

# Welcome

**Marty:  
Fishing  
for Answers**

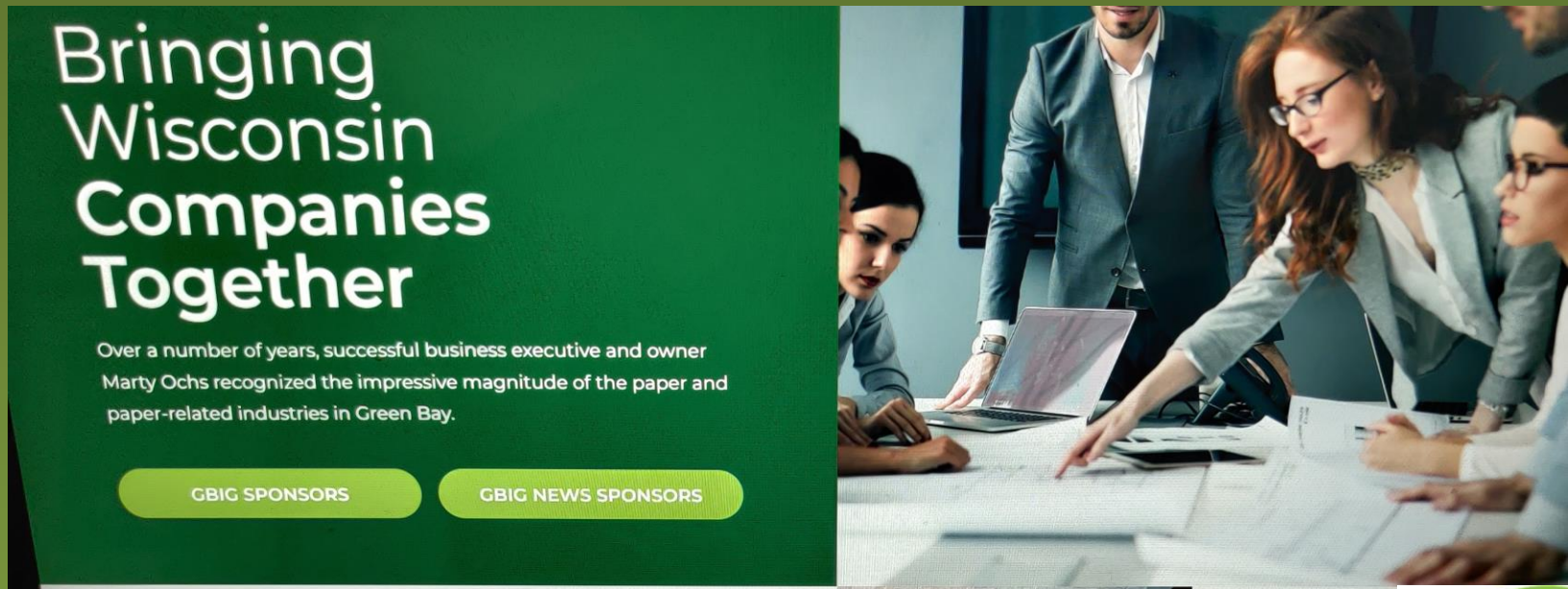


GREEN BAY  
INNOVATION GROUP

<https://greenbayinnovationgroup.com>

## The Green Bay Innovation Group (GBIG)

A business-to-business consortium of enterprises in the paper, packaging, printing, converting & related industries....



**Bringing  
Wisconsin  
Companies  
Together**

Over a number of years, successful business executive and owner Marty Ochs recognized the impressive magnitude of the paper and paper-related industries in Green Bay.

GBIG SPONSORS

GBIG NEWS SPONSORS



# Mission Statement

The mission of the Green Bay Innovation Group is to bring together and create opportunities for networking between Wisconsin companies involved in the Paper, Printing, Pulp, Plastics, Packaging, Converting and Supplier Industries!

GBIG creates a dialog between companies. GBIG webinars, meetings, communications are about current and new products, technology, innovation, sales, marketing, social media/web design, new equipment....

GBIG is looking to create new products, new markets and expand the presence of our industries in Wisconsin. We are here to help you push the norm and challenge one another to make our companies and our communities better.

Finally, we are bringing financial support to our Communities, especially to those most in need through donations from our Sponsors!



# Investment Status

- Min. investing, esp. in printing-writing grades in WI & U.S.
- More investing in corrugate pkg & tissue markets

