

Curbside Recycling Markets

**Municipal Waste Management
Association
Fall Summit
September 17, 2005
Burlington, VT**

**Chaz Miller
Miller Recycling Associates**

ALL PRICES AS OF AUGUST 31 UNLESS OTHERWISE INDICATED

- DATA FROM RECYCLING MARKETS.NET STARTING JAN 31, 2020
- TRENDS MORE IMPORTANT THAN SPECIFIC PRICE DATA

**YOU DON'T NEED TO TAKE NOTES, A PDF OF MY SLIDES W/SPEAKER
NOTES WILL BE AVAILABLE FROM MWMA OR MYSELF**

I'LL TALK ABOUT PRICES

- ABOUT UNIQUE CONDITIONS FOR TYPES OF PACKAGES
- ABOUT THE ECONOMY
- ABOUT WHERE MARKETS ARE HEADED

BUT FIRST

What Are These & Where Do They Go?



MONTGOMERY COUNTY DEP

RECYCLABLES ARE SIMPLY **RAW MATERIALS LOOKING FOR BUYERS**

- *BECAUSE RECYCLABLES ARE BOUGHT NOT SOLD*

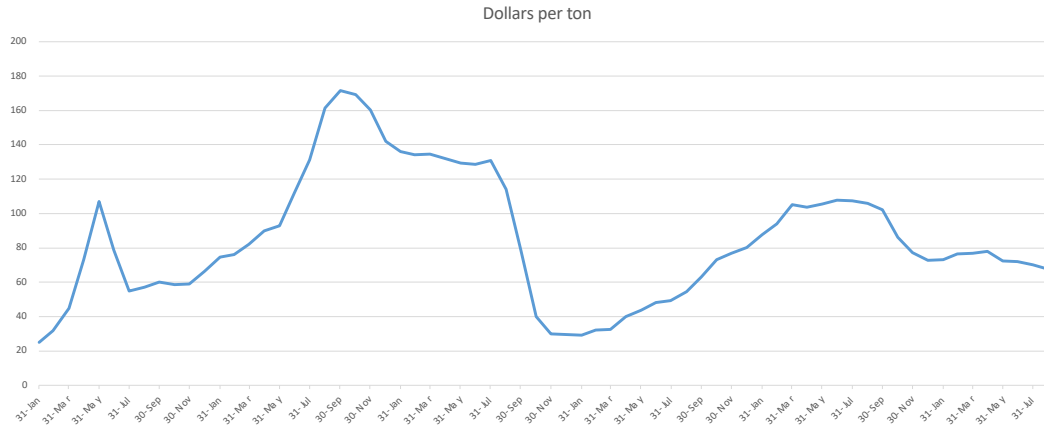
BUYERS ARE PURCHASING MANAGERS MAKING A BET ON THE FUTURE & HOW MUCH RAW MATERIALS THEY WILL NEED FOR THEIR PRODUCTS THEY WANT

- CONSISTENT QUANTITY
- CONSISTENT QUALITY
- AT AN ACCEPTABLE PRICE
- RECYCLING MARKETS HAVE COMPETITIVE, SEASONAL, ECONOMIC & OTHER VARIABLES

NOTE: RECYCLABLES CAN BE CIRCULAR BUT MANY MARKETS AREN'T

- *MRFS ARE MORE INTERESTED IN REVENUE THAN BEING CIRCULAR*

OCC National January 2020 – August 2025



DATA: RECYCLING MARKETS.NET

OLD CORRUGATED CONTAINERS (OCC) (BALED)

NATIONAL \$67.50 PER TON

- DOWN \$2.50 FROM PREVIOUS MONTH (\$70)
- DOWN \$39.44 YOY (\$105.94)
- DOWN \$104.26 FROM SEPTEMBER 2021 HIGH (\$171.56)
- UP \$42.83 FROM 2020 LOW (\$24.69)
- UP \$45.31 FROM 2008 PRE COVID LOW (\$22.19)

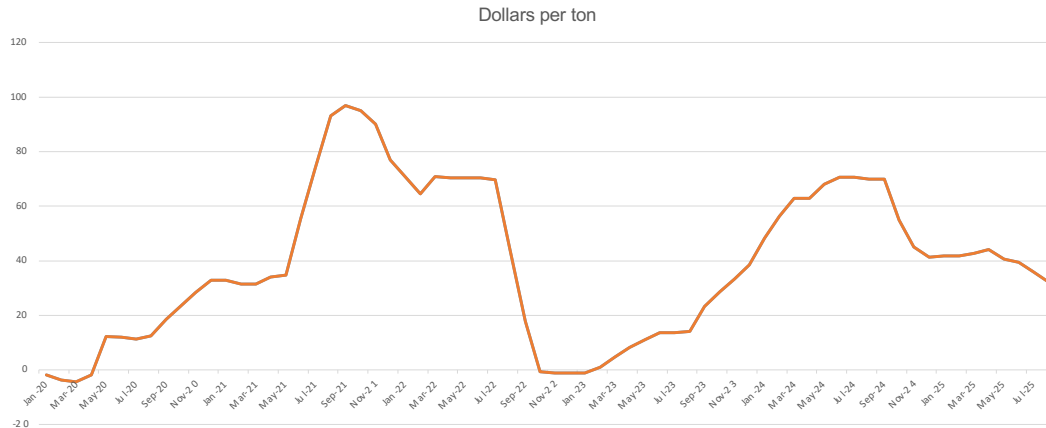
MARKETS PRIMARILY LINERBOARD OR CORRUGATED MEDIUM

- RAW MATERIALS FOR BOXES
- SOFT DEMAND FOR BOXES

HIGH – LOW PREVIOUS 20 YEARS FOR OCC

- **HIGHS IN 2011 JULY 17 (\$180) & 2021 (\$171.56)**
- **LOWS IN DEC 2008 GREAT RECESSION & WINTER 2019 (\$22.19 & \$24.69)**

RMP National January 2020 – August 2025



**DATA: RECYCLING MARKETS.NET
RESIDENTIAL MIXED PAPER (RMP)
NATIONAL \$32.19 PER TON:**

- DOWN \$3.75 FROM LAST MONTH (\$35.94)
 - DOWN \$37.81 YOY (\$70)
 - DOWN \$64.69 FROM SEPTEMBER-NOVEMBER 2021 HIGH (\$96.88)
 - UP \$36.81 FROM 2020 LOW (-\$4.38)
 - GENERALLY RISES & FALLS AT A DISCOUNT TO OCC
 - SPREAD B/W OCC & RMP 52%: HIGH MEANING LESS INTEREST IN RMP
 - **SEPT 12 RMP DOWN 63 CENTS TO \$31.56**
- MARKETS CAN BE SAME AS OCC BUT MORE LIKELY FOR LOWER GRADE PACKAGING OR PRODUCTS**
- MOST MILLS USE RMP AS AN ADDITIONAL

Recycled Paper Market Drivers

"You only need to make so many boxes"

- Box demand down since 2022
- 8 paper mills closing this year
- Closing excess production capacity should tighten markets

