

The Economics of Green

Less expensive, easier-to-find products and long-term cost savings are making it easier than ever to go green.

BY SCOT CASE

As the world emerges from the Great Recession, state and local governments remain hyper-focused on reducing expenses. They also remain focused on buying green.

Seemingly contradictory, these two trends reflect a new green reality: Going green makes good financial sense. "Green (responsible) purchasing is increasingly being understood as a way to save money, not just a way to be more environmental," suggests Jonathan Cohen, director of the Responsible Purchasing Network.



Emergence of the green economy

Many economists see growth of the green economy as a critical component of the broader economic recovery, and government purchasers continue to be one of the driving forces.

Governments' interest in buying more environmentally and socially responsible products has led to significant maturing of the green economy since the late 1980s.

A significant change is that there is now a wider variety of high-quality, affordable products on the market with improved environmental performance. Increased demand for greener products has led to more supply, better prices and higher quality products. Recycled-content copy paper containing high post-consumer content, for example, is now indistinguishable in product performance and aesthetics from non-recycled paper. Current recycled-content copy paper is a significant improvement over the dingy, gray recycled-content copy paper originally marketed as "green" in the early 1990s. It is also widely available from suppliers such as Office Depot, Staples and others.

Here are some of the factors contributing to the recent rapid growth of the green economy, particularly within government sectors:

- Lower product costs for greener products and services
- Long-term cost savings associated with many greener purchases
- Lower information costs, which make it easier to identify and buy greener products

Lower product costs

"There has been a perception that buying green has to cost more, but it doesn't," explains Cohen of the Responsible Purchasing Network.

Suppliers agree. According to Yalmaz Siddiqui, Office Depot's director of environmental strategy, government purchasers across the country – "but especially in places like California, the Pacific Northwest and the Northeast" – are aggressively pursuing green cost-saving opportunities. As an example, he cites remanufactured toner and ink cartridges that generate immediate 10 to 30 percent cost savings when compared to virgin products, meet original equipment manufacturer standards, comply with equipment warranty requirements and come with a 100 percent money-back guarantee that covers any potential damage to equipment resulting from their use. Office Depot even offers a take-back program to keep the ongoing environmental benefits and cost savings viable.

In addition to toner and inkjet cartridges, Office Depot also reports significant government purchaser interest in greener cleaning chemicals, which are available without additional cost and provide significant human health and

environmental benefits; energy-efficient lighting and office equipment; and continued interest in recycled-content copy paper.

"While recycled-content copy paper is generally more expensive than virgin paper, it continues to sell well for government purchasers and other organizations that have made a green purchasing commitment," explains Siddiqui. To help defray the additional cost of recycled-content copy purchases, Office Depot is helping some customers implement double-sided copying practices to reduce overall copy paper costs even if purchasers have to pay slightly more for the recycled-content paper. This assistance is part of a broader program of "green audits"

to help customers across the United States identify opportunities to improve environmental performance and reduce overall cost. Office Depot also provides reports documenting green purchasing quantities and the resulting environmental benefits. A "green substitution" program in places such as Hennepin County, Minn., automatically provides pre-approved "greener" alternatives to specific purchasing requests.

The meaning of green

Green purchasing, also now known as responsible purchasing, is an effort to reduce the hidden human health, environmental and social costs of purchasing decisions by buying more environmentally and socially responsible products. It includes efforts to buy goods and services that reduce waste, create energy- or water-efficiencies, use recycled materials, reduce or eliminate hazardous materials or produce other related environmental or social benefits.

Long-term cost savings

Another important factor in the rise of the green economy is that many government purchasers are no longer required to focus exclusively on the initial purchase price. More use of total-cost pricing, which examines the initial purchase price along with operational and disposal costs of product purchases, provides purchasers with the flexibility to buy greener products that might be slightly more expensive initially but that generate significant long-term financial savings.

Buying more energy- and water-efficient products, for example, might cost more initially, but the reduced operational costs offset the additional cost within three to six months. More energy- and resource-efficient buildings meeting the U.S. Green Building Council's LEED green building standard, for example, might add one or two percent to the initial construction or renovation cost but generate significant long-term savings.

According to Vincent Kitira of the Responsible Purchasing Network, a popular example of governments pursuing long-term cost savings is substituting energy-efficient, light-emitting diode (LED) bulbs in traffic lights, emergency exit signs and street lamps instead of the traditional incandescent or halogen bulbs. While more expensive initially, the LED lights reduce energy costs that can offset the initial purchase price in as little as two years. The payback period is even quicker if purchasers include the reduced maintenance costs: LED bulbs can provide seven to 11 years of continuous use compared to traditional bulbs' one- to two-year life expectancy.

In February 2009, Los Angeles announced one of the county's largest LED lighting retrofits with a plan to spend \$57 million to retrofit 140,000 street lights with LED bulbs and produce savings of \$10 million a year in energy and maintenance costs. Denver switched to LED traffic lights and is saving \$430,000 a year in reduced costs. On a smaller scale, 38 municipalities in Pennsylvania bought and installed LED traffic lights using money available from federal and state grants. Their associated electric bills decreased from \$1,000 a month to \$200 a month.

The Responsible Purchasing website (www.responsiblepurchasing.org) includes an LED purchasing guide that includes a variety of case studies and recommended specification language.

Lower information costs

The early pioneers of the green purchasing movement – including places such as Santa Monica, Calif.; Massachusetts; King County, Wash.; and Portland, Ore. – faced significant information costs when launching their responsible purchasing programs. It took significant purchasing staff time and energy to determine which environmental factors to include in a purchasing specification, to identify products meeting the specification and to locate suppliers.