## ISSUES:

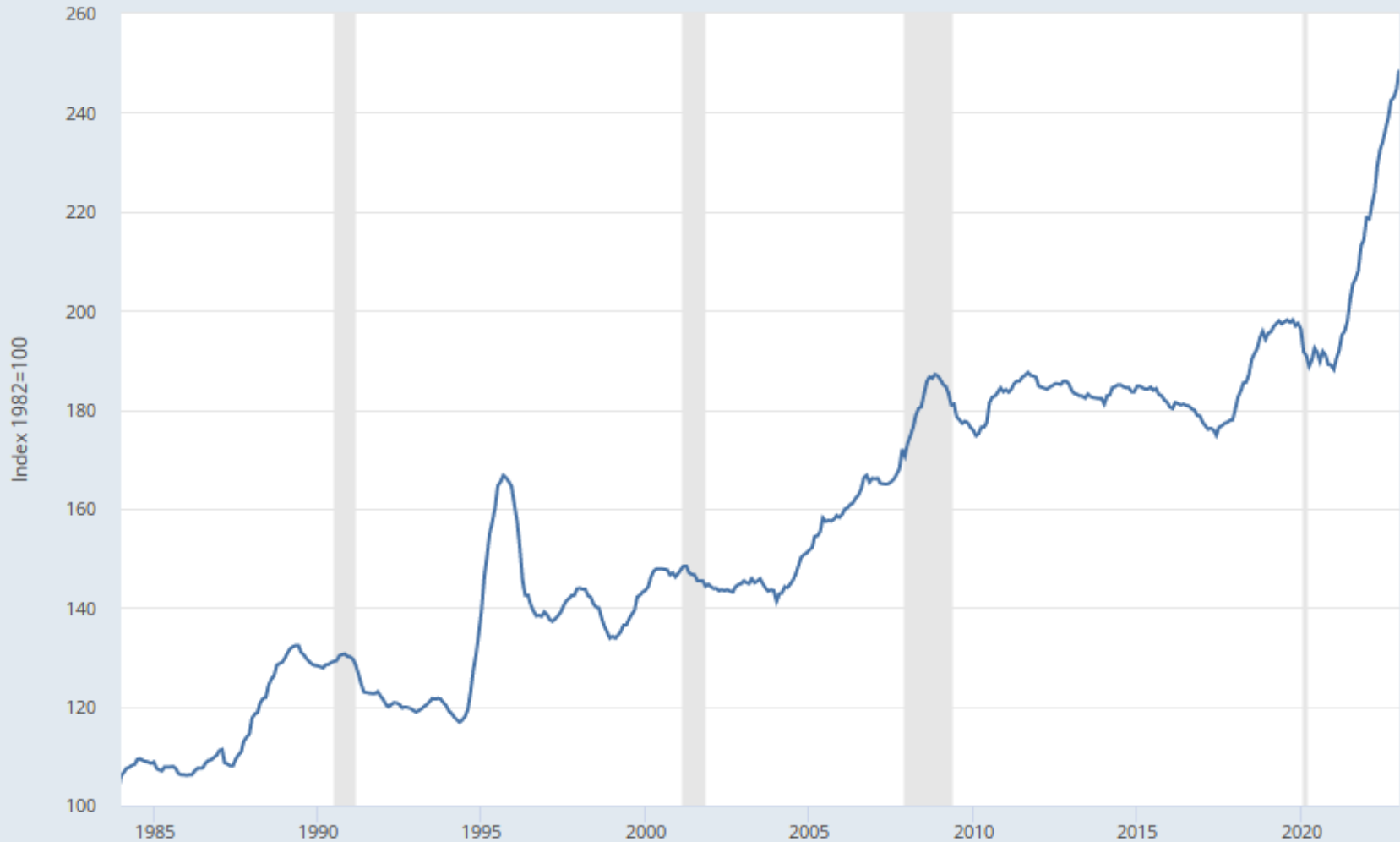
1. Changing ownership: Foreign & Private Groups with NO ties to WI or the Midwest U.S. 37% Priv Equity + Asia
2. Closings-Lack of demand, environ. issues, few upgrades
3. Expensive to run, with barrier to entry, lack of new equip., small return on invest., need to run at 92%. In U.S., investors look at short term profit vs. Europe & Asia
4. Mills require lots of capital for equip, materials, operation, maintenance=large \$\$ outflows and \$\$ outflow issues.
5. Several mills upgrading, with years for little return
6. Paper mill market size has dropped from est. \$52 billion to approximately \$38 billion (Statista)



# Producer Price Index: Pulp, Paper, and Allied Products: Printing & Writing Papers

**FRED**

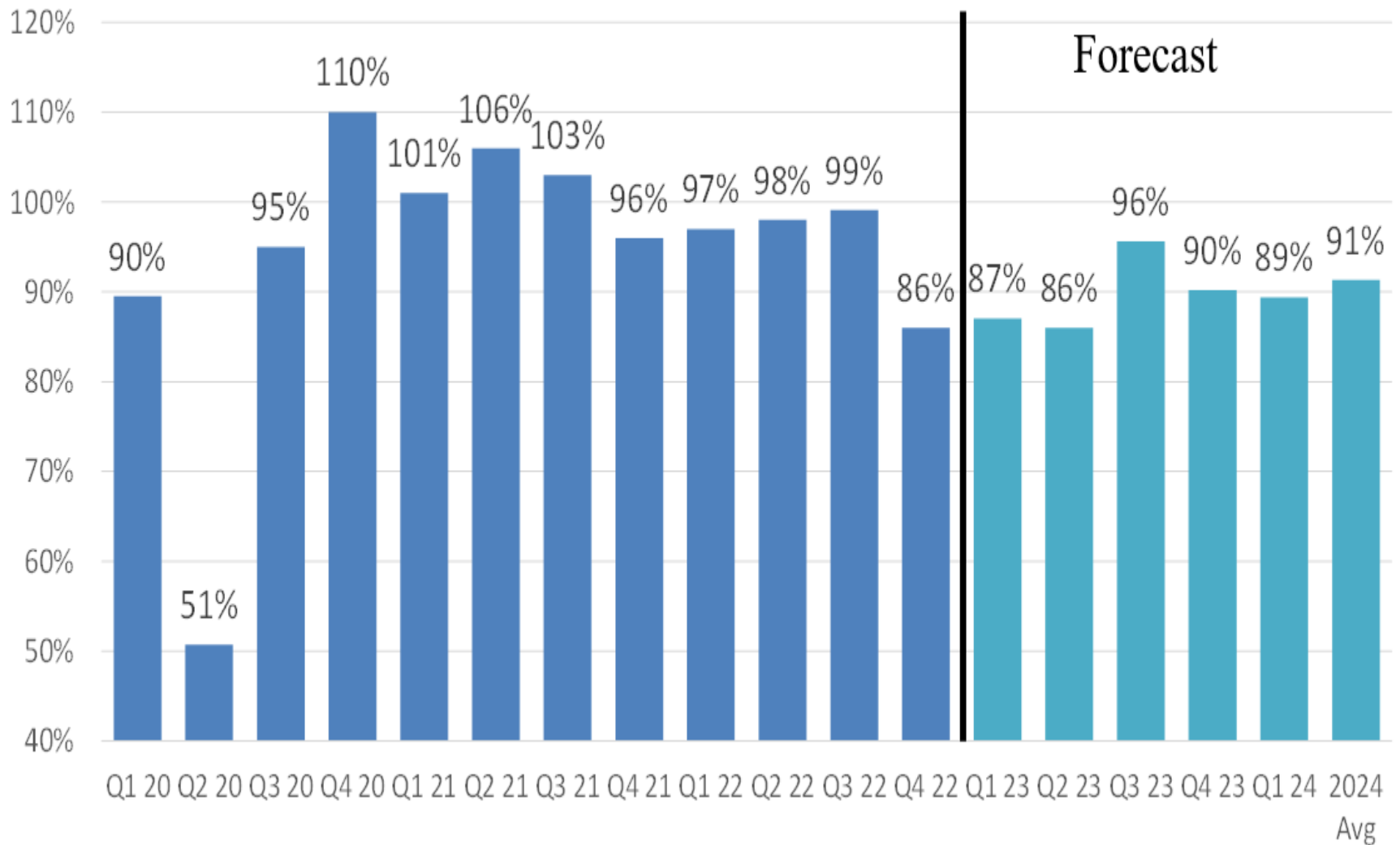
— Producer Price Index by Commodity: Pulp, Paper, and Allied Products: Writing and Printing Papers



