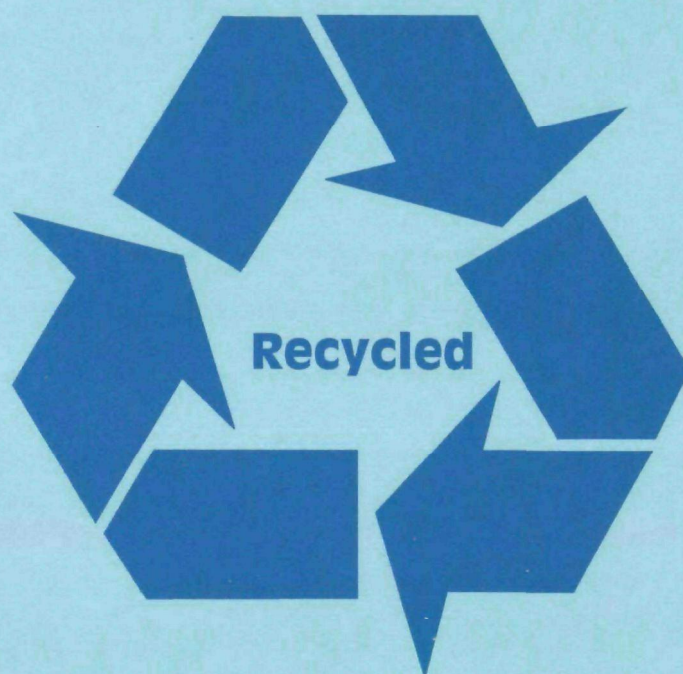


# **The Procurement and Use of Recycled Products**

A Primer for Government Officials



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## INTRODUCTION

Recycling is not completed until the recyclables collected by municipalities, businesses, and institutions are made into new products and these products are purchased and used by consumers, thus CLOSING THE RECYCLING LOOP.

In recent years, interest in the procurement and use of recycled products has increased dramatically. Despite this interest, the actual purchase of recycled products to date has been quite limited. Lack of information about procuring recycled products is often cited as a major reason.

The purpose of this primer is two-fold:

- To stimulate the purchase of recycled products; and,
- To explain how to implement a recycled products procurement program.

The primer explains the reasons for buying recycled products and identifies some of the myths and barriers associated with such purchases. Key terminology is defined and sources of information about recycled products are identified.

Guidelines for establishing an AFFIRMATIVE PROCUREMENT PROGRAM are presented, as are procedures for modifying the procurement process to purchase recycled products. Incentives used to facilitate the procurement of recycled products, including cooperative purchasing arrangements, are described. The EPA and FTC guidelines pertaining to the advertising of recycled products are outlined. And finally, some sources of general information and assistance are listed.

The key to successful recycling programs is the presence of adequate, stable markets for the recyclables that are collected. Such markets cannot exist or survive if there is only limited demand for recycled products.

Government can play a major role in helping to create and expand such markets by purchasing recycled products. Collectively, government purchases in the United States account for about 20% of the Gross National Product. Thus, if governments alone were to purchase recycled products, the positive impact on recycling markets would be significant.

It is hoped that government officials, recycling coordinators, purchasing agents, and others will find this primer helpful and will be motivated to procure and use recycled products in their routine operations.

## REASONS TO BUY RECYCLED PRODUCTS

Since many government agencies are satisfied with the virgin products (products made with virgin materials/resources) that they currently purchase and use, why should they switch to recycled products?



There are three very good reasons why they should do so - environmental protection, resource conservation, and economic development.

### **Environmental Protection**

The production of recycled products is often less harmful to the environment than is the production of their virgin counterparts.



- Some recycled products require far less energy to produce than do their virgin counterparts. Good examples of this are aluminum cans and glass bottles.

The manufacturing process used to produce some recycled products may employ less toxic materials and generate less toxic/hazardous wastes than do the comparable virgin manufacturing processes (although this is not universally true for all recycled products).

### **Resource Conservation**

- The manufacture of recycled products involves the reusing of certain natural resources, thereby promoting the conservation of resources. Examples are recycled cellulose fibers from trees used to make new paper products and scrap steel used to make new steel products.

### **Economic Development**

The purchase of recycled products can also benefit the national and local economies. The procurement and use of recycled products creates a market demand for such products. This results in the opening of new and larger markets for the recyclables that are collected.

- New and expanded markets for recycled products can lead to the creation of new businesses and industries that manufacture these products or to the expansion and diversification of existing industries. These, in turn, create new jobs and strengthen the local tax base.