BOX DEMAND DOWN AS UNIT SALES FOR CONSUMER PACKAGING ARE GOING DOWN

- ONLY NEED TO MAKE SO MANY BOXES & THAT NEED IS LESS

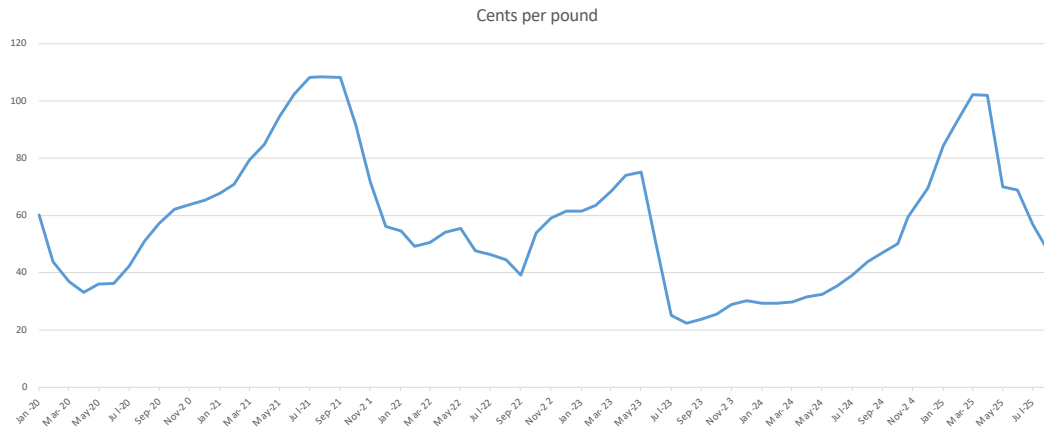
AF&PA DATA:

- CONTAINERBOARD DOWN 5% YOY
- OPERATING RATES DECLINE
- <https://www.afandpa.org/news/2025/afpa-releases-q2-2025-containerboard-quarterly-report>
- BOXBOARD FLAT
- <https://www.afandpa.org/news/2025/afpa-releases-q2-2025-boxboard-quarterly-report>

ALMOST 10% LOSS IN BSF FOR CONTAINERBOARD LAST FOUR YEARS

- BOTH VIRGIN & RECYCLED CAPACITY CLOSING – MORE VIRGIN

Natural HDPE National January 2020 – August 2025



DATA: RECYCLING MARKETS.NET

NATURAL HDPE

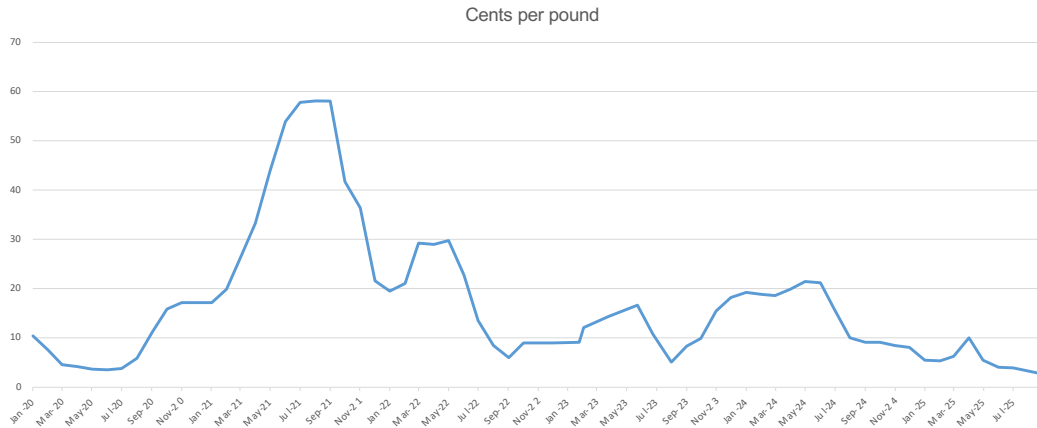
NATIONAL 47.56 CENTS PER POUND

- DOWN 9.25 CENTS FROM PREVIOUS MONTH (56.81 CENTS)
- UP 4.32 CENTS YOY (43.88 CENTS)
- DOWN 60.88 CENTS FROM AUG 21 HIGH (108.44 CENTS)
- UP 25.18 CENTS FROM POST COVID LOW (22.38 CENTS)
- UP 35.82 CENTS FROM 2008 LOW (11.69 CENTS)
- **SEPT 12 DOWN 3.43 CENTS TO 44.13 CENTS**

MARKETS PRIMARILY PACKAGING

- HIGHLY VERSATILE B/C NOT DYED
- USED IN LIMITED NUMBER OF PRODUCTS: PRIMARILY MILK ALSO OTHER LIQUID
- BRAND DEMAND DROVE 2021 HIGH
- *HIGH-LOW: PRESENT TO 2005*
- *HIGH JULY – AUGUST 2021 108.44 CENTS PER POUND*
- *LOW DECEMBER 2008 11.69, AUG 2023 22.38 CENTS PER POUND*

Color HDPE National January 2020 – August 2025



DATA: RECYCLING MARKETS.NET

COLORED HDPE

NATIONAL 2.66 CENTS PER POUND

- DOWN 0.65 CENTS FROM LAST MONTH (3.31 CENTS)
- DOWN 6.47 CENTS YOY (9.13 CENTS)
- DOWN 0.87 CENTS FROM 2020 LOW (3.53 CENTS)
- DOWN 3.9 CENTS FROM PRECOVID LOW (6.56)
- SPREAD B/W C & N HDPE 94%: VERY HIGH

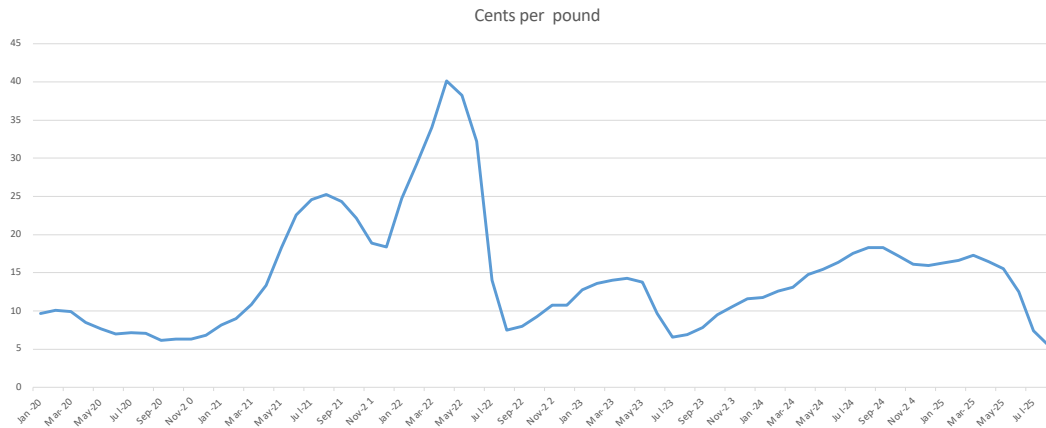
MARKETS PRIMARILY CONSTRUCTION USES: PIPES, ETC.

