



RECYCLED PAPER

Plenty available — now let's all use it!

Capacity is not what's holding back recycled paper market development — lack of demand is.



by Gerard Gleason, Susan Kinsella and Victoria Mills

After losing market share for several years, recycled printing and writing paper is at a critical juncture. Demand has contracted sharply since Conservatree (San Francisco) estimated its high at 10 percent in the early 1990s. A dozen recycled paper mills and three deinking mills have closed within the past year and a half. The American Forest & Paper Association (Washington) now estimates the percentage of recycled fiber across printing and writing grades to be less than 5 percent, including preconsumer fiber.

Why this downward spiral in demand and production at a time when recycled papers have achieved the highest quality and most competitive prices ever? One reason many major purchasers give for not buying recycled paper is concern that not enough capacity exists to support their jump into the market. They worry that their large purchases could max out the available paper supply, deplete recovered paper sources and drive up prices.

To test this premise, Conservatree and the Alliance for Environmental Innovation

(Boston) surveyed all deinking mills in the U.S. and Canada that make fiber for printing and writing papers. The results clearly show that, despite mill closures, significant industry capacity still exists to support a large and rapid increase in the use of recycled printing and writing papers.

The data also suggest that a broad and sustained increase in demand for recycled paper — starting with levels of postconsumer recycled content that now are widely available and cost-competitive — is the best strategy for building long-term market strength and expansion.

A comprehensive capacity study

From interviews with managers at all the nonintegrated (stand-alone) deinking mills and the deinking mills integrated to printing and writing paper manufacturing mills, the study found that:

- ◆ most deinking mills are running at less than full capacity, with an average capacity utilization across all mills of 73 percent
- ◆ of the mills running at less than full capacity, all said they easily could expand their production of deinked pulp to meet an increase in demand
- ◆ the supply of recovered paper, the raw material for making deinked pulp, is not a significant concern to most deinked pulp producers.

Most managers believe that, under current market conditions, recovered paper collection would quickly catch up to an increase in demand, even with continued exports of recovered paper. AF&PA reports that the recovery rate for printing and writing paper, the type of office and printing paper best suited for high grade deinking, is now 41 percent, so plenty is left to collect.

Some deinked pulp producers note, how-

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ever, that some recovered paper sources are becoming too contaminated, driving them to higher-priced feedstocks. They attribute the increased contamination to the growing popularity among local governments of single-stream collection systems, as well as to increasingly poor sorting.

The study also determined the fate of more than a dozen idled deinking mills. Although most were built just a few years ago, several were victims of the mid-'90s jolt in paper prices, which also drove up recovered paper prices, coupled with the advent of cheap virgin market pulp shipped in from overseas. Unfortunately, they opened just as many purchasers abandoned the recycled paper market. Although a couple could possibly be brought back on-line and a few others restarted as tissue fiber mills, the rest have been either converted to other production or dismantled.

Nevertheless, the Alliance and Conservatree found 360,000 tons per year of excess capacity to produce postconsumer deinked kraft pulp (see Table 1). Had preconsumer fiber been counted in the capacity totals, the number would have been even higher.

How much recycled paper does this make?

The 360,000 tons of unused deinked pulp capacity constitute 100 percent fiber. How much paper that could yield varies by the fiber contents of different types of paper, as well as the amount of postconsumer content used.

Coated papers, for example, use a relatively low percentage of fiber in the sheet, and the most widely available level of postconsumer recycled content currently is only 10 percent. If all the unused capacity were directed to making coated papers with 10 percent postconsumer content, it could produce more than 5.6 million tons per year, or nearly 60 percent of U.S. coated paper production.

Uncoated papers, on the other hand, have both higher fiber contents and higher standard postconsumer content levels. Still, if all the unused capacity were directed to making copier paper at 30 percent postconsumer content, it would produce more than 1.5 million tons per year, or one-third the entire U.S. copier paper production.

Of course, all of the fiber would not be devoted to one kind of paper or another, but rather shared among many different grades of paper. Currently, several efforts are underway to increase recycled paper purchases among many types of paper users. All will count on a piece of this potential increase in the fiber pie.

This Conservatree and Alliance capacity study unequivocally shows that the current

Table 1 Estimated capacity and production of post-consumer deinked kraft pulp in U.S. and Canada

| Current deinked pulp supply (totals) | Tons per year |
|--------------------------------------|---------------|
| Capacity | 1,348,000 |
| Production | 988,000 |
| Unused capacity | 360,000 |

Source: Alliance for Environmental Innovation/Conservatree interviews with deinking mill representatives, July-December 2001.

deinked pulp supply is sufficient to meet a significant surge in demand from several applications at once. Table 2 shows one possible scenario for sharing the excess pulp capacity. Pulp allocations are based on each grade's approximate share of U.S. printing and writing paper production, along with a multiplier effect when higher percentages of postconsumer content are used.

Recycled paper market development needs to focus on increasing market share, not just recycled content levels.

Some purchasers question whether the additional capacity translates into actual machine availability at paper manufacturers. But many paper mills have unused manufacturing capacity and multiple feedstock lines, so they can switch pulp sources depending on the day's best prices and their customers' needs.