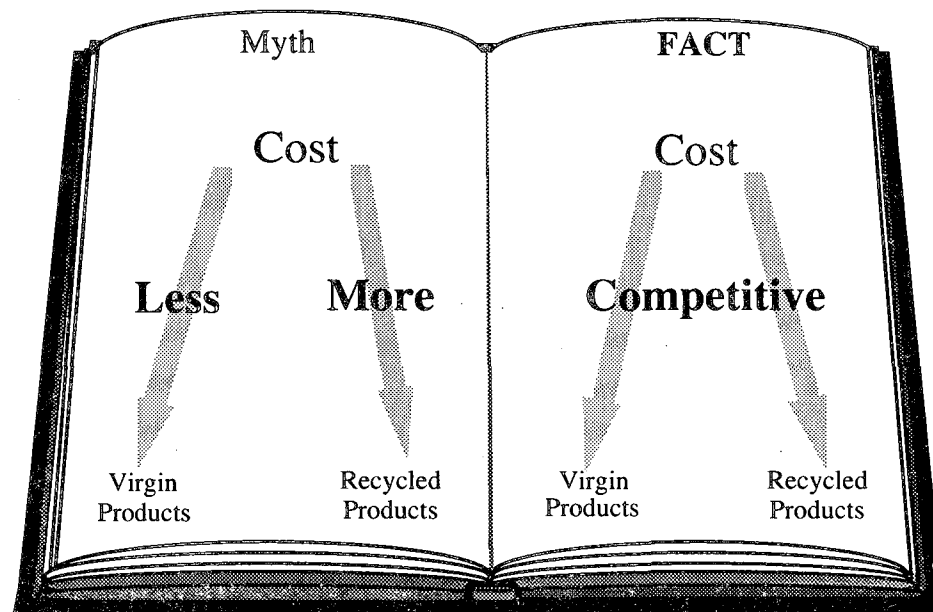
## MYTHS AND BARRIERS ASSOCIATED WITH BUYING RECYCLED PRODUCTS

Among the reasons why recycled products procurement programs have been rather slow to catch on are a number of lingering myths or perceptions about recycled products plus certain governmental administrative barriers that inhibit or prevent their procurement. Although most of these myths have been disproven and the barriers have been removed in recent years, there still remain negative perceptions that need to be addressed.

The following is a brief description of the main myths and barriers and what is being done to overcome them.

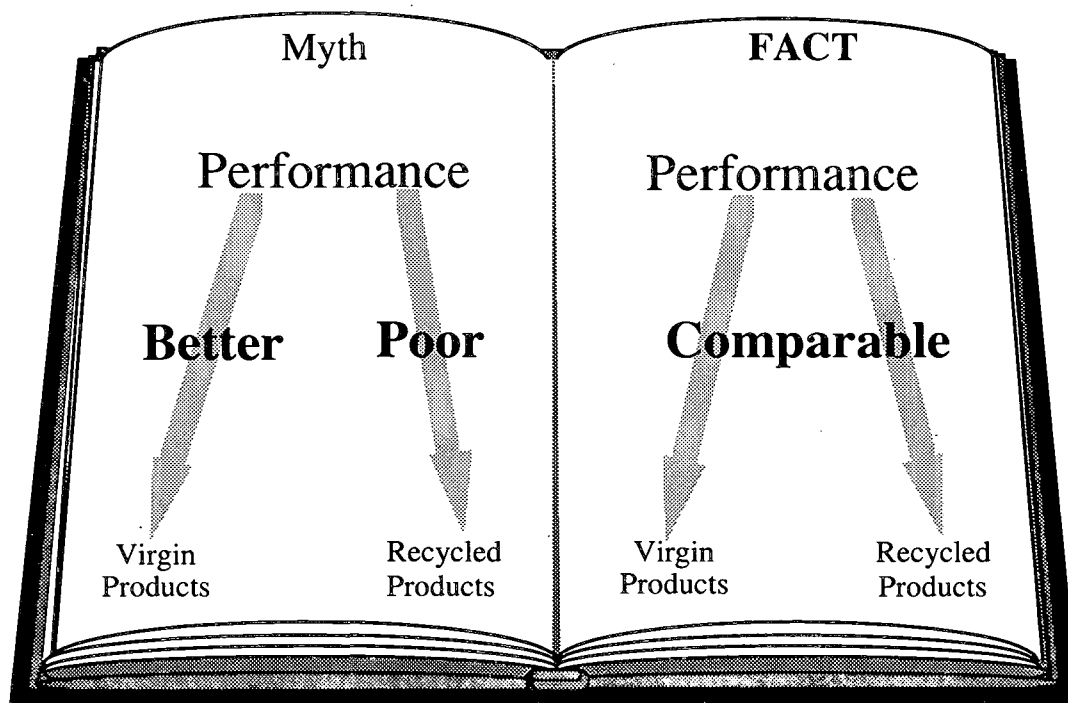
### Product Prices

There is a persistent belief that all or most recycled products cost much more than their virgin counterparts. While this might be true for some recycled products, it is not universally so. Prices may be higher for products that are in limited supply or for products that are manufactured at plants which are a great distance from the buyer (resulting in high transportation costs). However, as demand for products has increased and governments have banded together in cooperative purchasing arrangements to negotiate lower prices, the overall prices of recycled products have come down to where they are often competitive with those made with virgin materials.