- COLORED HDPE IS NOT AS VERSATILE B/C OF THE COLORANTS
- SUPPLY: VERY WIDE ARRAY OF CONSUMER PRODUCTS
- INTERESTING CORRELATION B/W NEW HOME SALES & STARTS & CHDPE MARKETS

HIGH LOW – PRESENT TO JUNE 2005

- *HIGH AUG 2021 58.13 CENTS &*
- *LOW DECEMBER 2008 6.56 CENTS & JUNE 2020 3.53 CENTS*

PET National January 2020- August 2025



DATA: RECYCLING MARKETS.NET

PET

NATIONAL 5.47 CENTS PER POUND

- DOWN 1.92 CENTS FROM LAST MONTH (7.39 CENTS)
- DOWN 12.90 CENTS YOY (18.37 CENTS)
- DOWN 35.17 CENTS FROM MAY 2022 RECORD (40.64 CENTS)
- DOWN 0.70 CENTS FROM SEPT 2020 BOTTOM (6.17 CENTS)
- UP 1.34 CENTS FROM PRE COVID LOW JAN 09 (4.13)
- **SEPT 12 DOWN 0.38 CENTS TO 5.09 CENTS**

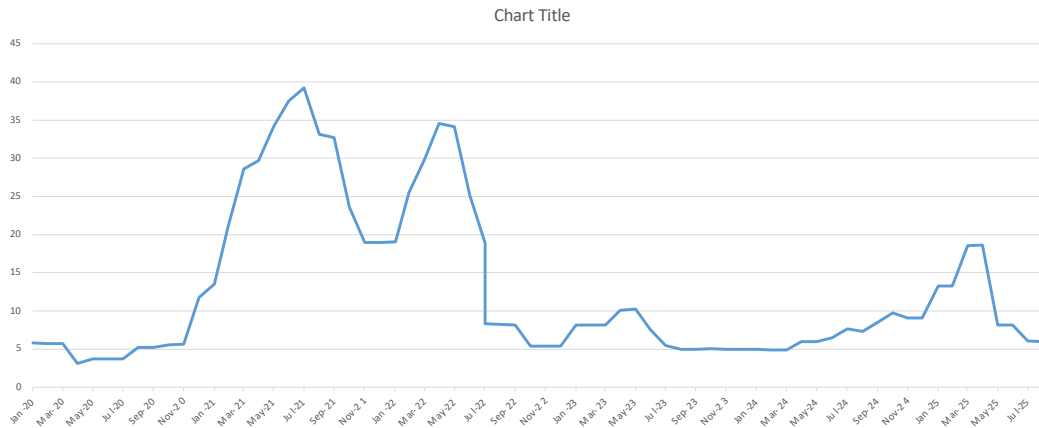
MARKETS PRIMARILY BOTTLES & FIBER

- WEAK SUMMER BEVERAGE INDUSTRY SALES
- FLOOD OF IMPORTED RECYCLED PET RESIN
- BRANDS MOSTLY MEETING, NOT EXCEEDING. RECYCLED CONTENT REQUIREMENTS/COMMITMENTS
- FIBER INDUSTRY CUTTING BACK DUE TO WEAK MARKETS

HIGH-LOW PRESENT TO 2005

- *PRE-COVID HIGH 2011: \$0.37 (GAS & OIL HIGH) POST COVID 40.64 CENTS*
- *LOW DEC 2008:- JAN 09 GREAT RECESSION: 4.13 CENTS & 6.17 SEPT 20*

PP National January 2020 – August 2025



DATA: RECYCLING MARKETS.NET

POLYPROPYLENE

NATIONAL 5.94 CENTS PER POUND

- DOWN 0.12 CENTS FROM LAST MONTH (6.06 CENTS)
- DOWN 1.37 CENTS YOY (7.31 CENTS)
- DOWN 38.56 CENTS FROM JULY 2021 HIGH (44.5 CENTS)
- UP 2.94 CENTS OVER 2020 LOW (3 CENTS)
- DOWN 0.69 CENTS FROM PRE-COVID LOW OF 6.63 CENTS
- **SEPT 12 DOWN 0.31 CENTS TO 5.63**

MARKETS NON-CONSTRUCTION DURABLE USES

- STORAGE CONTAINERS, PAINT CANS, TOYS, BOTTLE CAPS, CAR BATTERY CASES, CARPET FIBER, PACKAGES, ETC.
- DURABLE PLASTICS PRODUCTION DOWN

HIGH-LOW –

- *ALL TIME LOW MAY 8 2020 \$0.3 & PRE COVID LOW 6.63 CENTS JUNE 2017*
- *HIGH JULY 2021 \$0.445*

Recycled Plastics Market Drivers

Demand down

- Plastics production down to 2017 levels
- Too much resin
- Sustainability “commitments”

PLASTIC PRODUCTION: <https://www.plasticsnews.com/video/fed-slows-rate-cuts-plastics-manufacturing-faces-new-lows>

NEW MACHINERY ORDERS DOWN <https://www.plasticsnews.com/news/plastics-machinery-orders-drop-tariff-concerns-cloud-2025-outlook>

- THE TOTAL VALUE OF PLASTICS MACHINERY SHIPMENTS FOR Q1 \$252.1 M, DOWN 4.6% YOY AND 17.5% Q42024.

EXCESS RESIN IS VIRGIN & IMPORTED RECYCLED RESIN

HOUSING STARTS <https://www.census.gov/construction/nrc/current/index.html>

DURABLE GOODS PRODUCTION DOWN

HOUSING CONSTRUCTION: <https://www.census.gov/construction/c30/current/index.html>

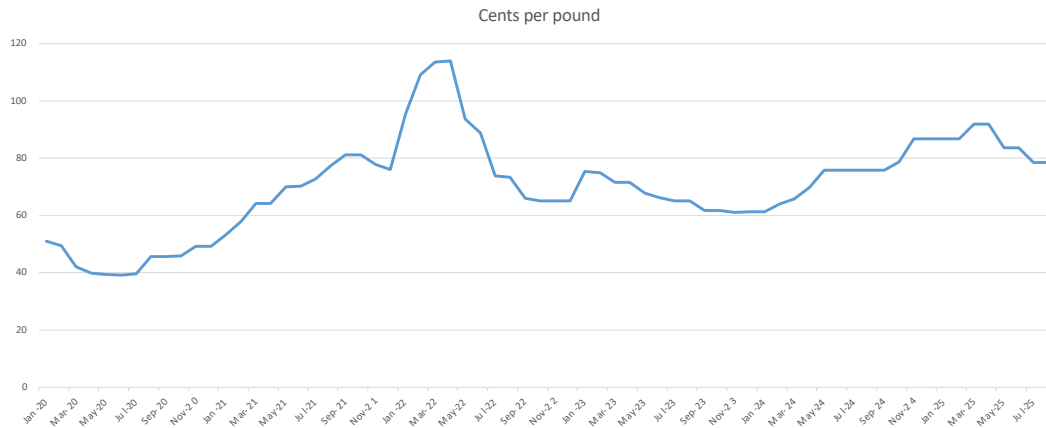
BRENT CRUDE AT \$66.07 DOWN FROM \$66.63 AUG 11) - 12 MONTH SPREAD \$58.40 - \$82.63

