to help develop quantitative estimates of the projected benefits of making new environmentally preferable purchase choices for federal government agencies. Included in this reference are calculators, guides, policies, products, and data collection and tracking instruments. Although this reference is specifically targeted toward federal agencies, there are useful tools that can be used by local governments as well as non-governmental entities.

CalRecycle (formerly the California Integrated Waste Management Board), Recycled-Content Product Directory (www.calrecycle.ca.gov/RCP/)

Lists thousands of recycled content products, manufacturers, and vendors. It is regularly updated with new information.
APPENDIX A:
Sample Green Bid Specifications

Below are two sample green specifications developed by local and state governments for janitorial paper supplies and toner cartridges. These sample bid specifications are examples of the varying lengths and levels of detail that green bid specifications can take on. For further examples of green bid specifications, visit EPA’s Database of Environmental Information for Products and Services.

JANITORIAL PAPER SUPPLIES

Product must be made in accordance with reasonable industry practice with respect to holes, tears, wrinkles, cleanliness, foreign materials or dirt. It must have no disagreeable odor, either wet or dry, in accordance with reasonable industry practice. Edges of the product must be cleanly cut and not ragged. Product must dispense properly from the box or fixture. Each roll of bathroom tissue must contain at least 40 square feet of product (equivalent to approximately 300 x 4.5 x 4.4 inch sheets). Each box of facial tissue must contain at least 70 square feet of product (equivalent to approximately 175 x 8.0 x 8.0 inch sheets).

TONER CARTRIDGES

Qualification

• To be eligible for award, all bidders shall have prior successful experience providing remanufactured toner cartridges for at least one (1) year at a rate of at least two hundred (200) cartridges per month. Samples may be required prior to bid award.
• It is the intent of buyer to purchase goods, equipment and services having the least environmental impact within the constraints of statutory purchasing requirements, departmental needs, availability, and sound economical considerations.
• Suggested changes and environmental enhancements for possible inclusion in future revisions of this specification are encouraged.

Technical Specifications: General Requirements

• Bidder shall furnish remanufactured toner cartridges that have been fully remanufactured to specifications equal to, or exceeding original equipment manufacturer’s (OEM) cartridge standards of quality and performance and approved remanufactured toner cartridge industry standards. Toner cartridges furnished to this specification shall meet or exceed the latest remanufactured toner cartridge standards, or the guidelines adopted by the Standardized Test Methods Committee (STMC), the American Society for Testing and Materials (ASTM) and the International Safe Transit Association.

---

7 Green Seal Environmental Standards, www.greenseal.org/certification/GSalphabetical.cfm
• Bidder shall certify that its remanufactured toner cartridges have been tested in accordance with the above standards and guidelines and that its cartridges have met or exceeded those tests.

• Bidder shall furnish documentation with this bid stating the number of company personnel who have completed the training for the STMC Guidelines. This includes the standardized testing certification for ASTM F1856-98, ASTM F2036, and ISTA 1A VERSION-99.

• Bidders shall have facilities, skilled personnel, equipment and parts available to completely service, maintain, overhaul and repair all laser printers listed in this solicitation.

• Bidders shall furnish documentation with this bid demonstrating that service personnel have completed training sufficient to completely service, maintain, overhaul and repair all laser printers listed in this solicitation.

• Bidders shall provide verification that the company (or the remanufacturing company) has a densitometer, test printers and applicable operation procedures to perform on-site toner cartridge testing. If bidder does not have a densitometer, test printers and applicable operating procedures, bidder shall provide detailed information regarding its (or the remanufacturer’s) on-site toner cartridge testing.

• To be eligible for awards, bidders must include bids for all toner cartridges listed in this solicitation.

• Bidders shall furnish documentation with this bid indicating the current and expected failure rate of toner cartridges supplied under this contract.