Source: U.S. Bureau of Labor Statistics

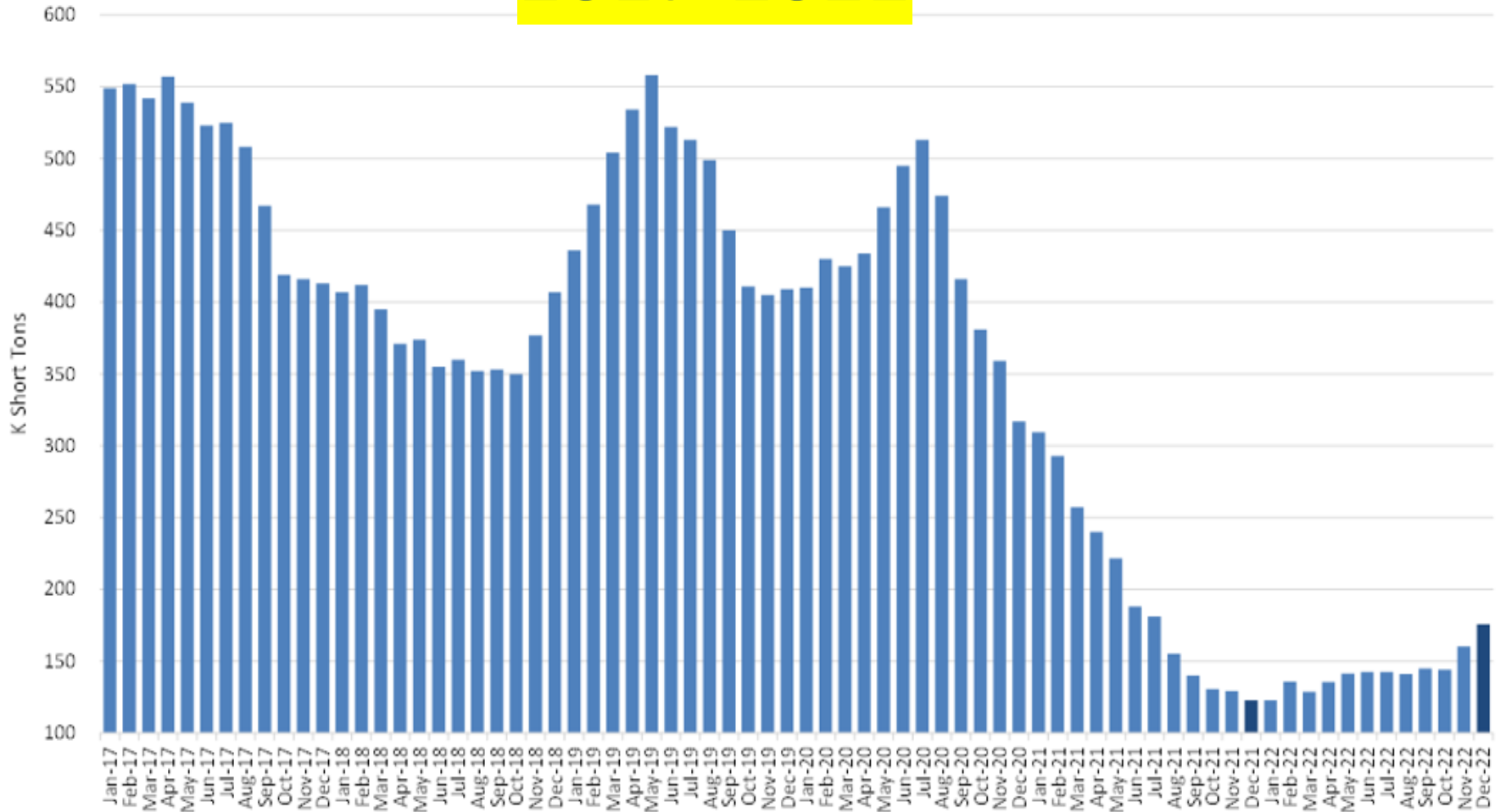
myf.red/g/10qxx

# U.S. Coated Freesheet Rates



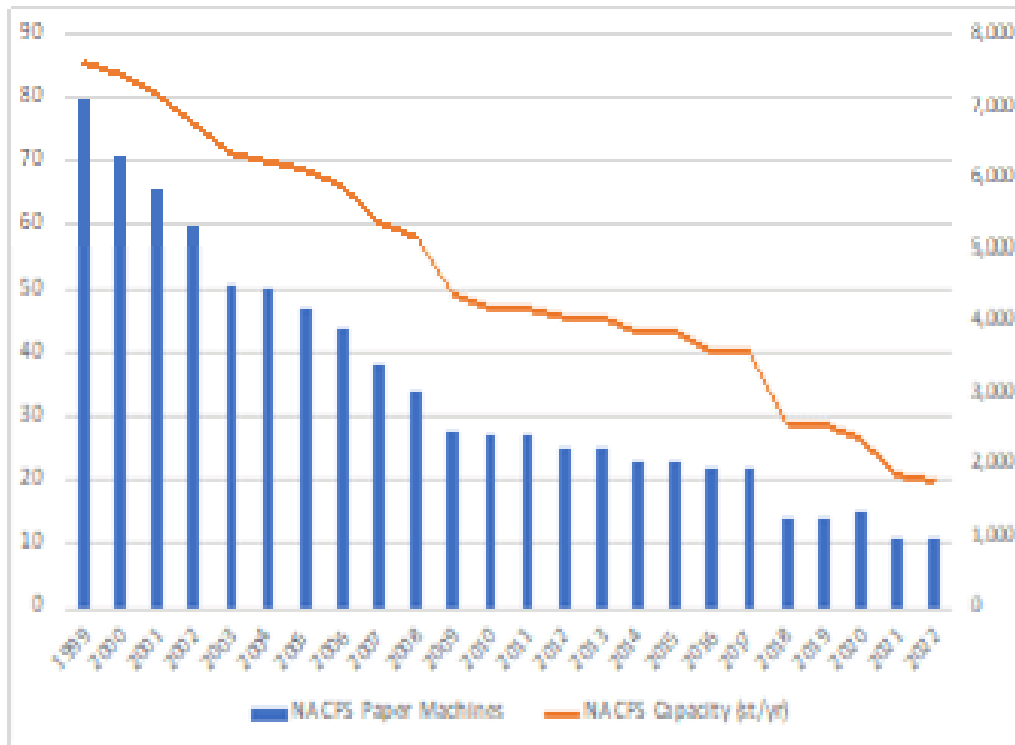
# U.S. Coated Fresheet Mill Inventory

2017-2022