<https://markets.businessinsider.com/commodities/>

HENRY HUB \$3.11 UP FROM \$2.95 AUG 11 – 12 MONTH SPREAD \$2.13– \$4.90

- <https://markets.businessinsider.com/commodities/natural-gas-price>

Aluminum Cans National January 2020 – August 2025



DATA: RECYCLING MARKETS.NET NATIONAL 78.44 CENTS PER POUND

- SAME AS LAST MONTH
- UP 2.5 CENTS YOY (75.94 CENTS)
- DOWN 45.37 CENTS FROM MAR 11 2022 HIGH (123.81 CENTS)
- UP 39.31 CENTS FROM 2020 LOW (39.13 CENTS)

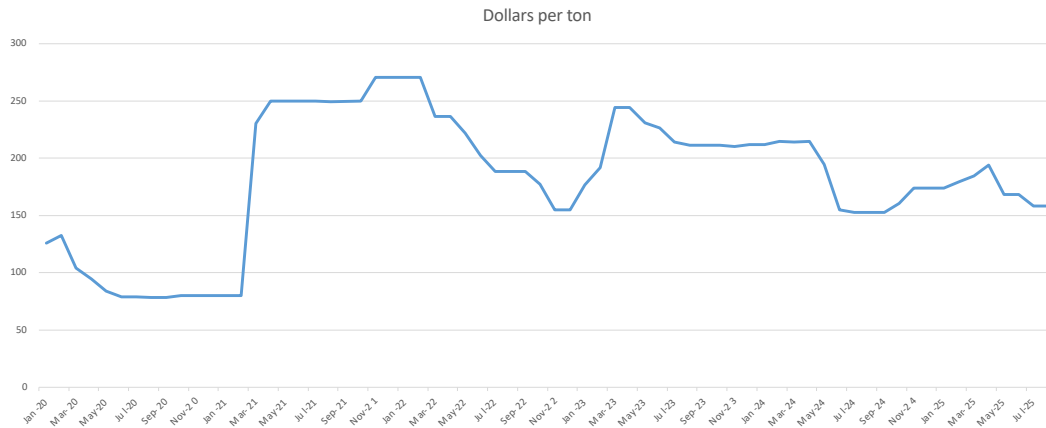
MARKET: CANS

- BEER SALES DECLINING : BEER SALES DROP AS CONSUMERS SWITCH TO OTHER BEVERAGES
- DISTILLED SPIRITS NOW SLIGHTLY LARGER MARKET SHARE BY SALES REVENUE THAN BEER
- AGGRESSIVELY MOVING INTO NON-ALCOHOL BEVERAGES INCLUDING WATER
- OTHER USE COULD BE CAST ALUMINUM BUT RARE IN NORTH AMERICA

ALLTIME HIGH - \$1.238 MARCH 2022

ALLTIME LOW 39.13 CENTS – JUNE 2020

Steel Cans – National January 2020 – August 2025



DATA: RECYCLING MARKETS.NET

STEEL

NATIONAL \$158.13 PER TON

- SAME AS LAST MONTH
- UP \$5.32 YOY (\$152.81)
- DOWN \$122.50 FROM ALL TIME HIGH (\$270.63)
- UP \$79.69 FROM 2020 LOW (\$78.44)

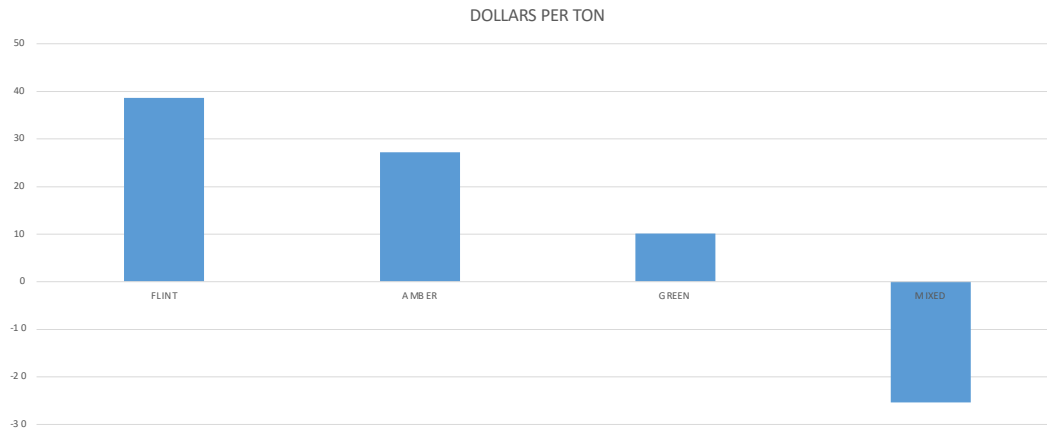
MARKET ELECTRIC ARC FURNACES

- 70% US PRODUCTION IS EAF WHICH RELIES ON SCRAP

HIGH : WINTER 21-22 \$270.63

LOW: WINTER 2015: \$35

Glass Bottles – National



PRICES RARELY CHANGE

- ONLY COMMODITY WHERE SELLER PAYS FOR SHIPPING

FLINT (CLEAR): \$38.56

AMBER (BROWN): \$27.19

GREEN: \$10.13

MIXED: -\$25.31

Metal & Glass Market Drivers

Metal & Glass

- Alcoholic beverage sales continue to decline
- Aluminum expands non-alcoholic beverage markets
- Tariff negative impact on metal products

METAL PRICES SOLID

- ALUMINUM & STEEL WELL ABOVE PRE-COVID
- ALUMINUM CANS RESISTING SEASONAL SLUMP DUE TO NEW CAN USES
- STEEL CAN DEPENDENT ON CONSTRUCTION & HURT BY CHINESE DUMPING
- DISTILLED SPIRITS NOW SLIGHTLY LARGER MARKET SHARE BY SALES REVENUE THAN BEER

THE BOOM IN NEW STEEL MILLS IS OUTPACING DEMAND

- WALL STREET JOURNAL AUGUST 26

MAJOR GLASS END USER SHUTS DOWN OREGON BOTTLING PLANT

- RESOURCE RECYCLING, AUGUST 25
- CITES "DEMAND & REGULATIONS"

Exports



PHOTO: LA TIMES: THE PORTS OF LOS ANGELES & LONG BEACH

- BY FAR THE LARGEST IN US

WHY DO WE EXPORT RECYCLABLES?

