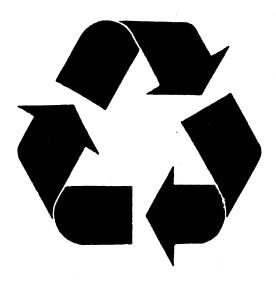
Building a Strategy for Marketing Minnesota's Secondary Materials

Executive Summary: A Blueprint for Action

Center for Urban and Regional Affairs in cooperation with The Minnesota Project

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February 1990

To all interested in recycling and secondary materials market development:

On December 13 and 14, 1989, a select group of thirty-five public and private sector people participated in a workshop on marketing secondary materials, held at the University of Minnesota's Hubert H. Humphrey Center in Minneapolis. The purpose of this conference was to discuss the current situation and formulate a strategic "Blueprint for Action" for marketing recycled materials. While the discussions focused on Minnesota and the Midwest, the group's observations and proposals are applicable to the entire country.

The workshop was conducted by the University of Minnesota's Center for Urban and Regional Affairs (CURA) in cooperation with The Minnesota Project and funded by a grant from the Northwest Area Foundation. Project organizers designed the effort to respond to the immediate need for a broad-based, innovative discussion of market strategies, at a time when Minnesota and other states are facing a significant change in the market environment for recycled materials.

About a third of the participants came from industry, another third from government, with the remainder bringing perspectives from the academic community and the nonprofit sector. Included in the group were key decision-makers in industry and state government, and people with responsibility and leverage in the economic and governmental spheres. Among them were participants from Arkansas, California, Florida, Iowa, Ohio, Washington, Wisconsin, and Alberta, Canada. A list is attached.

To take advantage of the impressive mix of people, most of the workshop was conducted in small, informal sessions organized around three major materials areas—waste paper, plastics, and glass and metals. Together, their work represents a significant assessment of the current impediments inhibiting market utilization of secondary materials and an innovative, extensive, and potent "Blueprint for Action" to overcome these impediments.

The group did not want the results of their discussions to end with the workshop. Nor did they feel it was sufficient just to apply the recommendations to their own agencies and organizations. They agreed that the "Blueprint for Action" should be widely distributed and expressed strong interest in having additional sessions involving others from Minnesota and other states.

The results of the December workshop are highlighted in the Executive Summary. It is hoped that this document will be useful to all those—in the public and private sectors—interested in developing strategies for marketing secondary materials. Copies of the full workshop report (Building a Strategy for Marketing Minnesota's Secondary Materials, Volume II: A Blueprint for Action), as well as a workshop background document (Volume I: Market Status Report) on the status of Minnesota's secondary materials markets, are available from CURA.

Sincerely,

Thomas L. Anding, Workshop Chair

Associate Director, CURA

A STRATEGY FOR MARKETING SECONDARY MATERIALS

EXECUTIVE SUMMARY: A BLUEPRINT FOR ACTION

The results of the December workshop are summarized below. While there was not unanimous agreement on every detail of the group's report, major agreement existed on the following key observations and proposals. The overall conclusions specifically reflect areas of common agreement which emerged either in the large group sessions or among the small groups.

OVERALL CONCLUSIONS

- 1. The use of secondary materials (particularly waste paper, plastics, glass, and metals) is inhibited by a number of market impediments, the *most important* of which are:
 - <u>Insufficient quality of materials</u>—due to a lack of materials and packaging standards, inadequate materials separation, and the presence of contaminants in the waste stream.
 - <u>Diffusion of supply</u>—caused by distances from markets and myriad brokers, especially in rural areas, and the wide variety of types of materials.
 - <u>Higher costs of secondary materials relative to their virgin counterparts</u>—caused by insufficient demand; costs of collection, processing, and transportation; and "unfair competition" as a result of subsidies that keep the price of virgin materials "artificially" low.
- 2. Five major actions should be taken to overcome these impediments:
 - Establish cooperative collection, transportation, and marketing arrangements—to coordinate collection, transportation, processing, and brokering; reduce the costs of these activities; and enhance the quantity and quality of the resource. These might include any of several possible types, including multi-county market cooperatives, material recycling facilities (MRFs), and multi-state cooperatives.