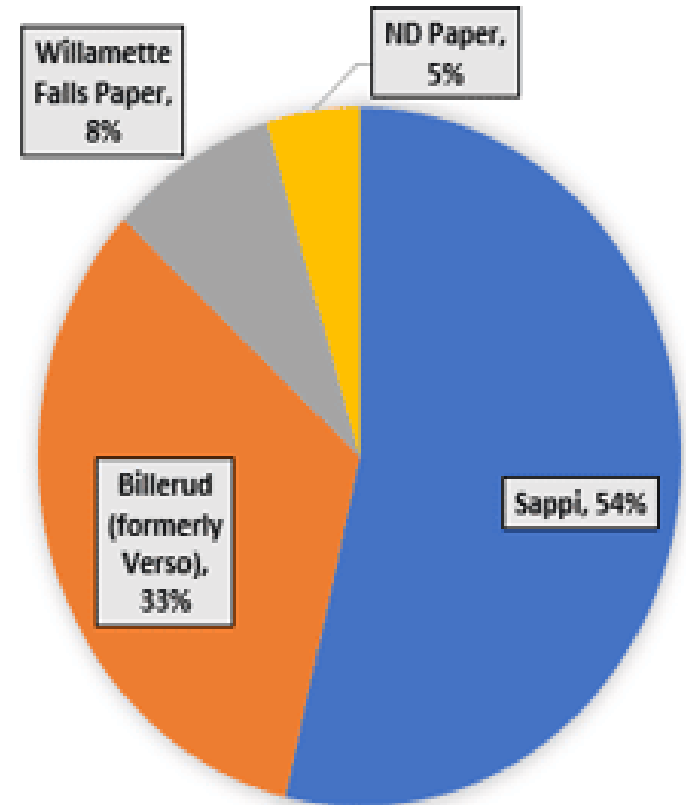


# Coated Freesheet Capacity & Shares

## Paper Capacity N.A. Coated Freesheet



## 2022 CFS



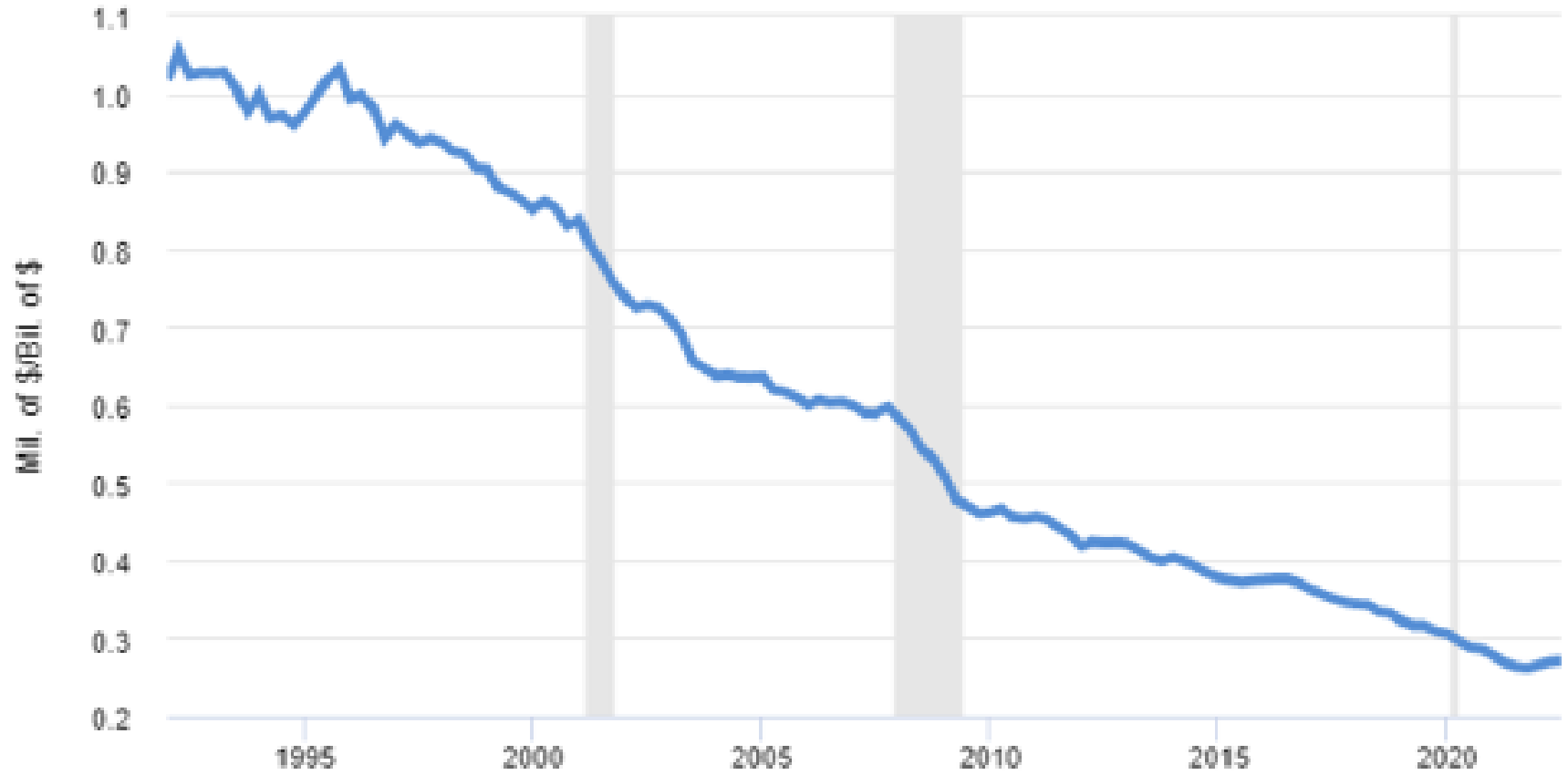