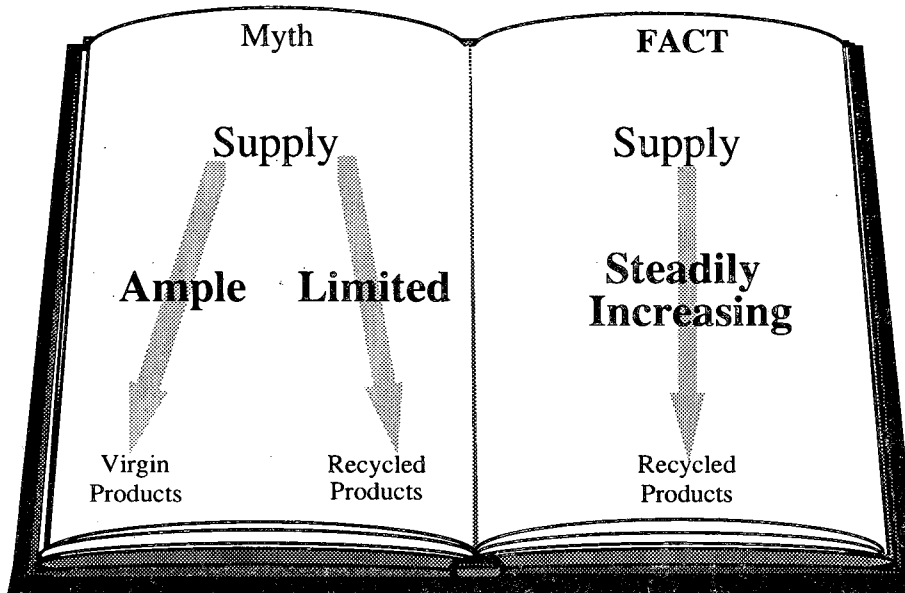
## Product Quality

Years ago, when recycled products first came on the market, many products failed to perform well. Thus, the perception evolved that recycled products are of poor quality compared to their virgin counterparts. This is one myth that appears to die hard. Although some recycled products fail to perform as expected (the expectations, not the performance, may be the problem), it is not usually true that recycled products are of poorer quality than virgin products. Most perform just as well as products containing virgin materials, and the quality is continually improving. Furthermore, many companies will provide samples for performance testing prior to purchase.



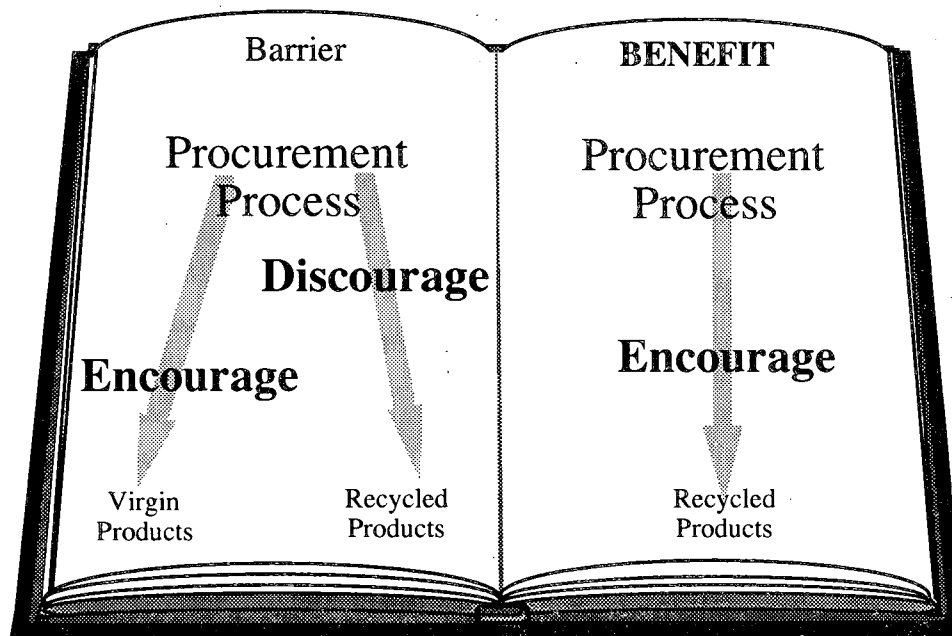
## Product Availability

Because many recycled products are new to the marketplace or are manufactured in limited quantity, the supply often fails to meet new and sudden demand. Even when demand is high, supply can lag behind until manufacturing capacity catches up. However, the supply of most recycled products has been steadily increasing and shortages should not be a major problem in the future. In fact, continued strong product demand is a positive incentive for industries to expand their manufacturing capacity.



## Procurement Process

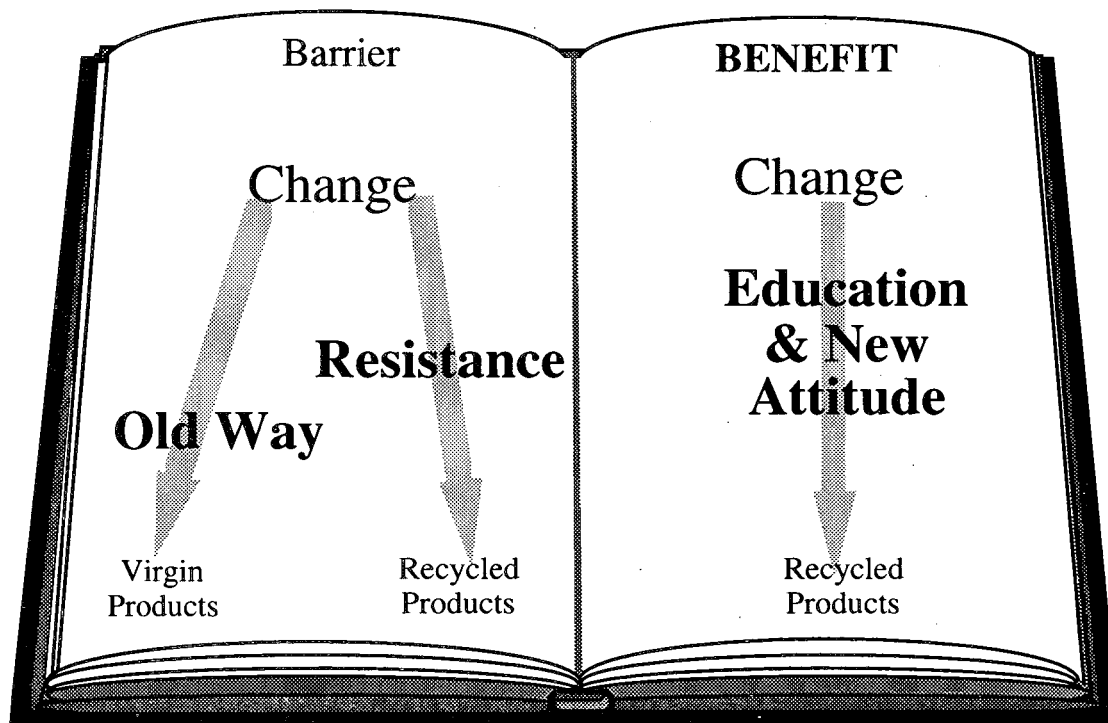
A major barrier to the purchase of recycled products by governments may be the subtle, but nonetheless potent, preference for virgin products built into the procurement process. The wording of bidding directions and forms plus the descriptions of product specifications may preclude the acceptance of bids on recycled products. However, many government procurement agencies have revised their bidding documents and specifications to not only permit, but to even encourage, the offering of bids on recycled products.