Cartridge Remanufacturing Process

• The term “remanufactured” includes, at a minimum, the following:
  • Assessment to determine if the toner cartridge can be remanufactured.
  • Complete disassembly of toner cartridge to thoroughly clean and check all internal and external components against the original manufacturer’s specifications.
  • Worn, damaged, or end of life-cycle components should be replaced.
  • Replacement of the original OEM drum with a new drum (which may include an extended life-drum). If the returned toner cartridge is equipped with an extended-life drum, bidder shall inspect it, clean it or replace it with a new extended-life drum or new after market drum.
  • Replacement of all seals with an OEM-type heat seal, card seal, or pressure sensitive seal.
  • Replacement of the primary charge roller (PCR) with a re-coated or new PCR.
  • Replacement of wiper blades not meeting OEM specifications or the latest remanufactured toner cartridge industry standards adopted by the STMC or the latest guidelines adopted by ASTM for remanufactured toner cartridges.
  • Replacement of any parts not meeting OEM specifications or the latest remanufactured toner cartridge industry standards adopted by the STMC or the latest guidelines adopted by ASTM for remanufactured toner cartridges.
  • Filling of toner cartridge meeting OEM specifications or the latest remanufactured toner cartridge industry standards adopted by the STMC or the latest guidelines adopted by ASTM for remanufactured toner cartridges.
• Chemically cleaning or replacing the corona wire assembly (where applicable).
• One fuser wand (where applicable) with high temperature resistant felt wiper and one cotton swab shall
  be provided with each toner cartridge.
• The hopper shall be filled to capacity with new toner meeting or exceeding OEM standards. Bidder
  shall indicate in this bid the original manufacturer(s) and part number(s) of toner supplied.
• A toner hopper seal/separator meeting or exceeding OEM standards shall be inserted to prevent
  spillage of toner during shipping.

**Cartridge Packing**

• Bidder shall clearly label each toner cartridge with the manufacturer’s/supplier’s name and cartridge
  model number.
• Each toner cartridge shall be packaged in an anti-static moisture proof bag and either heat-sealed or
  zip-locked, meeting or exceeding OEM standards. The cartridge shall then be placed in a protective
  cradle prior to being packaged in an external carton.
• The external carton and packaging of the toner cartridge shall protect the cartridge from damage
  during shipping.
• Packaging for the toner cartridges shall be constructed to permit users to re-package spent cartridges
  for return to bidder. It is desirable that all corrugated packaging contain a minimum of 35% post-
  consumer recycled content and provide certification from the carton manufacturer/supplier to verify the
  actual percentage of recycled content.
• The external carton or an internal shipping invoice shall identify toner cartridge type (make and model),
  the bidder’s name, address and telephone number, and the purchase order number. All cartridge boxes
  or internal shipping invoices will also bear the date of remanufacture and use by date for shelf life and
  inventory purposes.

**Cartridge Testing**

• All cartridges are to be tested after remanufacturing by installing the cartridge in an applicable printer,
  running and inspecting test copies. It is desirable that a copy of a test page be included with the
  finished product.
• Bidders shall also provide to buyer at least five cartridges from the items listed in this solicitation for
  testing and evaluation by buyer, at the request of buyer.

**Defective Cartridges**

• All defective toner cartridges will be returned to the bidder at bidder’s expense. Bidder shall supply pre-
  paid mailing labels, or shall pick up defective cartridge(s) at the buyer’s location.
• A diagnostic analysis shall be performed to determine the cause of the problem for any toner cartridge
  returned by the buyer.
• The diagnostic analysis report shall be delivered to the buyer within ten (10) business days.
• If the analysis determines that the toner cartridge failed, a replacement remanufactured cartridge shall
  be provided at no expense to the buyer within ten (10) business days from completion of analysis.
  Replacement cartridges shall be properly marked as replacements and identified by the purchase order
  number.
• If the buyer has continued uncorrected problems with a particular model, or if there are page yields consistently below OEM standards or approved manufactured toner cartridge industry standards, the buyer may cancel the cartridge model from the contract.