**Total: 1,821,000 s/t**



# PRINTING SHIPMENTS AS A PERCENTAGE OF CURRENT-DOLLAR GDP, 1992-2022

**FRED** 

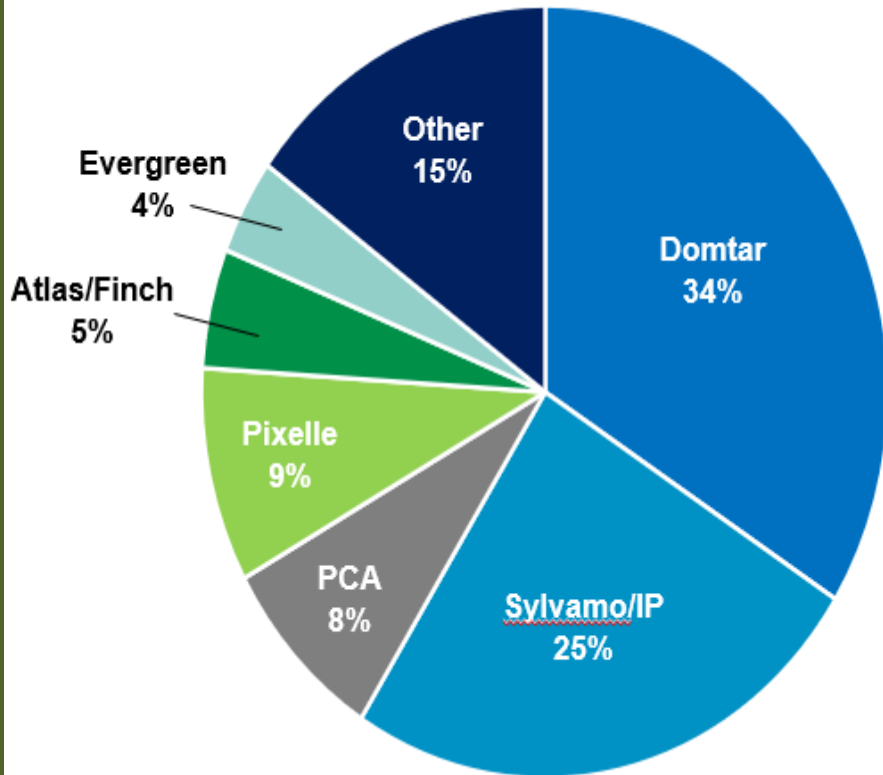
— Manufacturers' Value of Shipments: Printing/Gross Domestic Product