## Resistance to Change

The procurement and use of recycled products constitutes a rather significant change for many government agencies. And whenever there is change, especially when everything appears to be operating just fine, there is bound to be reluctance and resistance on the part of managers and employees. As the saying goes, "If it ain't broke, don't fix it." This resistance and attitude often has its roots in the myths and barriers cited above. However, if people can be educated and convinced to try something new, then this barrier can be overcome.



## TERMINOLOGY AND DEFINITIONS

Before embarking on the procurement of recycled products it is very important to know and understand the terminology associated with recycling and recycled products. This includes such terms as RECYCLED, RECYCLABLE, RECOVERED or SECONDARY MATERIALS, and PRE- and POST-CONSUMER.

Since we're dealing with recycled products, let's begin with the term RECYCLED. When the term RECYCLED is applied to a product, it means that the product was manufactured with certain materials recovered from the waste stream. For example, recycled newsprint is paper made with cellulose fiber which was recovered from previously used or discarded newsprint.

### Recycled:

Product manufactured with certain materials recovered from waste stream.

Since many manufacturers are now using the term RECYCLED and applying it by their own standards, it has been necessary for some governments to enact legislation or regulations specifying exactly what the content of recovered materials must be. Again using the example of newsprint, a law or regulation might specify that the minimum content of recycled cellulose fiber must be 50% post-consumer.

In this example, reference has been made to RECOVERED MATERIALS. These are sometimes called SECONDARY MATERIALS. These terms are applied to any waste that is a source of a raw material used in manufacturing the recycled product. In the example cited above, cellulose fiber is the raw material that was recovered from waste or old newspapers (ONP).

### Secondary Material:

Waste that is a source of a raw material used in manufacturing the recycled product.

Another term that is often used in association with RECOVERED MATERIAL is RECYCLABLE. It refers to the characteristic that allows the waste material to be recycled or remanufactured. ONP, for example, is recyclable, that is, it can be

used to make recycled newsprint. The term is also often used as a noun. All of the materials recovered from the waste stream are referred to as RECYCLABLES.

**Recyclable:**

The characteristic that allows the waste material to be recycled or remanufactured.

As is the case with the term RECYCLED, manufacturers have often used the term RECYCLABLE loosely, resulting in governments enacting rules for its future use. For a material to be RECYCLABLE it must not only possess the characteristic of being able to be recycled, but must also be collected for remanufacturing in significant quantities at the local or state level.

**A Material is Recyclable if:**

- It possesses the characteristic of being able to be recycled.
- AND
- It has been collected for remanufacturing in significant quantities at the local or state level for recycling.

The terms PRE-CONSUMER and POST-CONSUMER must also be understood and considered when procuring recycled products. PRE-CONSUMER recovered materials refer to those wastes which have not actually been generated as the result of use by consumers. They include wastes generated within a manufacturing plant and materials that were unsold and unused by consumers. A good example would be magazines. Often printed in great quantities, many magazines are never sold and are subsequently discarded. Those unsold and unused copies are often referred to as PRE-CONSUMER wastes because they have never been used by the ultimate consumer. Conversely, products that have been purchased and used by consumers and subsequently discarded as waste are referred to as POST-CONSUMER. However, there is still disagreement on the application of these terms to specific types of wastes.