• If the toner cartridge defect rate exceeds three (3%) percent of all cartridges utilized within any six-month period, the buyer reserves the right to cancel the contract.

**Warranty**
• The bidder shall warrant the remanufactured toner cartridges against defects in material and workmanship for a minimum of one year from the date of manufacture.

• If problems occur with printers due to a bidder’s defective remanufactured toner cartridge, bidder shall provide: (1) a competent factory-trained authorized service technician to repair printer within two (2) working days, or (2) shall reimburse the buyer for any printer service performed due to the bidder’s defective cartridge.

**Used Cartridge Recycling Collection**
• Bidder shall provide in-person or third party collection of all used and empty toner cartridges.

• Bidder shall recycle end-of-life toner cartridges and provide buyer with details of its recycling program upon request.

**Waste Toner Recycling or Disposal**
• The bidder shall ensure that remaining toner in used cartridges is recycled or disposed of in a manner that complies with all environmental and human health and safety laws.

• At buyer’s request bidder shall provide manifests and any other documentation needed to confirm the proper disposal of material.

**Customer Support**
• The bidder shall provide one-on-one customer support to buyer’s personnel as required.

**References**
• Bidder shall submit, with its response, the name, address, telephone number, and point-of-contact of at least three (3) entities (i.e., companies, government agencies or other institutions) in which the bidder has provided remanufactured toner cartridges. References will be checked prior to award. Any negative responses received may result in disqualification of the response.
APPENDIX B: Model Green Procurement Policies

Green procurement policies can range in scope and detail from a few sentences to a detailed multipage document. The sample policies below include the authorizing resolutions for adoption of green procurement programs by three U.S. and Canadian cities.

BOULDER, COLORADO

“All City departments, in consultation with the City Purchasing office and the Environmental Affairs office, shall report annually regarding a review of existing product and services specifications to: (a) identify and eliminate any specifications that require the use of virgin products or exclude the use of recycled or environmentally preferable products, unless they can demonstrate to the satisfaction of the City Manager that such specifications are necessary to protect health and safety or that recycled or environmentally preferable products do not meet performance standards, unfairly eliminate competition, or are unreasonable in price, taking durability and liability into account; and (b) revise specifications, where appropriate, to include recycled content and environmentally preferable criteria...”

RICHMOND, BRITISH COLUMBIA

“In order to increase the development and awareness of environmentally sound products and services, City of Richmond staff will review their contracts and tender specifications for goods and services, to ensure that wherever possible and economically feasible, specifications are amended to provide for consideration of environmental characteristics.”

TORONTO, ONTARIO

Requires purchasing officials to “ensure that wherever possible specifications are amended to provide for the expanded use of environmentally preferred products such as: durable products, reusable products, energy efficient products, low pollution products, products (including those used in services) that contain the maximum level of post-consumer waste and/or recyclable content, and products that provide minimal impact to the environment.”

For further guidance, the Center for a New American Dream and the North American Green Purchasing Initiative of the Commission for Environmental Cooperation have developed the following sample template for establishing a green procurement policy:

POLICY ESTABLISHING Organization Name PURCHASING PROGRAM FOR ENVIRONMENTALLY PREFERABLE PRODUCTS AND SERVICES

1.0 Purpose

Organization Name recognizes we are a large consumer of goods and services. Every one of our purchases has an environmental impact resulting from the combined impact of a product’s manufacture, use, and disposition. As a result, every day, the purchasing decisions of our employees and contractors can positively or negatively affect the environment.

The goal of this policy is to reduce the adverse environmental impact of our purchasing decisions by buying goods and services from manufacturers and vendors who share our commitment to the environment. By including environmental considerations in our purchasing decisions, along with our traditional concerns with price, performance, and availability, we will remain fiscally responsible while promoting practices that improve public health and safety, reduce pollution, conserve natural resources, and reward manufacturers and vendors that reduce the adverse environmental impact of their production and distribution systems.

