



Figure 1. (Life-cycle model for products and services)
Life-Cycle Analysis

GREEN Purchasing

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NAEP submits for consideration and adoption the following definition of Green Purchasing. We will introduce this definition at the Sustainability Institute in Phoenix (April 30 – May 2, 2007), so we invite your comments.

For the complete NAEP Green Purchasing Definition, visit www.NAEPnet.org/Do-GreatThings.

Definition of Green Purchasing

Green Purchasing is the method wherein environmental and social considerations are taken with equal weight to the price, availability, and performance criteria that colleges and universities use to make purchasing decisions.

Green Purchasing is a serious consideration of supply chain management.

Green Purchasing is also known as “environmentally preferred purchasing (EPP), green procurement, affirmative procurement, eco-procurement, and environmentally responsible purchasing,” particularly within the U.S. Federal government agencies.

Green Purchasing minimizes negative environmental and social effects through the use of environmentally friendly products.

Green Purchasing attempts to identify and reduce environmental impact and to maximize resource efficiency.

Common Considerations for Effective Green Purchasing

The Life-Cycle Analysis (LCA) Perspective

- Looking at costs beyond the purchase price.
- Considering the cost of environmental and social impacts over the lifetime of a product or service. See Figure 1, above.

Pollution Prevention

- Avoiding the creation of wastes throughout the manufacturing process.
- Reducing or eliminating toxic emissions affecting air, soil, and water.
- Preventing transfer of pollution from one environmental medium to another.
- Accomplishing “source reduction” and “waste reduction” to minimize the creation of wastes rather than managing them after they are created. (USEPA Pollution Prevention-P2 Definition)

Resource Efficiency

- Giving preference to reusable content and recycled materials over virgin materials, as well as to conserving water and energy.

Additional Insight

Green Purchasing frequently may include:

- the acquisition of recycled content products,
- environmentally preferable products and services,
- biobased products,
- energy- and water-efficient products,
- alternately fueled vehicles,
- products using renewable energy,
- alternatives to hazardous or toxic chemicals as well as non-ozone-depleting substances, and
- products containing alternatives to certain priority chemicals.

In the past, many individuals thought of Purchasing and Supply Chain Management (SCM) as a business function with only bottom-line financial considerations. However, for the past 20+ years, many purchasing and supply chain professionals have worked to link purchasing and SCM with environmental science and management (as well as other academic disciplines) by researching (and applying) the impacts that purchasing and SCM have on social, economic, and environmental processes and systems.

National and international researchers have been able to investigate all aspects of global marketplace behavior by going into the field to research the complete life-cycle analysis (LCA) of many products and services, from raw material extraction to packaging, shipping, transportation, use, disposal, and reuse. By understanding and researching purchasing and the supply chain in this way, professionals hope to apply the benefits of integrating social, ethical, and environmental criteria upstream (at acquisition), which have multiple downstream impacts (better policy and technological enhancements, as well as waste and pollution prevention).

Research in this area has consistently shown that professional purchasers and SCM managers who consider environmentally preferable criteria in the procurement process have the power to reduce or eliminate negative impacts as well as costs. In fact, global experience demonstrates how environmentally preferable criteria early in the process improve the organization's environmental performance, while addressing ethics, social regeneration, and economic concerns.

Additionally, many ‘green’ products work as well or better than traditional products and can save money. Switching to safer cleaning products, for example, can reduce incidents of allergic reactions, asthma, burns, eye damage, major organ damage, and cancer. Buying 100 percent recycled-content paper can reduce energy use by as much as 44 percent, decrease greenhouse gas emissions by 37 percent, cut water use and solid waste emissions in half, and practically eliminate wood use. Similarly, energy-efficient products and renewable energy sources reduce greenhouse gas emissions and harmful air pollutants while lessening our dependence on imported oil. Overall, the implementation and integration of green purchasing concepts constitutes a system-wide process-reform that helps shrink an organization's ecological footprint.

Green Purchasing can allow an organization to offset financial and environmental risk, rather than inheriting it from suppliers. Alternatively, organizations may want to pre-qualify suppliers who demonstrate responsible environmental management. Assessment and benchmarking can aid an organization with the process. Green Purchasing can bring important benefits for its practitioners: risk management, eco-efficiency, stronger supplier relationships, and improvements in environmental performance.

We thank you for your contributions in the process. We expect this step to confirm a definition will pay dividends for all of us in higher education. **NAEP**



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