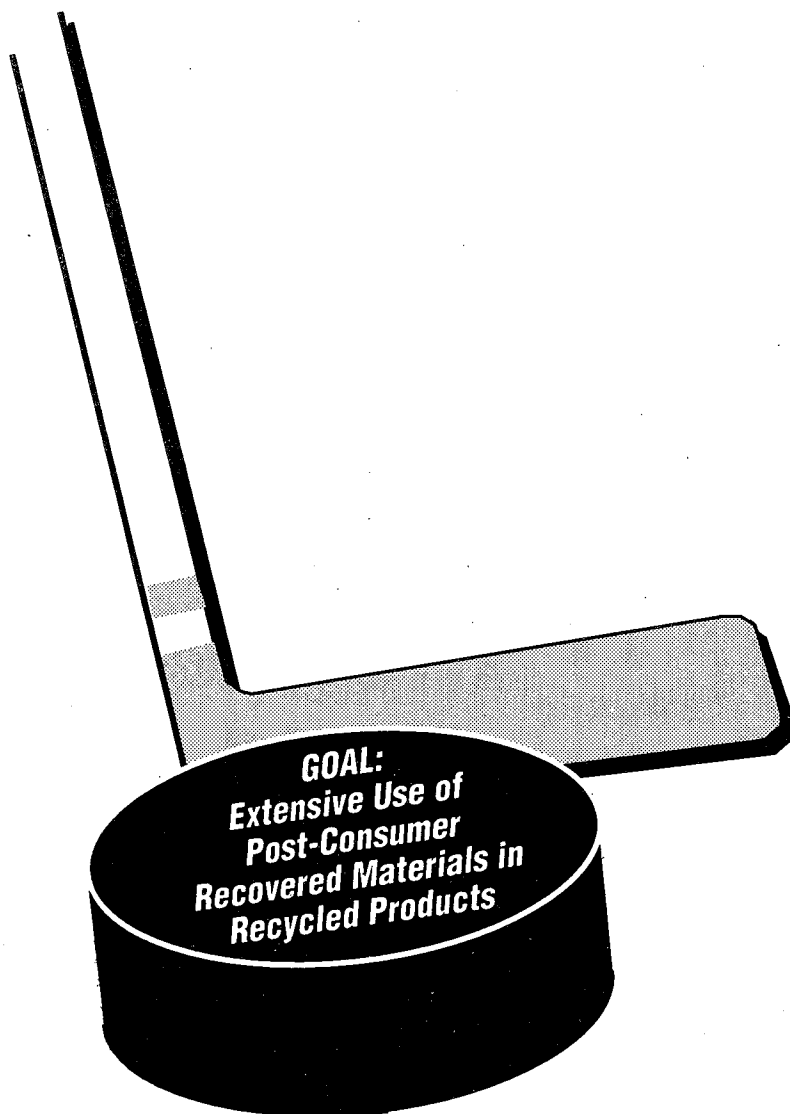
**Pre-Consumer:**

Wastes which have not been generated as a result of consumer use.

Since a goal of recycling is to recover resources from the municipal solid waste stream which is made up mostly of post-consumer wastes, it is especially important that post-consumer recovered materials be used as much as possible in recycled products - and that procurement agencies request products with significant post-consumer material content.

**Post-Consumer:**

Products purchased and used by consumers then discarded as waste.



## **INFORMATION ABOUT AVAILABLE RECYCLED PRODUCTS**

There are literally hundreds of recycled products currently on the market, ranging from recycled printing papers to plastic lumber. For every type of recyclable material collected, there are dozens of products that are made from them.

Despite this, government officials wishing to procure recycled products often don't know how to get information about what is available and who sells it.

To assist those who are seeking information about available recycled products, several excellent resources are available.

### **American Recycling Market, Inc. (ARM)**

ARM, headquartered in Ogdensburg, NY, publishes a comprehensive listing of recycled products which is updated three times each year. Entitled THE OFFICIAL RECYCLED PRODUCTS GUIDE, this document contains over 2000 certified listings of recycled products available from manufacturers and distributors throughout the United States. Listings are in alphabetical order by product, by company name, and by location (state). ARM also has a computerized database which can be accessed instantaneously. For more information, contact American Recycling Market, Inc., PO Box 577, Ogdensburg, NY 13669, phone 800/267-0707.

### **United States General Services Administration (GSA)**

The GSA is the principal Federal government procurement agency (a few other agencies are empowered to do their own procurement). Among its responsibilities are the identification of recycled products which federal agencies might purchase and the negotiation of contracts with manufacturers and distributors for the procurement of such products. To assist federal agencies in selecting appropriate recycled products, the Federal Supply Service of the GSA has compiled its own RECYCLED PRODUCTS GUIDE which lists all of the products for which contracts have been negotiated. Although designed for federal agencies primarily, the GUIDE can also be useful to others who need information about recycled products. Copies of the RECYCLED PRODUCTS GUIDE may be obtained, at no cost, from the General Services Administration, Centralized Mailing List Service, PO Box 6477, Fort Worth, TX 76115.

## **United States Environmental Protection Agency (EPA)**

To facilitate implementation of its PROCUREMENT GUIDELINES FOR GOVERNMENT AGENCIES, EPA established a telephone hotline called the Recycled Products Information Clearinghouse (RPIC) which is operated for EPA by the Center for Earth Resources Management Applications, Inc. (CERMA) located in Springfield, VA. The CERMA staff can provide information, including lists of manufacturers and distributors, about the recycled products identified in the EPA guidelines. The telephone hotline number is 703/941-4452.

## **Pennsylvania Resources Council (PRC)**

The PRC, a non-profit environmental organization, has published a directory of the names and addresses of companies in and adjacent to Pennsylvania that produce and sell recycled products. Copies of this GUIDE TO RECYCLED PRODUCTS FOR CONSUMERS AND SMALL BUSINESSES and other information may be obtained by contacting PRC, PO Box 88, Media, PA 19063, 215/565-9131.

## **Other Sources of Information**

Other important sources for local governments are their respective state government procurement offices. Many states have taken the lead in procuring recycled products and have negotiated contracts with vendors through which local governments may purchase.

The United States Conference of Mayors and the National Recycling Coalition are sponsoring buy-recycled campaigns and can also be of assistance in identifying sources of recycled products.