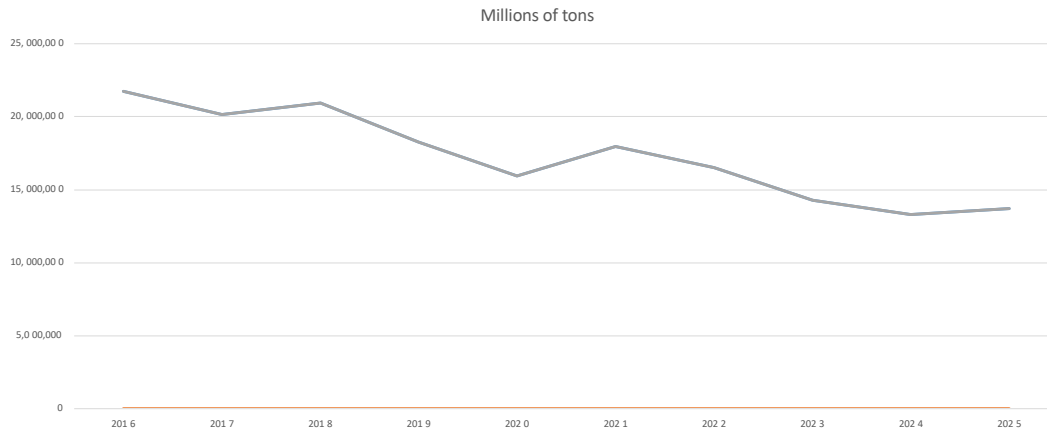
- BECAUSE SOMEONE WANTS THEM MORE THAN WE DO

METAL & PAPER THE BIGGEST EXPORTS

- TRACKED BY MILLIONS OF TONS
- WHEREAS PLASTICS BY BILLIONS OF POUNDS
- *TOTAL PLASTICS EXPORTS LESS THAN 5% OF PAPER*
- *ALUMINUM CANS & GLASS CULLET/BOTTLES NOT EXPORTED*

PAPER EXPORTS REMAIN NECESSARY AS LONG AS MANUFACTURING SHIPPED OVERSEAS

Recycled Paper Exports 2016 – 2025 (projected)



<https://resource-recycling.com/recycling/2025/02/19/paper-and-plastic-exports-decline-again-in-2024/>

PAPER EXPORTS 2024: 13.3 MILLION TONS

- EXPORTS DROPPED 11% FROM 2023 (14.8 MILLION TONS)
- DROPPED FROM 20.1 MILLION TONS IN 2017 TO 13.3 MT IN 2024
- FIRST HALF OF YEAR UP 3%: POTENTIAL 2025 EXPORTS 13. MT
- IMPORTS DOWN 21%, 252499 MT, ALMOST ALL CANADA, A LITTLE MEXICO & LESS ELSEWHERE

WHY?

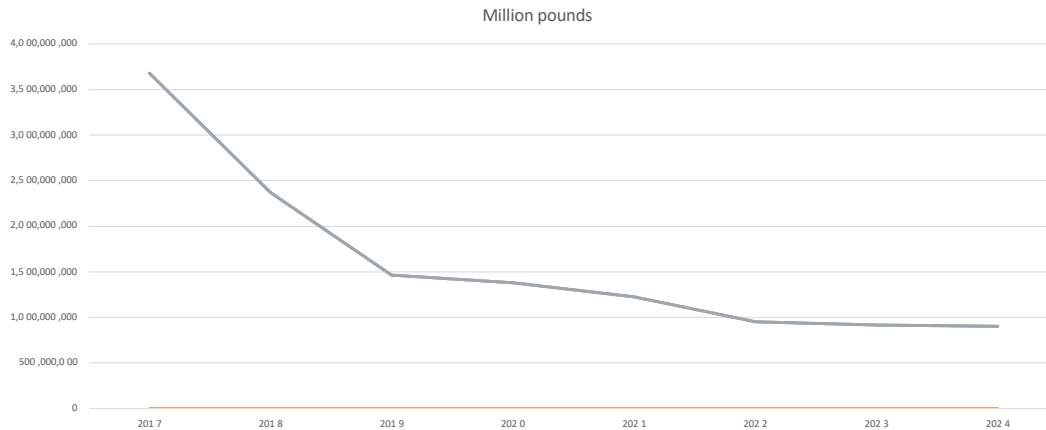
- OVERALL DECLINE CAUSED BY 2018 CHINA IMPORT BAN & INCREASED DOMESTIC DEMAND
 - DECLINE FROM 2023 DRIVEN BY WEAKER OVERSEAS ECONOMIES
 - INDIA, THAILAND, MEXICO & MAYAYSIA RECEIVE 8.2 MILLION TONS OR 62% OF EXPORTS
 - IMPORTS TO INDIA DOWN 31% & MEXICO DOWN 23%
 - 75% OF INDIAN PAPER MILLS RELY ON RECYCLED FIBER
 - INDIA SWITCHING TO EUROPEAN SUPPLIERS DUE TO TARIFF UNCERTAINTY
- 68% OF EXPORTS OCC, 15% RMP, 10% HIGH GRADE DEINKED PAPER, 3% OLD NEWSPAPERS

- OCC EXPORTS HAVE INCREASED WHILE RMP HAVE DECREASED OVER THE LAST DECADE

PAPER EXPORTS WILL BE BIG (1/3) AS LONG AS MANUFACTURING IS “OUTSHORED”

- *RESHORING IN IN TERMS OF MANUFACTURING JOBS UP 263% FROM 2019*

Recycled Plastics Exports 2017 – 2024



EXPORT DATA RESOURCE RECYCLING <https://resource-recycling.com/plastics/2025/02/12/plastic-exports-decline-again-in-2024/>
EXPORTS DROPPED 75% SINCE 2017 WHEN MORE THAN 3.7 BILLION POUNDS WERE EXPORTED

PLASTICS 2024:

- 903 MILLION POUNDS
- A 1.6% DECLINE FROM 2023
- PET & HDPE EXPORTS HAVE BEEN DECLINING FOR OVER A DECADE
- RECYCLED PET EXPORTS ON SIGNIFICANT RISE
- FLOODING MARKETS

WHY?

- CHINA CAUSED THE IMMEDIATE DROP
- INCREASED DOMESTIC DEMAND CAUSED THE MORE RECENT DECLINES
- CANADA & MEXICO GET 54% INDIA & MALAYSIA ARE THE TWO LARGEST ASIAN IMPORTERS

MIXED PLASTICS & POLYETHYLENE GRADES ARE EACH 37% OF THE EXPORTS (Q1 DATA)

- PRIMARILY FILM & NON-BOTTLE RIGID PACKAGES
- THAILAND BANNED IMPORTS OF RECYCLED PLASTICS AS OF JULY 1, 2025
- THAILAND A SMALL IMPORTER, NOT IN TOP TEN

North American Recycled Content Market Capacity Expansion



PHOTO NORPAC

THIS IS A PICTURE OF NEW RECYCLED PAPER PULPING MACHINE FOR NORPAC'S MILL IN LONGVIEW WA

ONE OF 24 EXPANSIONS OF EXISTING MILLS OR CONVERSIONS OF PRINTED PAPER MILLS TO PACKAGING PAPER

- OR NEW MILLS
- 8 MILLION TONS NEW CAPACITY WHEN FINISHED
- NORTHEAST RECYCLING COUNCIL: RECYCLED PAPER CAPACITY INCREASES IN NORTH AMERICA 2017-2024

PLASTIC HAS ALSO SEEN EXPANSION BUT NOT AS MUCH

Changes in Recycled Packaging Paper Production Capacity August 2025

- IP closing Savannah and Riceboro GA containerboard mills
- IP converting Selma, AL freesheet machine to containerboard (2026)
- Everboard recycled roofing material reopening in Iowa as ReCB

