

Notes to Illustrations

Chapter 1

Notes to Chart 1-1: Recycled Paper Prices

Official Board Markets (OBM) is published by Advanstar Communications, and can be accessed at www.packaging-online.com. OBM publishes Transacted Paper Stock Prices for the following regions: Chicago, New England, Buffalo, New York, Southeast, Southwest, Los Angeles, San Francisco, and Pacific Northwest. Historical data is available starting in January 1987. Commodities tracked are Mixed Paper, Boxboard Cuttings, ONP (old newspaper) #6, ONP (old newspaper) #8, OCC (old corrugated cardboard), Sorted Office Paper, and Sorted White Ledger (white office paper). Because DSNY paper contracts calculate per-ton costs and revenues using price categories for Mixed Paper, Newspaper #6, Newspaper #8, Corrugated, and White Office Paper, only these prices are shown in Chart 1-1. During certain periods, prices for certain commodities were not tracked by OBM. In these cases, trend lines are not shown for these periods.

Prices in Chart 1 are the average of high and low prices for each commodity reported per short ton. Grades and preparation requirements are as defined in current Paper Stock Industries' Standards and Practices Circular (PS-02); grade numbers appear in parentheses. These are board and paper-mill purchase prices, baled, F.O.B. (freight on board) seller's dock, exclusive of delivery charges, and of premium, spot, or distress lots, and of all subsequent charges for packing, handling, less-than-full-load freight, destination considerations, or other special charges. The prices listed are for reference only, and do not connote any commitment by any supplier to sell, nor by any purchaser to buy, any material at the price listed or at any price predicated upon the price listed. For further information on pricing, contact OBM at 888-527-7008.

Notes to Chart 1-2: Recycled Metal Prices; Chart 1-3: Recycled HDPE and PET Plastic Prices; and Chart 1-4: Recycled Glass Prices

Recycling Manager is published by American Metal Market LLC, and can be accessed at www.amm.com. *Recycling Manager* tracks materials prices for 15 major U.S. regions: Atlanta, Boston, Chicago, Cleveland, Dallas/Houston, Denver, Detroit, Los Angeles, Miami, Minneapolis, New York, Philadelphia, San Francisco, Seattle/Portland, and Washington, D.C. Historical data is available starting May 1991. Commodities tracked are: Used Steel Cans, No. 2 Ferrous Bundles, Municipal Shredded Ferrous, Shredded Auto Scrap, Aluminum UBCs (used beverage containers), Auto Batteries, Baled Clear PET, Baled Green PET, Baled Natural HDPE, Baled Mixed HDPE, Baled Mixed PET, Baled Mixed HDPE & PET, Flaked Clear PET, Flaked Green PET, Flaked Natural HDPE, Clear Glass, Green Glass, and Brown Glass. Because DSNY metal, glass, and plastics contracts calculate per ton costs and revenues using price categories for Used Steel Cans, Aluminum UBCs, Baled Natural HDPE, Baled Mixed HDPE, Baled Mixed PET, Clear Glass, Green Glass, and Brown Glass, only these prices are shown in Charts 1-2, 1-3, and 1-4.

Prices in Chart 1-1 are the average of high and low prices for each commodity reported in *Recycling Manager*. Prices for Aluminum, PET, and HDPE are published in cents per pound and have been translated to dollars per short ton for Charts 1-2, 1-3, and 1-4. Other prices are dollars per short ton. Prices are based on representative volumes delivered to consumers in each market area unless otherwise stated. Prices are the opinions of editors based on contacts with originators, scrap dealers, brokers, and consumers. Prices generally represent truckload quantities of baled, high-quality, well-separated materials meeting the specifications of local market buyers. For further information on pricing, contact *Recycling Manager* at (610) 205-1068.

Notes to Chart 1-5: Comparison of Paper Prices in New York Region to West Coast Regions

Prices shown are averages of monthly prices for Mixed Paper, Newspaper #6, Newspaper #8, Corrugated Cardboard, and

White Office Paper reported in *Official Board Markets* (OBM). Regions are as reported in this source as well. Data cover the period 1987 to 2002 only, because DSNY did not have access to pricing data from 2002 onward for regions other than New York. For further details on OBM pricing, see notes to Chart 1-1 above.

Notes to Chart 1-6: Comparison of MGP Prices in New York Region to West Coast Regions

Prices shown reflect monthly prices for Steel Cans, Aluminum Cans, Natural HDPE, Mixed HDPE, Mixed PET, Clear Glass, Green Glass, and Brown Glass averaged together from data reported in *Recycling Manager*. Regions are as reported in this source as well. Data cover the period 1991 to 2000 only, because DSNY did not have access to pricing data from 2001 onward for regions other than New York. For further details on *Recycling Manager* pricing, see notes to Charts 1-2 to 1-4 above.