Sources: U.S. Bureau of Economic Analysis; U.S. Census Bureau

# Uncoated Freesheet Capacity

Source: Domtar Report

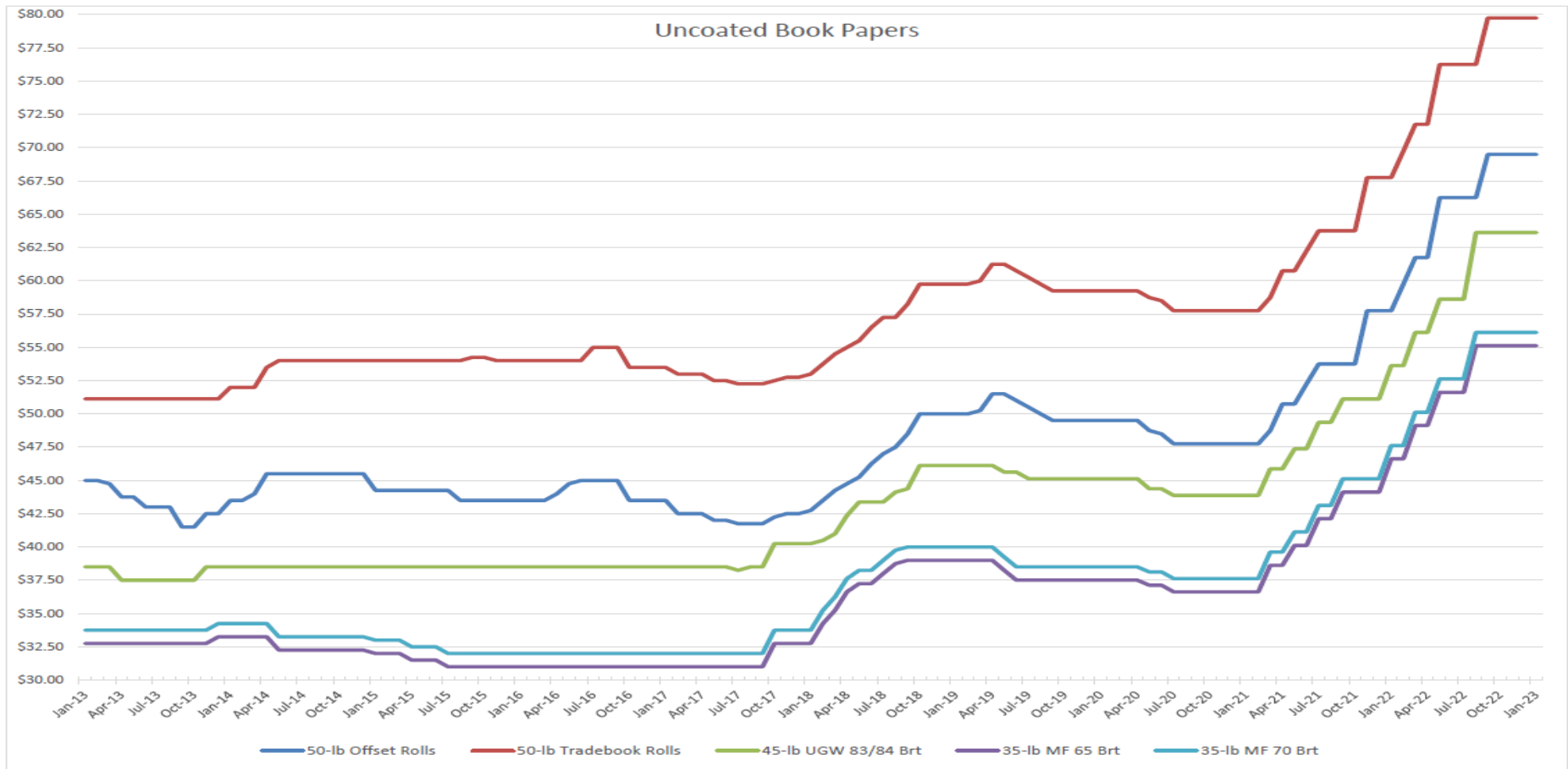


Company	# of Mills	# of Paper Machines
Domtar	8	14
Sylvamo/IP	2+2	7
PCA-Boise	2	3
Pixelle	2	7
Atlas/Finch	2	5
Evergreen	1	3

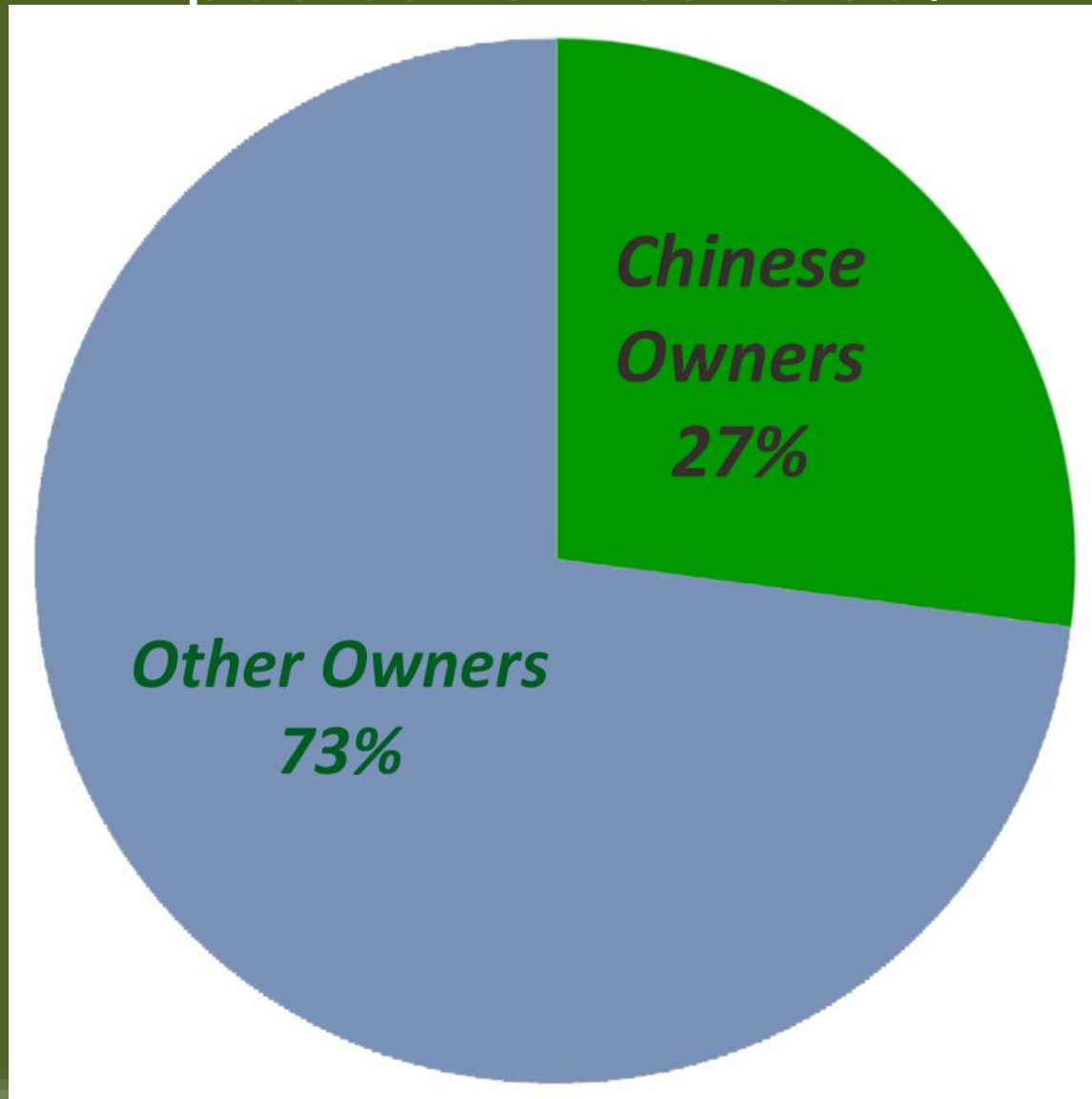
# Uncoated Book Papers Market Pricing

2013-2023 Source: RISI

Source: RISI Pulp Paper Week



# Ownership of U.S. Pulp Capacity Expected to Rise to 35%



# U.S. Import Trends

**Imports arriving for some grades – US Dollar Strength and Reduced Logistics Costs.**

**Finland Dock Workers Strike may delay some of those products to US Market – UPM**

**Impact of the Russian Invasion of Ukraine on Import Paper Market and Energy Costs**

**Continued Mill Consolidation and Machine Closures / Idling or Machine Repurposing**

# Ownership of U.S. Paper Companies

## ➤ CHINA: ND Paper Div. of Nine Dragons Paper

A Chinese papermaking company located in Hong Kong with 4 Mills in the USA.