Over the past few years, it has become easier to locate the information necessary to make more environmentally responsible purchases. The lower information costs are driven by several factors:

- **Growth of environmental standard and certification programs.** A number of respected environmental standard-setting and certification programs make it easier for government purchasers to identify greener products. According to the 2009 Responsible Purchasing Network's purchasing trends survey, the most recognized and used programs include:
 - ◆ **EcoLogo (www.ecologo.org)** – Includes almost 100 standards and thousands of certified products such as office equipment, cleaning products and paper and tissue products.
 - ◆ **Energy Star (www.energystar.gov)** – Develops standards for many common electricity-consuming products, including computers and office equipment, and lists of products meeting the standards.
 - ◆ **EPEAT (www.epeat.net)** – Contains a widely regarded standard for desktop and laptop computers and monitors. There are currently more than 1,000 products registered.
 - ◆ **Green Seal (www.greenseal.org)** – Promotes 35 standards and thousands of certified products including cleaning products and paper and tissue products.
 - ◆ **LEED (www.usgbc.org/leed)** – Provides a rating system to evaluate the environmental design, renovation and management of various building types. Governments have been very supportive of LEED.
- **Cooperative purchasing.** Cooperative purchasing has long been an effective cost-containment strategy

Federal government maintains green focus

Every president since George H.W. Bush has issued an Executive Order requiring federal agencies to buy greener products. President Obama continued the tradition of promoting federal green purchasing when he signed Executive Order 13514 in October 2009. The Executive Order focuses on improving the energy efficiency of federal facilities but also includes specific requirements to buy renewable energy, printing and writing paper containing at least 30 percent post-consumer content, reducing the purchase of hazardous materials, adopting integrated pest management procedures to reduce chemical use, buying EPEAT registered office equipment and adopting other environmentally preferable purchasing practices. For additional information, visit the Office of the Federal Environmental Executive at www.ofee.gov.



employed by government purchasers. Two of the most frequently used cooperative purchasing organizations now incorporate environmental considerations into several of their contracts.

- ◆ **U.S. Communities (www.gogreencommunities.org)** – U.S. Communities has been working closely with suppliers such as Graybar, Auto Zone, Office Depot, Herman Miller, Hayworth and others to ensure they are providing useful environmental information to government purchasers, and interest among government purchasers has been increasing. According to Connie Kuranko, program manager with U.S. Communities, “A few years ago, most government purchasers were just looking for basic green purchasing training. Now they are looking for specific green information and green pricing, and U.S. Communities is working with suppliers to provide it.” U.S. Communities is also building green product pricing into its contracts. A forthcoming contract for school supplies, for example, will include a green “core list” of items so purchasers can easily identify a supplier’s greener product offerings and make price comparisons.
- ◆ **Western States Contracting Alliance (www.aboutwsca.org)** – Paul Stembler, WSCA program manager, also sees continued interest in greener contracts. “We are very interested in helping governments go green.” WSCA incorporates “green language wherever it can.” Some recent examples include a billion-dollar contract for computers that requires all equipment to meet the EPEAT Silver green computer standard (and a Premium Savings Package that requires computers to meet EPEAT Silver), a rental car contract that includes hybrid-electric and alternatively fueled vehicles, a forthcoming contract for biobased toner cartridges and a recent office supply contract that includes a variety of sustainability requirements.
- **Suppliers sharing green product listings.** A variety of large government suppliers, including Office Depot, Grainger and Staples, now produce “green catalogs” that identify many of their more environmentally

preferable product offerings. This makes it significantly easier for government purchasers to locate greener products. Office Depot was one of the first suppliers to provide information on its greener product offerings. It published its first green catalog in 2003, focusing on recycled content products. Its 2010 catalog includes more than 2,000 products and a more sophisticated explanation of green. Recycled content is now one of many environmental attributes Office Depot recognizes. Others include low toxicity, bio-based, energy efficiency and improved indoor air quality. The catalog also clearly identifies products meeting respected environmental standards such as EcoLogo, Energy Star, GreenGuard and Green Seal.

- **Professional purchasing organizations sharing information.** Recognizing the need to make it easy for government purchasers to find greener products and services, a number of professional purchasing organizations are consolidating case studies, purchasing specifications and environmental purchasing policies:
 - ◆ **Responsible Purchasing Network (www.responsiblepurchasing.org)** – Has published a variety of purchasing guidelines and compiled a list of responsible purchasing policies.
 - ◆ **National Institute of Governmental Purchasing Green Community (www.nigp.org)** – NIGP’s Green Community is building an impressive array of green purchasing tools to make it significantly easier for purchasers to launch or expand a responsible purchasing program.
 - ◆ **National Association of State Procurement Officials (www.naspo.org)** – NASPO’s Green Purchasing Task Force has produced a Green Purchasing Resource Guide that has proved quite useful to numerous purchasing departments.

Future of the green economy

While emergence from the Great Recession is not moving as quickly as one would hope, the continuing rise of the green economy is an optimistic sign. Government purchasers have made it possible for the average consumer to buy greener products and enjoy the resulting environmental and financial benefits. Greener products originally purchased only by government purchasing officials – environmentally preferable cleaning products, recycled-content paper, remanufactured toner and ink cartridges, energy efficient lighting and office equipment – are now widely available in consumer markets. With continued government investment in greener products and services, a more financially and environmentally secure future is surely just around the corner.

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