CLOSING

IP: 3: RED RIVER LA, RICEBORO & SAVANNAH GA, GRIEF: 2: FITCHBURG, MA & LOS ANGELES, SMURFIT WESTROCK: 2: ST PAUL MN & FORNEY, TX & GP: 1: CEDAR SPRINGS, GA

“INTERNATIONAL PAPER TO CLOSE 4 FACILITIES AFFECTING 1,00 EMPLOYEES”

- PACKAGING DIVE AUGUST 21

“RECYCLED CONTENT ROOFING FACILITY REOPENS IN IOWA UNDER NEW OWNERSHIP”

- WASTE DIVE AUGUST 27

THREE EXPANDED RECYCLED PAPER CAPACITY CLOSED OR ON EXTENDED ECONOMIC DOWNTIME

“PAPERBOARD COMPANY PLANS NEW MILL, RECYCLING PROGRAM:”

- RESOURCE RECYCLING, FEB 13, 2023
- GRAPHIC PACKAGING INTERNATIONAL
- CLOSING THREE MILLS
- NEW MILL MAKE COATED RECYCLED PAPERBOARD FOR \$405 PER TON VS \$540 FOR COMPETITORS
- SLIGHTLY MORE TOTAL NEW CAPACITY ANTICIPATING PLASTIC TO PAPER PACKAGE INCREASES

AS NOTED IN EARLIER SLIDE, CLOSING EXCESS PRODUCTION CAPACITY SHOULD STRENGTH OVERALL DEMAND

Changes in Recycled Plastics Production Capacity

Plastics

- Republic PRF in Allentown, PA open late 26
- Blue Polymers to open resin facility nearby
- Denton Plastics expanding Oregon RPP capacity
- Circularix starts PA rPET facility, expands Florida facility
- rPlanet closed California rPET facility

PLASTICS HAS ALSO SEEN EXPANSIONBUTNOT AS DRAMATIC

“BLUE POLYMERS IS REPUBLIC SERVICES JOINT VENTURE WITH RAVAGO”

- REPUBLIC OPERATES A PRF, RAVAGO MAKES PLASTIC RESIN OR FLAKE
- REPUBLIC SERVICES PRESS RELEASE JULY 31

“BLUE POLYMERS TAKES OVER FOOD-GRADE RPET PRODUCTION FACILITY IN CALIFORNIA”

- PACKAGING DIVE AUGUST 19

“DENTON PLASTICS BUILDING MAJOR OREGON PP EXPANSION”

- PLASTICS RECYCLING UPDATE AUGUST 13
- PROCESSED 1.4 MILLION POUNDS PP IN 2023 – ECPECTS 2.6 MILLION POUNDS IM 2026

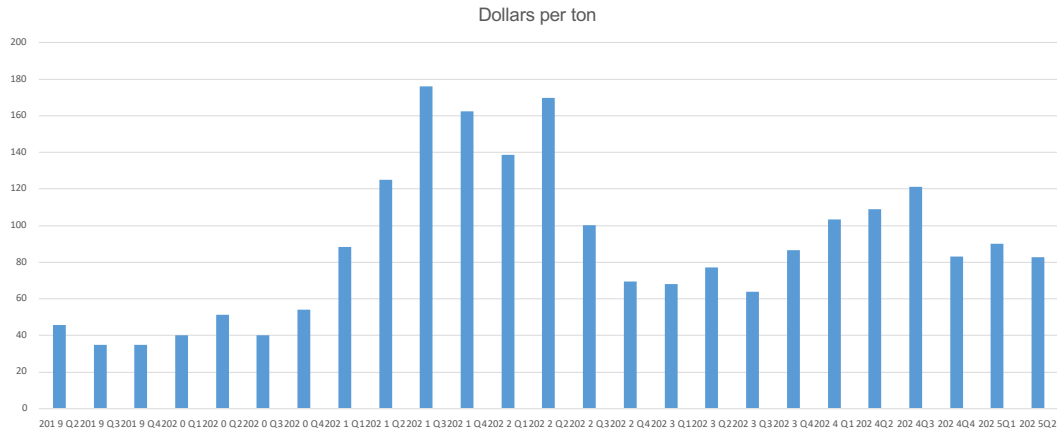
“CIRCULARIX STARTS FLORIDA RPET PLANT, EXPANDS PENNSYLVANIA SITE”

- PLASTICS RECYCLING UPDATE AUG 28
- CA: 55 MILLION POUND RPET & PA 165 MILLION POUNDS PA COMPLETE

“PET RECLAIMER rPLANET EARTH CLOSSES IN CALIFORNIA”

- PACKAGING DIVE, SEP 12

NERC MRF Average Bale Price Per Ton with cost of residue disposal Q2 2019 – Q2 2025



Q4 2024 DECLINE CAUSED BY SLIDE IN OCC & RMP PRICES

- INCREASE IN ALUMINUM, NHDPE & PET CUSHIONED THE FALL

Q1 2025 INCREASE CAUSED BY STABLE PAPER PRICES IN Q1

- ALONG W/STRONG ALUMINUM, NHDPE & PET PRICES

Q2 DOWN \$8.44 PER TON TO \$82.68

- PAPER WENT DOWN
- ALUMINUM DOWN SLIGHTLY, NHDPE DOWN MORE

PAPER'S DOMINANCE IN COLLECTION WEIGHT & VOLUME MAKES IT
FUNDAMENTALLY IMPORTANT FOR AVERAGE BALE PRICE

- HAULER/RECYCLER QUARTERLY REPORTS FOCUS ON OCC B/C OF ITS IMPORTANCE
- ALUMINUM & NHDPE ARE THE FROSTING ON THE CAKE

Where Is the Economy Going?



THIS POST-COVID ECONOMY REMAINS A PUZZLE

ECONOMIC POLICY UNCERTAINTY INDEX (ST. LOUIS FED) NEXT TO ALLTIME HIGH

- <https://fred.stlouisfed.org/series/USEPUINDXD>

HARD" ECONOMIC DATA BECOMING LESS OPTIMISTIC

- GDP UP, INFLATION UP BIGLY, NEW JOBS STALLING

SOFT DATA SUCH AS CONSUMER SENTIMENT & PROCUREMENT MANAGER

PROJECTIONS PAINT A PESSIMISTIC PICTURE

I HAVE SLIDES IN THE APPENDIX OF THIS PRESENTATION THAT GO INTO MORE
DETAIL

- I WANT TO FOCUS ON QUARTERLY REPORTS

QUARTERLY REPORT FROM BRANDS & PACKAGERS ARE TENDING
CAUTIOUS./NEGATIVE

- MOST END MARKET QUARTERLY REPORTS ARE PESSIMISTIC

PERHAPS THE MOST IMPORTANT DATA FOR RECYCLING MARKETS IS SOMETHING
CALLED "REAL DISCRETIONARY PERSONAL INCOME"

- WHAT YOU HAVE LEFT AFTER TAXES, FOOD, HOUSING, UTILITIES
• ADJUSTED FOR INFLATION

Real Discretionary Personal Income Under Siege

“Bread over blazers as shoppers pursue ‘needs’ over ‘wants’”

Retail Dive, Aug 20, “Target Struggles with Turnaround as Q2 Sales Drop”