[www.ndpaper.com](http://www.ndpaper.com) Estimated Sales Revenue, \$10 Billion+, 20,000 employees.

1. Rumford, Maine
2. Old Town, Maine
3. Fairmont, West Virginia
4. Biron, Wisconsin
5. Sturtevant, WI\* - Corrugated Pkg

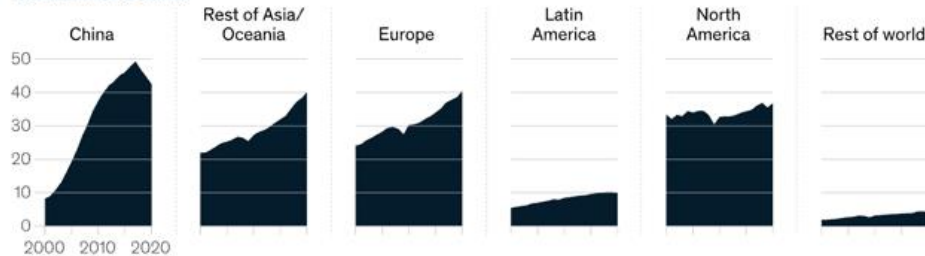


# Industry Shifts in Production

Since 2000, the paper and forest products industry has witnessed major shifts in production focus across regions.

Yearly paper production, by type, million metric tons

## Containerboard



## Fine Paper



## Market Pulp



<sup>1</sup>Uncoated wood-free (UWF) paper and coated wood-free (CFW) paper.  
Source: Fastmarkets RISI; McKinsey analysis

McKinsey  
& Company

Since 2000, the paper & forest products industry has seen major shifts in production across regions. L TO R:  
China  
Oceania  
Europe  
Latin America  
N. America  
Rest of Worlds



# Ownership of U.S. Paper Companies

- CHINA: Shanying International Holdings  
Shanghai: Phoenix Paper-Wickliffe, KY,  
estimated sales revenue of \$5.83 Bill.  
[www.shanyingintl.com](http://www.shanyingintl.com)
- Indonesian: Domtar – Div. of Paper  
Excellence, estimated revenue of \$5.6 Billion.  
21 Locations. See Map.
- [www.paperexcellence.com](http://www.paperexcellence.com)