- Modify existing subsidies that make the price of virgin materials artificially low—through federal and/or state government action to "level the playing field" and make secondary materials competitive with their virgin counterparts. These include the subsidies on wood and petroleum-based products that affect paper and plastics prices.
- Improve materials and packaging standards for products made from paper, plastics, glass, and metals—to enhance product design and recyclability. While the public and private sectors should be involved in making these improvements, standards and regulations must be enforceable by government.
- Impose packaging/container bans, taxes, deposits, or fees—to enhance the recyclability of packages and containers, create incentives for recovery of these secondary materials, enhance the quality of the materials that are recovered, and reduce the amount of material entering the waste stream.
- <u>Subsidize uneconomical aspects of collection, processing and transportation</u>—to assist in making secondary materials competitive with their virgin counter-parts through public research and development, tax breaks, grants, and other subsidies.
- 3. The public and private sectors each have legitimate and important roles to play in marketing secondary materials, and public/private cooperation in these efforts is essential. Government intervention in the market is necessary—even if the use of secondary materials is ultimately not profitable—in order to utilize these important resources and achieve environmental and landfill abatement goals. The degree to which public intervention is required will depend on the particular material.
- 4. The external costs of waste disposal—costs not reflected in the prices of packaging and other products made from virgin materials—require public strategies; the avoided costs of disposal justify public expenditures for recycling and materials marketing. While recycling may be expensive, especially in the near-term, secondary materials are an important resource and their price must be set with an eye toward total systems costs, including the costs of virgin resource development and waste disposal.
- 5. While states can do much to overcome the market barriers for these materials, some federal action is required to set standards for materials and packaging, establish labeling requirements for these, and modify existing public subsidies of virgin materials in order to create fair market competition for recyclables.

A STRATEGY FOR MARKETING SECONDARY PAPER

- 1. There are several grades of waste paper—newspaper, corrugated, office/computer, and others (such as magazines)—which have clear market potential. Even so, there are four major impediments inhibiting the full market utilization of these materials: excess quantity of these materials, given current demand (at least in the short-term); diffusion of supply caused by distances from markets and the variety of secondary paper types; higher costs of secondary paper relative to virgin fibers; and lack of, or inconsistent, quality of these materials.
- 2. Twelve key actions should be taken to overcome the impediments for waste papers with market potential (to be undertaken with an awareness of ongoing market conditions):
 - Create regional marketing and transportation cooperatives.
 - Identify and support smaller waste paper users in order to increase local demand and processing capacity.
 - Increase industry's capacity to use these materials by providing tax credits and other incentives for industry expansion, especially in the short-term.
 - Expand recycled paper procurement programs in government and the private sector.
 - Impose packaging bans, taxes, or surcharges to enhance recyclability.
 - Establish recycled paper content requirements, especially for newspapers.
 - Establish standards for products made from recycled waste paper.
 - Conduct educational and promotional efforts.
 - Label packaging and other paper products to indicate recycled content and "environmental soundness."
 - Define the appropriate roles of government and industry in waste paper marketing; determine who pays the net cost of recycling and designate who owns the waste paper.
 - Develop proposals for both regulatory and incentive measures to get industry to change its practices.
- 3. Five additional actions should be taken to overcome the impediments for mixed paper—a waste paper with limited market potential:
 - Impose packaging bans, taxes, or fees.
 - Conduct consumer education.
 - Improve paper processing technology.
 - Subsidize development of new products and end-uses for mixed paper.
 - After ensuring highest and best use, compost or burn mixed paper as a last resort.