- Quoting TD Cowen analysis

RETAIL DIVE

- “TARGET STRUGGLES WITH TURNAROUND AS Q2 SALES DROP”
- AUGUST 20
- QUOTING TD COWEN ANALYSIS

STRESSED CONSUMERS FOCUSING ON ESSENTIALS

- REAL DISCRETIONARY PERSONAL INCOME UNDER SIEGE
- “CONSUMER SPENDING GROWTH DRIVEN BY HEALTH CARE”: ADAM JOSEPHSON
- AS THE CONSUMER TURNS” SUBSTACK
 - THE IMPACT OF HEALTH CARE, HOUSING, INSURANCE & FINANCIAL SERVICES GIVING MOST OF US LESS MONEY FOR DISCRETIONARY SPENDING

RETAILERS TRYING TO KEEP PRICES DOWN

- STARTING TO PASS ON SOME TARIFF COSTS
- WILL PASS ON MORE

HIGHER INCOME AMERICANS – TOP 10% – ARE RESPONSIBLE FOR ALMOST HALF OF CONSUMER SPENDING

- MARKETPLACE SEPT 8
- “HIGHER INCOME AMERICANS DRIVE BIGGER SHARE OF CONSUMER SPENDING”

DISCOUNT STORES DOING WELL

- WALMART EVEN REPORTING MORE HIGH INCOME SHOPPERS

“Consumers Under Stress”

Quarterly retail, packaging, end market reports

- Generally cautious
- Unit sales down
- Lower price strategy driving sales
- Tariff price being passed on as much as possible

“PACKAGING” MEANS CONSUMER BRANDS, RETAILERS, END MARKET PRODUCERS

“DEERE CUTS OUTLOOK AS 3Q PROFIT, REVENUE FALL” AUG 14 WSJ

“TOLL BROTHERS PULLS BACK ON HOME DELIVERIES OUTLOOK:” AUG 19 WSJ

“T.J. MAXX OWNER BOOSTS FULL-YEAR OUTLOOK AFTER HIGHER SALES” AUG 19 WSJ

“WALMART REVENUE GROWS AS IT WORKS TO ABSORB TARIFF HIKES” AUG 21 RETAIL DIVE

“LEGO SALES HIT RECORD AS TOY MARKET REBOUNDS” WSJ AUG 27

“FIVE BELOW LIFTS VIEW AS MORE SHOPPERS LOOK FOR VALUE” AUG 28 WSJ

“HORMEL TO RAISE PRICES, CITING COSTLIER PORK, BEEF AND NUTS” AUG 29 WSJ

“CONSTELLATION BRANDS CUTS OUTLOOK ON WEAK BEER DEMAND” SEP 3 WSJ

Tariffs



TARIFFS GENERALLY DON'T APPLY TO RECYCABLES

- EXCEPT RECYCLED PET
- PRODUCTS MADE WITH RECYCLED CONTENT ARE COVERED
- ESPECIALLY ALUMINUM & STEEL CANS
- TARIFFS ON ALUMINUM & STEEL IMPORTS HURTING BEVERAGE & FOOD CAN INDUSTRIES

DEPEND WHOSE OX IS GORED?

- NORTH STAR BLUESCOPE STEEL MAKES STEEL FROM SCRAP
- WANTS TARIFF ON IMPORTED STEEL & ALUMINUM PARTS
- DOES NOT WANT TARIFFS ON SCRAP METALS
- <https://www.bbc.com/news/articles/c04z0ydvql2o>

SIMILAR ISSUE NOW WITH NEW 50% TARIFF ON STEEL CONTENT OF PLASTIC MOLDING MACHINES & MOLDS

- MOST OF THE WEIGHT OF THE MACHINE

TARIFF COSTS BEING PASSED ON TO CONSUMERS SLOWLY BUT SURELY

Markets Beyond August

Trends to watch

Consumer demand for goods:

- holiday buying
- lowered SNAP benefits
- tariff price impact

Housing starts and durables manufacturing

CONSUMER DEMAND & HOLIDAY BUYING THE MOST IMPORTANT

- THE IMPORTANCE OF REAL DISCRETIONARY PERSONAL INCOME
- IMPACT OF TARIFF PASS THROUGHES ON PRICES

“HOW SNAP CHANGES COULD IMPACT GROCERS”

- FOOD DIVE AUGUST 4

HOUSING STARTS & DURABLE MANUFACTURING FOR PLASTICS

Markets Beyond August

Paper flat

Plastic

- NHDPE price may have stabilized
- CHDPE stagnant
- PET might start to come back
- PP flat

Metal & Glass flat

PAPER DRIVEN BY DECLINING BOX DEMAND

- MILL CLOSURES & DOWNTIME LOWERING AVAILABLE CAPACITY
- SUPPLY STILL MORE THAN DEMAND

PLASTIC:

- NHDPE RETURNING TO NORMAL LEVELS
- CHDPE HAMPERED BY SLOW Q2 HOUSING STARTS
- PET DOWN DUE TO INCREASED RPET FLAKE IMPORTS
- BEVERAGE SALES NOT STRONG THIS SUMMER
- PP, LIKE NHDPE, RETURNING TO NORMAL LEVELS AS DEMAND WANES

Good Reads

Blue Polymers Takes Over Food-Grade rPET Production Facility in California

- Packaging Dive, August 19

Recyclers Have the Capacity – Let's Use It

- Plastics Recycling Update, August 20

The Biggest Retailers Are Thriving in the Tariff Economy

- Wall Street Journal August 22

Domestic, Global Factors Restrain Steel Markets

- Recycling Today, August 25

The Boom in New Steel Mills Is Outpacing Demand

- Wall Street Journal, August 26

Higher Prices Are Coming for Household Staples

- Wall Street Journal, August 28

Weak Summer Labor Market Flashes Warning Signs for the Economy

- Washington Post, September 5

Trump Adds PET resin to "reciprocal" tariffs

- Plastics Recycling Update, September 8

Sources Include

Marketplace: <https://www.marketplace.org>

NERC Increased Capacity to Use Recycled Paper Final March 2024

<https://www.nerc.org/nerc-releases-final-update-on-increased-capacity-to-use-recycled-paper>

Packaging Dive: <https://www.packagingdive.com>

Paper: Moore & Associates: Bill Moore: www.marecycle.com

Paper: RISI: Hannah Zhao: www.risiinfo.com

Plastic: Stina: www.stinainc.com

Plastics News: <https://www.plasticsnews.com>

Recycling Markets.net: Christina Boulanger-Bosley: www.recyclingmarket.net

Resource Recycling Magazine & weekly Resource Recycling & Plastic Recycling Update e-news: resource-recycling.com/recycling/magazine/