2.0 Defining Environmentally Preferable

Buying the most environmentally preferable alternative means Organization Name will seek products and services that have a reduced effect on human health and the environment when compared with competing products and services serving the same purpose. This comparison will consider all phases of the product’s life cycle, including raw materials acquisition, production, manufacturing, packaging, distribution, operation, maintenance, and disposal, including potential for reuse or ability to be recycled.

In practice, this means seeking products that have reduced environmental impact because of the way they are made, used, transported, stored, packaged, and disposed of. It means looking for products that do not harm human health, are less polluting, and that minimize waste, maximize use of bio-based or recycled materials, conserve energy and water, and reduce the consumption or disposal of hazardous materials. When determining whether a product is environmentally preferable, the following environmental attributes should be considered:

- Bio-based
- Biodegradable
- Carcinogen-free
- Chlorofluorocarbon-free
- Compostable
- Durable
- Energy efficient
- Heavy metal free
- Less hazardous
- Locally manufactured
- Low volatile organic compound content
- Low-toxicity
- Made from rapidly renewable materials
- Persistent, bioaccumulative toxic-free
- Recyclable
- Recycled content
- Reduced greenhouse gas emissions
- Reduced packaging
- Refurbished
- Resource efficiency
- Reusable
- Upgradeable
- Water efficient
3.0 Balancing Environmental Considerations with Performance, Availability, and Financial Cost

*Organization Name* is committed to buying more environmentally preferable goods and services as long as they meet our performance needs and they are available within a reasonable period of time at a reasonable cost. Nothing in this policy shall be construed as requiring a purchaser or contractor to procure products that do not perform adequately for their intended use, exclude adequate competition, or are not available at a reasonable price or in a reasonable period of time.

When comparing cost, *Organization Name* will not focus exclusively on the initial price. Instead, we will calculate and compare totals costs over the life of the item, which includes the initial cost along with maintenance, operating, insurance, disposal, replacement, and potential liability costs. Examining life cycle costs will save money by ensuring we are quantifying the total cost of ownership before making purchasing decisions.

*Organization Name* recognizes that competition exists not only in prices, but also in the technical competence of suppliers, in their ability to make timely deliveries, and in the quality and performance, including environmental performance, of their products and services. Balancing these sometimes-competing factors means that initial cost is never the only consideration. It also means we will sometimes pay more for higher performing goods and services, including those with superior environmental performance.

4.0 Establishing an Environmental Purchasing Task Force

Within one month from the date this policy is enacted, the head of the Purchasing Department shall designate an environmental purchasing coordinator to lead an environmental purchasing task force and every department head shall assign a senior staff member to participate. The first task force meeting shall take place no later than one month after the appointment of the environmental purchasing coordinator. The task force shall meet at least six times each year.

The Task Force shall be responsible for:

- Providing assistance to the head of the purchasing department in reviewing all specifications to ensure they are amended to include environmental considerations.
- Tracking the development of environmental standards and specifications *Organization Name* can integrate into its purchasing specifications, including those developed by independent, well-respected organization such as Environmental Choice, Green Seal, or Energy Star.
- Developing written environmentally preferable purchasing recommendations and practices to clarify people's responsibilities under this environmental purchasing policy.
- Prioritizing a list of environmentally preferable purchasing goals and objectives.
- Identifying environmentally preferable purchasing opportunities.
- Developing metrics for measuring progress in implementing the goals of this policy.
- Preparing educational and outreach materials to promote understanding of *Organization Name*’s environmental purchasing principles for all of the organization’s departments, contractors, vendors, and staff.
• Training the purchasing and contracting staff and all senior managers to familiarize them with their responsibilities under this environmental purchasing policy.
• Training the entire Organization Name staff to ensure everyone is aware of our desire to buy more environmentally preferable goods and services from businesses sharing our environmental commitment, especially those individuals with permission to use Organization Name credit cards.
• Recommending ways to integrate adherence to the requirements of the environmental purchasing policy into employee performance reviews.
• Establishing an awards program to recognize the efforts of individuals and departments that are the most successful at implementing the goals of this policy.
• Preparing an annual report documenting Organization Name’s efforts to buy more environmentally preferable goods and services. The report shall identify Organization Name’s environmental purchasing goals and track progress towards meeting them. It shall also include: (1) a list of all products and services for which Organization Name has incorporated environmental considerations; (2) the volume spent, quantity purchased, or general purchasing trends for each of the products and services based on actual purchasing data or a scientifically valid sampling method explained in the report; (3) a list of products and services for which Organization Name is developing environmental specifications; (4) an assessment of the environmental purchasing program’s effectiveness, an evaluation of program goals, and projections of future procurement opportunities; and (5) recommendations for changes to the environmental purchasing policy.