Chapter 2

Notes to Chart 2-1: Paper and MGP Diversion Rate Over Time

Diversion rates shown represent the total tonnage of curbside and containerized recycling collected in each Fiscal Year, divided by the sum of curbside and containerized recycling and refuse. Rates do *not* reflect recycling of construction and demolition debris, asphalt, millings, clean fill, auto bodies, or tires. They also do not reflect a small tonnage of composting each year.

Chapter 3

Notes to Chart 3-2: Recycled Paper Prices, NYC vs. Northwest

Prices shown are average of Mixed Paper, Newspaper #6, Newspaper #8, Corrugated Cardboard, and White Office Paper published in *Official Board Markets*. Regions are as reported in this source as well. Data cover the period 1995 to 2002 only, because DSNY did not have access to pricing data from before or after this period for the Pacific Northwest. For further details on OBM pricing, see notes to Chart 1-1 above.

Appendix VI

Notes to Table AVI-2: Annual Waste Stream and Diversion Tonnages Across Five U.S. Cities

1. This figure was derived by dividing the combined diversion tonnage by the combined diversion rate, according to the following formula:

$$\text{if the combined diversion rate} = \frac{\text{combined recycling tonnage}}{\text{combined waste (recycling + refuse) tonnage}}$$

then...

$$\frac{\text{combined recycling tonnage}}{\text{combined diversion rate}} = \text{combined waste tonnage}$$

2. As reported in the *Waste News* Municipal Waste Survey, 2003. Reflects combined residential and commercial data for Chicago, year ending June 2002.

3. This figure was derived by adding paper, metal, glass, and plastic diversion in the *Waste News* Municipal Waste Survey, 2003. Reflects combined residential and commercial data for Chicago, year ending June 2002.

Notes to Illustrations

4. This figure was derived by dividing the tonnage diverted by the combined waste tonnage.
5. This figure was derived by dividing the residential diversion tonnage by the residential diversion rate, according to the following formula:
- $$\text{if the residential diversion rate} = \frac{\text{residential recycling tonnage}}{\text{residential waste (recycling + refuse) tonnage}}$$
- then...
- $$\frac{\text{residential recycling tonnage}}{\text{residential diversion rate}} = \text{residential waste tonnage}$$
6. As reported in the *Waste News* Municipal Waste Survey, 2004. Reflects combined residential data for Chicago, year ending June 2003.
7. This figure was derived by adding paper, metal, glass, and plastic diversion in the *Waste News* Municipal Waste Survey, 2004. Reflects combined residential data for Chicago, year ending June 2003.
8. As reported in the *Waste News* Municipal Waste Survey, 2002. Reflects combined residential and commercial data for Los Angeles for year ending June 2001.
9. This figure was derived by adding paper, metal, glass, and plastic diversion in the *Waste News* Municipal Waste Survey, 2002. Reflects combined residential and commercial data for Los Angeles for year ending June 2001.
10. As reported in the *Waste News* Municipal Waste Survey, 2004. Reflects residential data for Los Angeles for year ending June 2003.
11. This figure was derived by adding paper, metal, glass, and plastic diversion in the *Waste News* Municipal Waste Survey, 2004. Reflects residential data for Los Angeles for year ending June 2003.
12. As reported to the New York State Department of Environmental Conservation, Division of Solid and Hazardous Materials (see Appendix V). Reflects residential, commercial, and sewage-sludge data from calendar year 2002. Note that the diversion tonnages do not reflect commercial paper, MGP, or other diversion handled by out-of-city facilities. The commercial recycling tonnages are therefore understated.
13. As reported in the *Waste News* Municipal Waste Survey, 2004. Reflects residential data for New York City for year ending June 2003.
14. This figure was derived by adding paper, metal, glass, and plastic diversion in the *Waste News* Municipal Waste Survey, 2004. Reflects residential data for New York City for year ending June 2003.
15. As reported in the *Waste News* Municipal Waste Survey, 2004. Reflects combined commercial, industrial, and residential data for San Francisco for year ending December 2001.
16. This figure was derived by adding paper, metal, glass, and plastic diversion in the *Waste News* Municipal Waste Survey, 2004. Reflects residential data for Los Angeles for year ending December 2001.
17. As reported in *Solid Waste At A Glance*, 1999, at <http://www.cityofseattle.net/util/solidwaste/reports.htm>. Reflects combined commercial and residential data for Seattle for year ending December 1999.
18. As reported in *Garbage Report, December 2003*, at <http://www.cityofseattle.net/util/solidwaste/reports.htm>. Reflects residential data for Seattle for year ending December 2003.

Processing and Marketing Recyclables in New York City

19. As reported in *Curb/Alley Recycling Report, December 2003*, and *Apartment Recycling Report, December 2003*, at <http://www.cityofseattle.net/util/solidwaste/reports.htm>. Reflects residential data for Seattle for year ending December 2003.

20. As reported in *Yard Waste Report, December 2003*, at <http://www.cityofseattle.net/util/solidwaste/reports.htm>. Reflects residential data for Seattle for year ending December 2003.

21. This figure was derived by adding paper, metal, glass, plastic, and yard-waste diversion reported as per notes 21 and 22 above.