### **Information Sources**

#### **Comprehensive Listings**

- The Official Recycled Products Guide  
American Recycling Market, Inc.  
P.O. Box 577  
Ogdensburg, NY  
800/267-0707

- Recycled Products Guide  
U.S. General Services Administration  
Centralized Mailing List Service  
P.O. Box 6477  
Fort Worth, TX 76115

#### **Directory**

- Guide to Recycled Products for  
Consumers and Small Businesses  
Pennsylvania Resources Council  
P.O. Box 88  
Media, PA 19063  
215/565-9131

### **Information Sources**

#### **Computerized Database**

- American Recycled Market, Inc.  
800/267-0707

#### **Telephone Hotline**

- EPA's Recycled Products Information  
Clearinghouse  
703/941-4452

#### **Other Information Sources**

- State Government Procurement Offices  
•U.S. Conference of Mayors  
202/293-7330  
•National Recycling Coalition  
202/625-6406

## ESTABLISHING AN AFFIRMATIVE PROCUREMENT PROGRAM

EPA has published guidelines for establishing an Affirmative Procurement Program (APP) for the purchase of recycled products. These guidelines apply to all procuring agencies of the federal, state, and local governments that use appropriated federal funds for purchasing products, plus their respective contractors.

There are four components of an APP, namely (1) a Preference Program, (2) a Promotion Program, (3) Procedures for Obtaining and Verifying Estimates and Certifications of the Content of Recovered Materials, and (4) Annual Review and Monitoring. The following are some specifics about each component.

### Affirmative Procurement Program

<b>Preference Program</b>	<b>Promotion Program</b>	<b>Verifying Estimates and Certification of the Content of Recovered Materials</b>	<b>Annual Review and Monitoring</b>
The Preference Program specifies that the procuring agencies have a preference for recycled products. This can be accomplished by specifying minimum content standards which identify the minimum content of recovered materials that products must contain. In the absence of minimum content standards, the procuring agencies may make a case-by-case evaluation of bids received from vendors of recycled products.	The Promotion Program allows procuring agencies to actively promote their preference for recycled products through the bidding process. For example, procurement agencies may choose to include explicit statements in their solicitation documents, discuss their preferences in prebidder conferences, and issue general announcements about their preferences.	The Estimation and Certification component specifies that vendors must estimate the percentage of and certify the actual content of recovered materials in their products. Vendors must make their own arrangements for obtaining such information from manufacturers.	Annual Review and Monitoring involves an on-going review of the minimum content standards, bidding documents and procedures, and the entire APP. Procuring agencies should review the range of estimates and certifications they received to determine whether they are using the highest percentage of recovered materials.

There are several other aspects of government procurement programs that may need to be assessed and modified to ensure the procurement of recycled products.

## **ADAPTING THE GOVERNMENT BIDDING PROCESS**

The policies, procedures, and forms used by government procurement agencies can greatly affect the ability of the government to procure recycled products. Past procedures which were established for the purchase of products made with virgin materials may have provisions that prevent vendors from offering bids on recycled products or may openly state that recycled products will not be considered. Therefore, it is essential that government procurement agencies examine their policies, procedures, and forms to remove any provision that might discriminate against the purchase of recycled products.

The first place to start is with bid solicitation forms. These should be revised to remove discriminatory language or implications. Some governments have gone as far as to add statements that they prefer to purchase recycled products, such as the following:

"\_\_\_\_\_ prefers to buy products made with recovered materials whenever they meet performance standards, can be purchased competitively, and are available at a reasonable price within a reasonable period of time."

The published specifications of products for which bids are solicited may also be stated in such a way as to preclude the use of recycled products. The wording of specifications should be reviewed periodically to ensure that they do not intentionally or inadvertently indicate that recycled products are not acceptable. Performance of the products, rather than the material or aesthetics, should be given primary consideration when rewriting specifications, for even if the recycled products may not look as nice, their performance may be equal.

To facilitate the bidding of recycled products, bid solicitation forms and directions should indicate the information needed to verify that the products meet recycled criteria. This would include the content of recovered material and the certification of the manufacturer.

## INCENTIVES TO PROCURE RECYCLED PRODUCTS

In an effort to encourage the procurement of recycled products, governments have enacted or implemented various economic and administrative incentives. These include minimum content standards, price preferences, and set-asides.

Minimum content standards specify the lowest percentage of recovered material that a recycled product must contain to be eligible for procurement by government agencies. For example, federal recycled product guidelines specify that recycled lubricating oils contain at least 25% refined oil. Cellulose building insulation must contain at least 75% post-consumer recovered paper. By establishing minimum content standards, governments open the market to recycled products.

Price preferences are often granted to recycled products because the price of recycled products may be higher than their virgin counterparts. Governments may grant preferences of 5%, 10%, or greater which allows the acceptance of bids on recycled products even if the bid price is 5% to 10% higher than the price of the products made with virgin materials. Critics of price preferences argue that vendors have little incentive to reduce their prices if they can charge higher prices and still make the sale. Proponents see price preferences as temporary measures to assist vendors of recycled products to compete on the open market.

Another incentive that governments may use is a set-aside, whereby a certain percentage or quantity of the purchases of particular products must be recycled. For example, a government may specify that 25% of all purchases of copier paper per year must have recycled fiber content. This assures that at least some of the products that are purchased will be recycled.

## **Incentives to Procure Recycled Products**

### **Economic:**

- **Price Preferences –**  
Governments allow the acceptance of bids on recycled products when bid price is 5% - 10% higher than the price of virgin products
- **Set-Asides –**  
Government specifies that a certain quantity of a particular product must be recycled

## **Incentives to Procure Recycled Products**

### **Administrative:**

- **Minimum Content Standards –**  
Government procurement agencies specify the lowest percentage of post-consumer material that a recycled product must contain

## COOPERATIVE PROCUREMENT OF RECYCLED PRODUCTS

Governments, especially small ones, often experience considerable difficulty when attempting to procure recycled products. They may find that they are unable to obtain an adequate supply of products on a timely basis at a competitive price. To deal with this, governments are turning to cooperative purchasing as a partial remedy.