A STRATEGY FOR MARKETING SECONDARY PLASTICS

- 1. The most important impediments inhibiting the utilization of secondary plastics include an inadequate supply and unreliable flow of plastics; diffusion of materials caused by distances from markets and myriad brokers; variations in quality; and the higher cost of secondary plastics relative to virgin resins. In addition, there is a lag in the application of technology and the development of infrastructure for the collection and remanufacture of these materials; and a lag in investment for new product development from secondary plastics. There is also a need for a "common language" about recycling and secondary plastics to avoid misunderstandings in government and industry.
- 2. Five key actions should be taken to overcome *quality* problems:
 - Standardize the plastics industry through materials and packaging standards and fees on packaging with less recyclable content.
 - Improve sorting of secondary plastics.
 - Create new applications for plastics of varying quality.
 - Foster more effective supplier/user "deal-making."
 - Eliminate the use of so-called "biodegradable" plastics (which do not degrade under normal landfill circumstances, and which complicate the remanufacture of mixed secondary plastics).
- 3. Three key actions should be taken to overcome the diffusion of supply caused by distances to markets and myriad brokers:
 - Establish materials recycling facilities (MRFs).
 - Establish other cooperative marketing arrangements.
 - Create a commodities market for secondary plastics.
- 4. Four key actions should be taken to overcome the *relatively higher costs of doing business* with secondary plastics:
 - Enhance the price of secondary plastics through government action.
 - Remove existing public subsidies on virgin plastics.
 - Shift public and private research and development priorities to acknowledge the increasing importance of secondary plastics.
 - Create greater demand for secondary plastics, particularly through new product development.
- 5. Two types of action should be taken to overcome inadequacies in the recycling/remanufacturing infrastructure:
 - Threaten regulation and bad publicity as incentives to improve infrastructure.
 - Provide public subsidies, positive publicity, and other rewards as incentives to improve infrastructure.

A STRATEGY FOR MARKETING SECONDARY GLASS AND METALS

- Secondary glass and metals are more fully utilized by their markets than some other
 recyclables because they have markets which are fairly strong, and they can almost
 always be recycled into new products. Even so, there are three major impediments that,
 if overcome, would increase utilization of these materials. These include insufficient
 quality of materials; insufficient demand for products containing secondary glass and
 metals; and the higher price of secondary glass and metals relative to their virgin counterparts because of transportation and other costs.
- 2. Twelve actions should be taken to *enhance the quality* of recycled glass and metals (several of which would, as a by-product, also increase the quantity of materials):
 - Conduct education programs (with emphasis on materials separation).
 - Set higher recycling goals for glass and metals (because they are easier to collect, recycle, and market than other secondary materials).
 - Improve glass and metals collection.
 - Require source separation through mandates, regulations, and incentive-based ordinances.
 - Require deposits on glass and metal containers.
 - Establish price signals to enhance source separation (through imposition of fees on packaging and other products, and increased tipping fees).
 - Base garbage collection fees on volume or weight (providing waste generators with an incentive for source separation).
 - Evaluate the relationships between economic incentives and materials recovery rates through cooperative studies by government and the private sector.
 - Improve mechanical separation technology.
 - Improve materials and packaging standards for glass and metal products.
 - Substitute lacquer or enamel for tin plate in metal (eliminating significant capital and technological barriers to recycling metal cans).
 - Improve metals processing (by increasing the quantities of, and ways in which certain grades of metals are used at the mills).
- 3. Five actions should be taken to *stimulate demand for products* containing secondary glass and metals:
 - Conduct education programs to promote the use of products containing secondary glass and metals.
 - Improve private sector marketing of products containing secondary glass and metals.
 - Improve materials and packaging standards for glass and metal products (to create industry confidence and thereby stimulate demand).

EXECUTIVE SUMMARY

- Establish price/cost incentives such as packaging and other product fees.
- Establish public and private procurement programs.
- 4. Four actions should be taken to reduce transportation costs:
 - Subsidize transportation costs when distances make transportation of recycled glass and metals cost-prohibitive.
 - Set trucking prices to recover glass and metals from low-generation-rate areas.
 - Establish transfer centers for consolidating small loads of secondary glass and metals, especially in rural areas.
 - Establish transportation and marketing brokerages, run individually or jointly by the government, private sector, or nonprofit groups.

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