Market development strategy

The existence of so much unused deinked pulp capacity is both an opportunity and a warning. If recycled paper demand continues to languish, more mill closures can be expected. But paper purchasers can turn the situation around by driving up market demand. The most effective way to do this is by broadly expanding the number of users of recycled paper, rather than solely driving up postconsumer recycled content levels among current users.

Given producers' experience with fickle recycled paper demand, the best strategy for long-term market development is for the widest possible array of purchasers to sig-

nificantly boost recycled papers' market share in each grade. This means that even the papers with lower postconsumer contents have a critical role to play. Strong support for the papers available and affordable today will prevent the foundation for recycled paper from slipping further. This also will achieve the following strategic gains:

Maintaining and expanding a wide manufacturing base. While a few North American mills can make copy paper with 100 percent postconsumer recycled content, many more can make the same paper with 30 percent, often at lower cost.

Developing a broader and more diverse purchasing base. This signals to producers that recycled paper is no longer just a product for a "niche" market.

Spreading existing deinked pulp capacity across the greatest number of users. Clearly, more than three times as much 30 percent postconsumer content paper can be made than 100 percent postconsumer from the available fiber, thereby hiking market share much more significantly.

Ensuring the shift to recycled paper is sustained and irreversible. Broad and lasting customer acceptance will follow as users see that recycled paper meets their price and performance needs.

Right now, purchasers have every reason to feel confident about buying recycled paper. It is widely available in printing and writing grades; it prints and performs just as well as virgin paper; it is priced competitively with like-quality virgin papers; and, as research has shown, plenty of capacity exists.

Once paper producers see buyers' confidence reflected in customer orders and increased market share, they in turn will gain the confidence to invest in new integrated deinking facilities that further expand recycled paper capacity, and to make technological improvements that reduce production costs and increase the level of postconsumer recycled content.

Cost

The abundance of deinked pulp capacity shows that even the conversion of many major purchasers to recycled paper does not threaten to tighten up supply enough to drive up prices. Moreover, contrary to popular assumptions, many recycled papers already are available at or very close to price parity.

Several North American coated paper producers offer 10 percent postconsumer sheets at the same price as virgin papers. Major corporations often report buying 30 percent postconsumer recycled copier paper at the same price as virgin paper. Text and cover papers, used for letterhead, business cards and brochures, are priced very competitive-

Table 2 A possible scenario for sharing unused postconsumer deinked pulp among printing and writing paper grades

| Paper grade | Percent share of excess deinked pulp | Percent projected postconsumer content in paper | Potential paper production (tons/year) | Sample applications (1) |
|---|--------------------------------------|---|--|---|
| Coated (2) | 30 | 10 | 1.7 million | 35 percent of total U.S. coated paper used for magazines and catalogs 310 million reams |
| Uncoated office (3) | 50 | 30 | 770,000 | |
| Other uncoated printing and writing (4) | 20 | 30 | 308,000 | 100 million books and 10 billion phone bills and 7,400 direct mail campaigns of one million pieces each |

(1) Conservatree calculations.

(2) Such as catalogs, magazines.

(3) Such as copier and laser papers.

(4) Such as books, commercial printing papers and forms bond.

Source: Conservatree and Alliance for Environmental Innovation, 2002.

ly with virgin papers. Price differentials, when they exist, are typically in the range of 3 to 5 percent or less, but always are subject to negotiation. Achieving workable pricing sometimes takes persistence and flexibility on both sides, but purchasers are increasingly reporting success.

Production costs for recycled versus virgin paper varies from mill to mill, depending on configuration and pulp sources. Some mills report that recycled fiber costs them more to run, while others say they can produce recycled paper at the same cost, or even for less, than virgin paper.

Buy up, folks!

The reasons for the mill closures in the past 18 months have more to do with their age and relative efficiency than with the fact that they made recycled paper. But, the unfortunate

reality is that, because of lack of demand, the mill owners saw no reason to transfer that recycled paper production to their newer mills. For the most part, that capacity was just lost.

Even with those mill closures, this study proves that plenty of opportunity exists to increase recycled paper's share of the printing and writing paper market. Indeed, a broad and sustained shift by major purchasers now will stabilize the market, reset the demand and production spiral in a positive direction, and ultimately encourage investments that expand the market, thus multiplying environmental benefits over time.

Again and again, mill managers insist to us that capacity is not what's holding back recycled paper market development. Rather, they make clear that the real problem is lack of demand. The reality is, as Mark Ohleyer, market manager for Georgia Pacific's

Eureka! and Geocycle copier paper on the West Coast, says, "Buy up, folks! We can make all you need!" **RR**

Conservatree is a nonprofit organization dedicated to providing information and technical assistance to help purchasers convert to environmental papers. Conservatree's Web site, at www.conservatree.com, includes the full text of this report, plus listings of hundreds of environmental printing and writing papers. The Alliance for Environmental Innovation works cooperatively with companies to create environmental solutions that also make business sense. For more information about the Alliance, visit www.EnvironmentalDefense.org/Alliance.

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