5.0 Establishing Initial Priorities
Within six months of the date this policy is enacted, the environmental purchasing task force shall complete an examination of Organization Name’s purchases of the following commodities and, based on anticipated purchasing needs and volumes, prioritize its efforts to integrate environmental considerations into their purchase:
• Recycled content products designated by the U.S. Environmental Protection Agency, www.epa.gov/cpg
• Energy-efficient products listed by the Energy Star program, www.energystar.gov
• Biobased products designated by the US Department of Agriculture, www.ars.usda.gov/bbcc
• Building renovation and new construction
• Cleaning products and services
• Furniture
• Hybrid electric or alternative fuel vehicles
• Landscaping products and services
• Paint and painting services
• Paper (beyond the initial recycled-content requirements)
• Pest management products and services
• Renewable electricity
• Vehicle maintenance products and services
6.0 **Reviewing Existing Specifications, Solicitation Language, and Purchasing Regulations**

Within six months from the date this policy is enacted, the head of the purchasing department shall ensure procedures are in place to review every upcoming procurement so that wherever possible specifications, solicitation language, and purchasing regulations are amended to expand the use of more environmentally preferable products.

The review must ensure the following:

- **ALL** generic solicitation language, purchasing regulations, and procedures shall be reviewed to ensure they do not conflict with the goals of this environmental purchasing policy.
- **ALL** products for which the US Environmental Protection Agency (EPA) has developed recycled-content recommendations shall be required to meet or exceed EPA's recommended recycled content percentages unless costs are prohibitive or other environmental considerations are more important.
- **ALL** products for which the federal Energy Star program has developed energy-efficiency standards shall be required to meet or exceed the Energy Star standard unless costs are prohibitive or other environmental considerations are more important.
- **ALL** products for which the US Department of Agriculture (USDA) has developed biobased recommendations shall be required to meet or exceed USDA's recommended biobased percentages, unless costs are prohibitive or other environmental considerations are more important.
- **ALL** products and services for which the Environmental Choice or Green Seal standard setting organizations have established standards shall be required to meet or exceed those standards unless costs are prohibitive or other environmental considerations are more important.
- **ALL** products and services selected by the environmental purchasing task force shall be required to meet or exceed the task force recommendations unless costs are prohibitive.

7.0 **Promoting Environmental Purchasing**

Every department shall ensure its employees are familiar with the educational and outreach materials developed by the environmental purchasing task force.

Every department is responsible for ensuring its employees, contractors, and vendors are aware of *Organization Name’s* desire to buy more environmentally preferable goods and services from companies sharing our environmental commitment.

Every department is responsible for ensuring that any of its employees who have been issued credit cards are fully aware of their responsibilities under this policy. No purchase, including those made on *Organization Name* credit cards, is exempt from this policy.

Every department shall also require their contractors and consultants to use environmentally preferable products whenever cost effective and to the extent practicable for all work completed on behalf of *Organization Name*.

8.0 **Reviewing the Policy**

Within five years from the adoption of this environmentally preferable purchasing policy, *Organization Name* will undertake a comprehensive review of the guidelines, goals, and action plans.