Waste360: <https://www.waste360.com>

Waste Dive: <https://www.wastedive.com>

THESE COMPANIES & PUBLICATIONS ARE EXCELLENT SOURCES OF
INFORMATION ABOUT MARKET TRENDS

Contact

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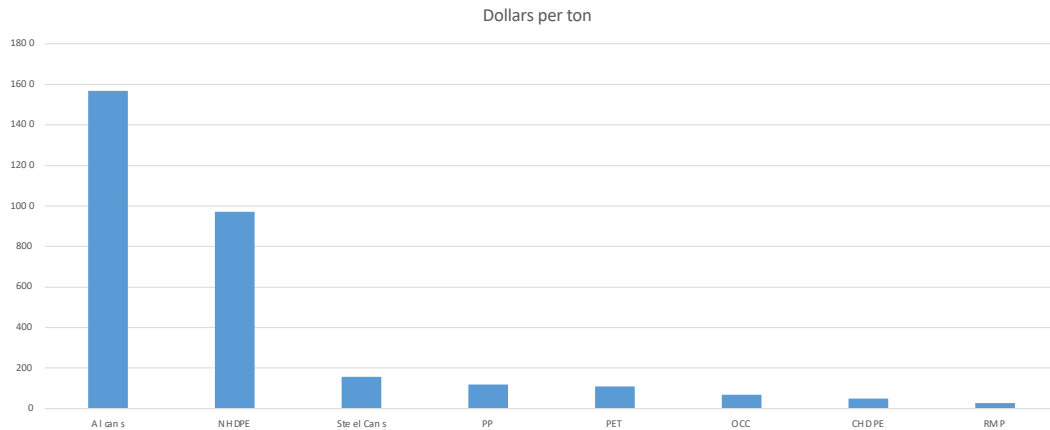
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Appendices

- **National MRF Per Ton Value**
- **Where Is the Economy Going? Hard Data**
- **Where Is the Economy Going? Soft Data**
- **Where Is the Economy Going? Procurement & Logistics**

National MRF Per Ton Value August 2025



NOTE HOW PAPER IS ON A PER TON LEVEL BUT CRUCIAL TO BALE VALUE

CHDPE LESS VALUABLE THAN OCC

- RARE FOR ANY OF THE OTHER CURBSIDE RECYCLABLES TO BE LESS VALUABLE PER TON THAN PAPER
- MIXED GLASS, OF COURSE, IS AN EXCEPTION

Where Is the Economy Going?

”Hard” data is a mix

- GDP up
- Core inflation up
- Job growth stalled
- Real disposable personal income down

“HARD” DATA MEASURABLE IN DOLLARS OR WEIGHT, ETC, & ARE “LAGGING” B/C DATA REFLECTS THE PAST

DATA SOURCES INCLUDE:

- GDP: <https://fred.stlouisfed.org/series/GDPC1> UP 3.3%
- INFLATION: CORE PCE: <https://www.bea.gov/data/personal-consumption-expenditures-price-index-excluding-food-and-energy> UP 2.9%
- UNEMPLOYMENT: <https://www.bls.gov/news.release/empsit.nr0.htm>: FLAT AT 4.3%
- JOB CREATION: <https://www.bls.gov/news.release/empsit.nr0.htm>: NEW JOBS BARELY UP
- CONTINUOUS JOBLESS CLAIMS HIGHEST SINCE NOV2021
- FEWER PEOPLE QUITTING JOBS, LESS HIRING, WHITE COLLAR LAYOFFS
- REAL DISPOSABLE PERSONAL INCOME:
<https://fred.stlouisfed.org/series/DSPIC96>

“CONSUMER SPENDING GROWTH DRIVEN BY HEALTH CARE”: ADAM JOSEPHSON

- THE IMPACT OF HEALTH CARE & OTHER COSTS ON DISCRETIONARY CONSUMER SPENDING
- ”AS THE CONSUMER TURNS” SUBSTACK

Where Is the Economy Going?

”Hard” data is relatively positive with weakness growing

- Wage growth: up slightly
- Real discretionary personal income down
- Retail sales: flat
- Industrial output: flat
- Durable goods: new orders down
- Household debt up: 90-day delinquencies surging

- WAGE GROWTH: <https://www.bls.gov/news.release/realer.nr0.htm>
- PERSONAL CONSUMPTION:
<https://www.bea.gov/sites/default/files/2025-06/pi0525.pdf>
- REAL DISCRETIONARY PERSONAL INCOME:
<https://fred.stlouisfed.org/series/DSPIC96>
- RETAIL SALES: <https://www.census.gov/retail/sales.html>
- INDUSTRIAL OUTPUT: <https://fred.stlouisfed.org/series/INDPRO>
- DURABLE GOODS:
<https://www.census.gov/manufacturing/m3/adv/current/index.html>
- PERSONAL SAVINGS: <https://fred.stlouisfed.org/series/PSAVERT> DOWN
- HOUSEHOLD DEBT: <https://www.newyorkfed.org/microeconomics/hhdc>
- CREDIT CARD DELINQUENCIES:
<https://fred.stlouisfed.org/series/DRCCCLACBS>

Where Is the Economy Going?

"Soft" data

Consumer sentiment/confidence

- Cautious

NAHB Homebuilder confidence

- Down... "soft housing market"

NFIB small business barely optimism index

"SOFT" DATA IS SPECULATIVE & FORWARD-LOOKING
UMICH CONSUMER SENTIMENT/EXPECTATIONS

- DOWN MOM & YOY:

THE CONFERENCE BOARD "DIPPED SLIGHTLY"

- US CONSUMER CONFIDENCE LITTLE CHANGED IN AUGUST: AUG 26
- CONFIDENCE REVIVED IN Q3 BUT CEOS REMAIN CAUTIOUS AUG 7

NATIONAL ASSOCIATION OF HOMEBUILDERS

- HMI KEY FINDINGS: AUGUST 2025

NATIONAL FEDERATION OF INDEPENDENT BUSINESSES OPTIMISM INDEX

- NEW NFIB SURVEY: SMALL BUSINESS OPTIMISM RISES SLIGHTLY SEPT 9
- WAITING FOR UNCERTAINTY TO RESOLVE

Where Is The Economy Going?

Procurement & Logistics

Institute of Supply Management

- manufacturing contracting
- new orders expanding
- production contracting

Warehouse demand down

Freight companies reporting fewer shipments

ISM MANUFACTURING

- <https://www.ismworld.org/supply-management-news-and-reports/reports/ism-pmi-reports/pmi/august/>

ISM SERVICES: <https://www.ismworld.org/supply-management-news-and-reports/reports/ism-pmi-reports/services/august/>

BOTH ISM CATEGORIES SHOW EMPLOYMENT CONTRACTING & PRICES RISING

LMI: <https://www.the-lmi.com/july-2025-logistics-managers-index.html>

- INVENTORY RISE PRIMARILY IN FIRST HALF AS COMPANIES RUSHED TO BEAT TARIFFS

WAREHOUSE DEMAND: MARKETPLACE SEPT 5 QUARTERLY DEMAND FOR INDUSTRIAL WAREHOUSES SEES FIRST DROP IN 15 YEARS

CASS: <https://www.cassinfo.com/freight-audit-payment/cass-transportation-indexes/cass-freight-index>

UPS: WSJ JULY 30: "UPS SHARES DECLINE AS LACK OF GUIDANCE, WEAKER RESULTS, SHOW PROLONGED CHALLENGES"

CSX: WSJ JULY 28 "CSX QUARTERLY PROFIT, SALES FALL AS UNCERTAINTY PERSISTS AMONG INDUSTRIAL MARKETS"

DHL: WSJ: "DHL PARENT BACKS GUIDANCE DESPITE CONTINUED UNCERTAINTY"