



The RePaper Project was born of the Environmental Paper Network (EPN) in 2008 with a mission to cease the manufacture of paper that solely contains virgin fiber.

The Project uses a virtual three-legged stool to explain all the necessary pieces of the puzzle to build a successful recycled paper industry in North America. The three legs are: a vast supply of recovered fiber; available deinking capacity to manufacture recycled pulp; and a steady and growing market demand for recycled content paper. All legs must be strong, equal, and stable if we are to succeed for the long-term.

This Fact Sheet illustrates the current projections and calculations for recycled paper that the RePaper Project and EPN are using to determine program strategies and plans.

FIBER DEMAND STATUS

The forecasted demand varies somewhat by forecaster. It does not refer to new paper, but rather to paper currently produced with virgin fiber that could be switched to include some percentage of recycled fiber. The projected demand is for paper that is expected to be used by purchasers who have committed to using recycled paper. Therefore, it is not directly affected by increases or decreases in total paper production and the percentage of paper meeting the demand specs can escalate rapidly in relation to independent variables such as demand, capacity and supply of feedstocks.

FORECAST FIBER DEMAND

By Tyson Miller, Green Press Initiative/EPN, 3/07

SECTOR	TPY
Catalogs	300,000
Magazines	200,000
Books	250,000
Office Supply	100,000
Financial Services	100,000
Tissue	150,000
Newsprint (Canada)	1,000,000*

*2008 updated number



DEINKING DEMAND STATUS

Currently, 17 deinking mills in the U.S. and Canada supply at least some of their pulp to paper mills making recycled printing & writing paper. Fourteen of these mills make kraft deinked pulp, two make mechanical deinked pulp, and one makes both. Nine of these deinking mills are integrated to paper manufacturing mills and eight are stand-alone mills that sell market pulp to printing & writing mills, tissue mills, and packaging mills making the top printing layer of white boxes. Together, these 17 deinking mills supply approximately 1.6 million short tons of high grade deinked fiber, both kraft and mechanical, for use in printing & writing papers. Because their pulp is also used by other industry sectors, the portion available to printing & writing mills is somewhat variable.

To achieve the RePaper Project’s mission of eliminating paper produced in North America from exclusively virgin fiber content, increases in two different types of deinking mills are needed:

- Kraft deinking**, which is used to make freesheet papers such as copy paper, letterhead, uncoated printing paper, billing and report papers from financial institutions, and highquality books, as well as the base sheet for some coated papers. It also supplies half the fiber for groundwood-base coated papers.
- Mechanical deinked** pulp would replace virgin fiber in groundwood coated and uncoated papers.

MILL LOCATIONS:

1. Tyrone, PA – American Eagle Paper
2. West Carrollton, OH – Appleton Papers Inc
3. Jackson, AL – Boise Paper Solutions
4. Auburn, ME – Cascades Auburn Fiber
5. Breakeyville, QUE – Desencrage Cascades
6. Park Falls, WI – Flambeau River Papers
7. DePere, WI – Fox River Fiber
8. Franklin, VA – International Paper
9. Selma, AL – International Paper
10. Alsip, IL – Madison Paper Co./Myllykoski
11. Manistique, MI – Manistique Papers
12. Natchez, MS – Mississippi River Corp
13. Cincinnati, OH – Ohio Pulp Mills
14. Fairmont, WV – SFK Pulp Mills
15. Menominee, MI – SFK Pulp Fund
16. Duluth, MN – Stora Enso NA
17. Brokaw, WI – Wausau Paper

PROJECTION

PULP REQUIREMENTS TO MEET INCREASED RECYCLED CONTENT DEMAND

GRADE	PROJECTED INCREASE (DEMAND)	RECYCLED CONTENT	PROJECTED KRAFT (CHEMICAL) PULP REQUIRED	PROJECTED MECHANICAL PULP REQUIRED
OPTION 1				
Magazines, Catalogs - Coated #4 and #5	500,000 tpy	100%	160,000 tpy	160,000 tpy
Book, Office Supply, Financial - Uncoated Freesheet	550,000 tpy	100%	429,000 tpy	0
Total	1,050,000 tpy	100%	589,000 tpy	160,000 tpy
OPTION 2				
Magazines, Catalogs - Coated #4 and #5	500,000 tpy	30%	48,000 tpy	48,000 tpy
Book, Office Supply, Financial - Uncoated Freesheet	500,000 tpy	50%	214,500 tpy	0
Total	1,050,000 tpy	30%-50%	262,500 tpy	48,000 tpy

Calculations based on typical paper contents determined by Environmental Defense Paper Task Force Report and typical recycled fiber yield determined by Environmental Defense and Conservatree Deinking Capacity Study.