One of the simplest cooperative purchasing arrangements is for local governments to buy through contracts negotiated by their respective state governments. This has been called "piggybacking" in Pennsylvania. The state procurement agency establishes the product specifications and negotiates the price. It then provides this information to the local governments which can place their orders directly with the vendors without going through the usual bidding process.

Several government procurement agencies at the local or state level may enter into a formal cooperative purchasing agreement to procure recycled products as a single entity. One of the agencies or another office is empowered to negotiate contracts for the purchase of recycled products on behalf of the member agencies. Upon signing of the contracts, member agencies may simply buy the products directly from the vendors and have them shipped to their government facilities. An example of such an arrangement is the Metropolitan Washington Council of Governments.

Another approach, often used by public school districts, is for a group of districts to authorize one district or an entity such as a regional or county school association, to negotiate contracts on behalf of the members. Supplies of the products may be purchased and stored in a central warehouse from which the individual member school districts may order, or the individual member school districts may order directly from the vendors.

The cooperative procurement of recycled products is similar in concept and structure to cooperative marketing arrangements for the sale of the recyclables collected by municipalities. In fact, some of the entities that are doing cooperative marketing have expanded their services to include cooperative procurement.



## RECYCLED/RECYCLABLE PRODUCT ADVERTISING

As environmental marketing of products has become fashionable in response to the demands of consumers for “environmentally friendly” products, manufacturers have begun to promote their products by using such terms as RECYCLABLE and RECYCLED. The result has been widespread confusion and occasional misuse of terms.

Recognizing these problems and the need for some standardization, the federal government has issued voluntary guidelines for environmental advertising and marketing claims. Although the problem is one primarily found in the marketplace for household goods, government procurement officials should also be familiar with these guidelines since they may encounter similar advertising claims for products which they purchase.

The U.S. Federal Trade Commission (FTC) has primary responsibility for overseeing product marketing. In consultation with EPA and the Office of Consumer Affairs, the FTC issued in July 1992 its GUIDES FOR THE USE OF ENVIRONMENTAL MARKETING CLAIMS. The following are the guidelines which apply to the use of the terms RECYCLABLE and RECYCLED CONTENT.

### RECYCLABLE:

It is deceptive to represent, directly or by implication, that a product or package is recyclable. A product or package should not be marketed as recyclable unless it can be collected, separated or otherwise recovered from the solid waste stream for use in the form of raw materials in the manufacture or assembly of a new package or product. Unqualified claims of recyclability for a product or package may be made if the entire product or package, excluding minor incidental components, is recyclable. For products or packages that are made of both recyclable and non-recyclable components, the recyclable claim should be adequately qualified to avoid consumer deception about which portions or components of the product or package are recyclable. Claims of recyclability should be qualified to the extent necessary to avoid consumer deception about any limited availability of recycling programs and collection sites.

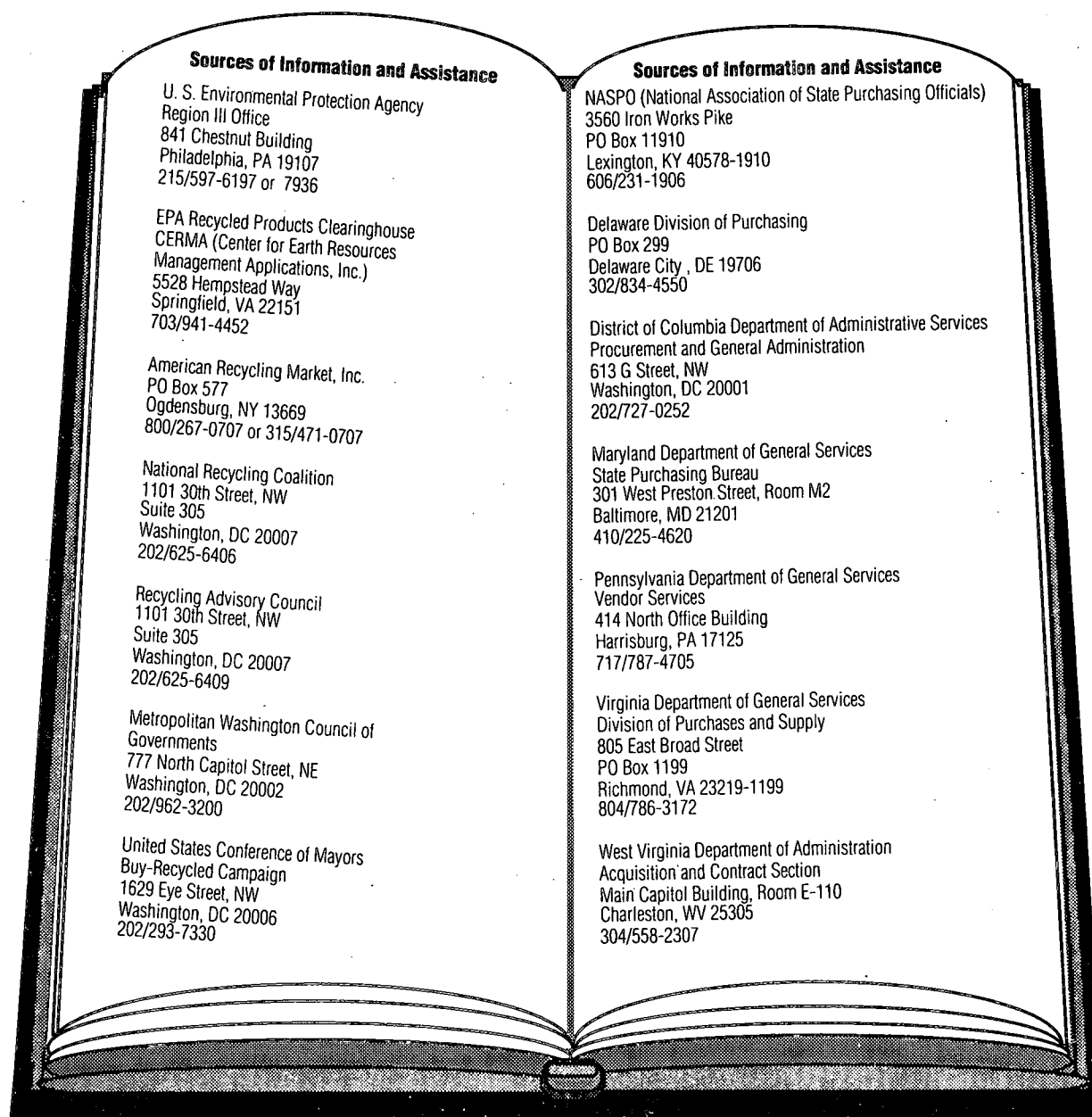
#### RECYCLED CONTENT:

A recycled content claim may be made only for materials that have been recovered or otherwise diverted from the solid waste stream, either during the manufacturing process (pre-consumer) or after consumer use (post-consumer). To the extent the source of recycled content includes pre-consumer material, the manufacturer and advertiser must have substantiation for concluding that the pre-consumer material would otherwise have entered the solid waste stream. In asserting a recycled content claim, distinctions may be made between pre-consumer and post-consumer materials. Where such distinctions are asserted, any express or implied claim about the specific pre-consumer or post-consumer content of a product or package must be substantiated.

It is deceptive to misrepresent, directly or by implication, that a product or package is made of recycled material. Unqualified claims of recycled content may be made only if the entire product or package, excluding minor, incidental components, is made from recycled material. For products or packages that are only partially made of recycled material, a recycled claim should be adequately qualified to avoid consumer deception about the amount, by weight, of recycled content in the finished product or package.

## SOURCES OF INFORMATION AND ASSISTANCE

There are numerous government agencies and national organizations that can provide helpful information, advice, and assistance on a wide array of topics and activities relating to the procurement of recycled products. The following are those which may be most useful to governments within the EPA Region III geographic area.



## BIBLIOGRAPHY OF USEFUL PUBLICATIONS

Several of the agencies and organizations listed in the previous section publish fact sheets, manuals, guides, and other materials that may be useful to those establishing and administering recycled products procurement programs. The following are some examples.

### Bibliography of Useful Publications

- From the U. S. Environmental Protection Agency Region III Office:
  - Procurement Guidelines for Government Agencies
  - Fact sheet on EPA Guideline for Purchasing Paper and Paper Product
  - Fact sheet on EPA Guideline for Purchasing Building Insulation containing Recovered Materials
  - Fact Sheet on EPA Guideline for Purchasing Retread Tires
  - Fact Sheet on EPA Guideline for Purchasing Re-Refined Lubricating Oil
  - Fact sheet on EPA Guideline for Purchasing Cement and Concrete containing Fly Ash
  - Proceedings of the 1992 Government Recycled Products Tradefair and Showcase
- From CERMA (Center for Earth Resources Management Applications, Inc.)
  - Recycled Paper Distributors List
  - Recycled Newsprint Mill List
  - State Procurement Laws
  - Designing Effective Procurement Policies
  - Recycled Paper Guideline
  - Insulation Guideline
  - Insulation Manufacturers List
  - Re-Refined Oil Guideline
  - Oil-Re-Refiners List

### Bibliography of Useful Publications

- Retread Tire Guideline
- Tire Retreaders List
- Asphalt Rubber
- Designing Effective Procurement Policies
- From American Recycling Market, Inc.
  - The Official Recycled Products Guide
- From NASPO (National Association of State Purchasing Officials)
  - State Purchasing Contact Manual
- From MWCOG (Metropolitan Washington Council of Governments)
  - Users Guide to Cooperative Purchasing
- From U. S. Conference of Mayors
  - Sample specifications for paper, oil, tires, road aggregate, building insulation, etc.
  - Buy-Recycled survey of 158 cities
  - Case studies of Philadelphia, Newark, and other cities
  - Information on purchasing under state contracts
  - Reporting forms for tracking purchases

## CONCLUSION

Buying recycled products ensures the closing of the recycling loop. It is also market development in the broadest sense.

There is a vast array of high quality recycled products already available and new ones are being produced daily. We are literally on the cutting edge of a new industrial revolution.

Governments at all levels have a unique opportunity to contribute to this by purchasing and using as many recycled products as possible. The purchasing power of governments can have a major positive impact on recycling market development.

This primer has described how to establish a recycled products procurement program, presented ideas on how governments can work together to acquire recycled products, and identified several sources of information and assistance available to government officials.

The next step is for governments to accept the challenge and to embark on the procurement of recycled products. EPA and others are ready and willing to help.