PROJECTION

NEW DEINKING MILLS REQUIRED TO MEET INCREASED RECYCLED CONTENT DEMAND

GRADE	PROJECTED INCREASE (DEMAND)	RECYCLED CONTENT	PROJECTED KRAFT (CHEMICAL) PULP REQUIRED	PROJECTED MECHANICAL PULP REQUIRED
Uncoated freesheet - Coated #4 and #5	1,050,000 tpy	100%	5 @ 350 tpd 4 @ 450 tpd	1.3 @ 350 tpd 1 @ 450 tpd
		30% - 50%	2 @ 400 tpd	0.4 @ 350 tpd

FIBER DEMAND STATUS

To achieve a loftier recycled content in paper production, all fiber collection must increase.

PROJECTION

INCREASED RECOVERED FIBER REQUIRED TO MEET RECYCLED CONTENT DEMAND

GRADE	TONS PRODUCTION	RECYCLED CONTENT	TONS OFFICE PAPER INCREASE	PERCENT INCREASE*	TONS ONP INCREASE	PERCENT INCREASE*
Printing and Writing	1,050,000	30% - 50%	367,500	2.34%	67,200	0.70%
		100%	824,600	5.26%	224,000	2.34%
Tissue	150,000	100%	157,500	1%	-	-
Newsprint	1,000,000	50%	-	-	588,235	6.15%

*Based on 2006 recovered fiber statistics from PaperRecycles.org, Paper Industry Association Council, of 15,690,000 tons P&W and 9,565,000 tons ONP

CURRENT U.S. COLLECTION STATISTICS

EPA STATISTICS FOR MUNICIPAL SOLID WASTE AND RECYCLING, 2006

GRADE	GENERATED* (SHORT TONS)	RECOVERED (000 TONS)	RECOVERY RATE	DISCARDED WASTE (000 TONS)
Overall Paper & Paperboard	85,300,00 (34% of SW generation)	44,000,000	51.6%	41,300,000 (24.3% of SW discards)
Office Paper (e.g. copy, printing, both residential and commercial)	6,320,000	4,150,000	65.7%	2,170,000
Standard Mail (3rd Class)	5,890,000	2,280,000	38.7%	3,600,000
Newsprint and Groundwood Inserts	12,360,000	10,870,000	88.1%	1,050,000
Books	1,130,000	290,000	25.7%	840,000
Magazines	2,570,000	1,040,000	40.5%	1,530,000
Other Commercial Printing	6,630,000	1,400,000	21.1%	5,230,000
Corrugated Boxes	31,430,000	22,630,000	72%	8,800,000
Folding Cartons	5,570,000	890,000	16%	4,680,000

Source: Municipal Solid Waste Generation, Recycling, and Disposal in the United States, Facts and Figures for 2006, <http://www.epa.gov/msw/msw99.htm>

* "Generated" in the EPA statistics means materials put into the municipal solid waste stream, not the total amount manufactured.



CANADIAN STATISTICS

Eighty-eight percent of Canadians have access to paper recycling programs, and nearly all (94%) participate in them.¹

In 1989, only one mill in Canada could produce recycled content newsprint; today there are 22.²

In 2006, Canada recovered approximately 49% of the paper and paper products consumed in Canada and turned them into new products. In all, the industry recycled 4.8 million metric tonnes of recovered fiber, 59% of it (2.8 million tonnes) from Canadian sources and the rest imported, primarily from the U.S.³

¹ Statistics Canada EnviroStats Summer 2007

² Forest Products Association of Canada (FPAC), <http://www.fpac.ca/en/sustainability/stewardship/recycling.php>

³ Paper Recycling Association, http://www.pppc.org/en/1_0/index.html

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