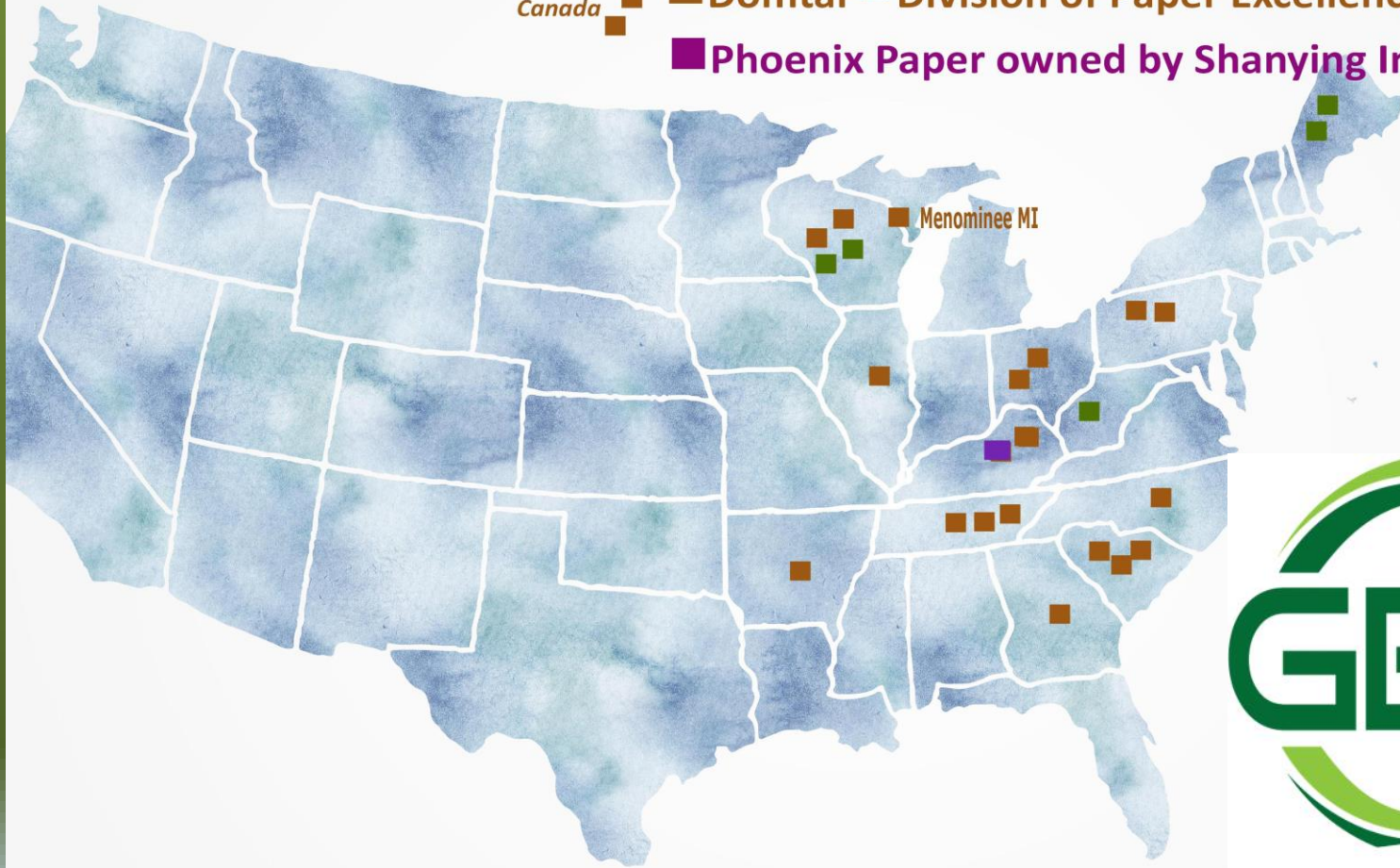


# U.S. Papermills Ownership

- ND Paper Division of Nine Dragons, A Chinese papermaking company
- Domtar – Division of Paper Excellence, Indonesian
- Phoenix Paper owned by Shanying International

Canada

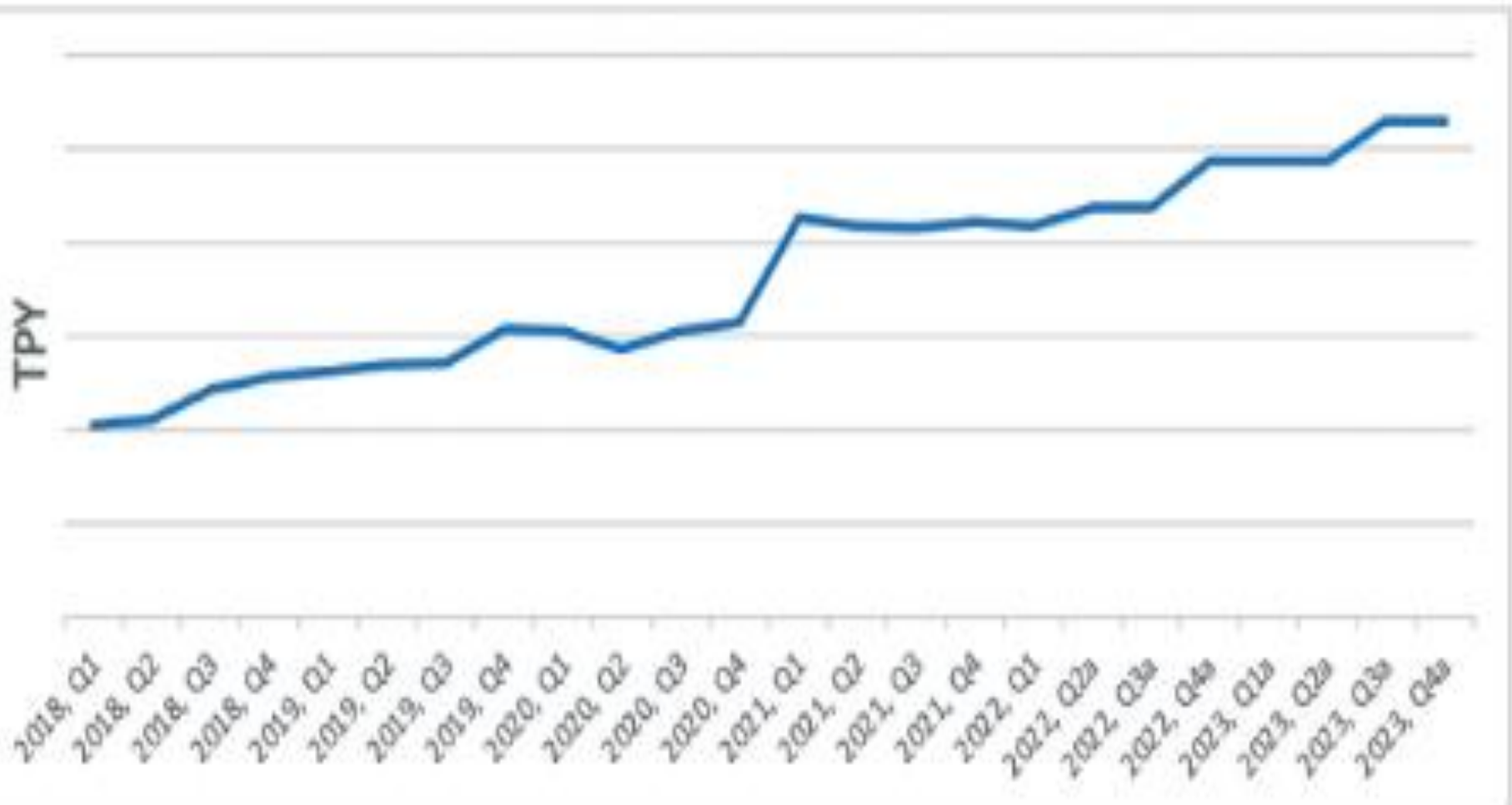
Menominee MI



China can produce in 3 weeks the annual output of Wisconsin

# Containerboard Capacity, 2018-2023

## US Containerboard actual and announced capacity



Source: FisherSolve Next

# Build Back for These Markets where Wisconsin is still a leader.

Book Printing	Label Printing & Finishing
Commercial Printing	Machine Shops
Catalog Printing	Nonwovens Substrates & Products
Coating & Laminating Companies	Package Printing & Completion
Carton Manufacturing	Pouches, Bags & Manufacturing
Converting Industries	Publication Industry
Compostable & recyclable substrates	Rotogravure Printing
Corrugated Manufacturing	Tissue Manufacturing & Products
Digital Printing	Tubes & Cores
Direct Mail Printing	Peel & Seal Specialties
Equipment Manufacturing & Robotics	Interleaving Products for Roofing Etc.
Flexographic Printing	Tapes & Liners
Forestry Industries	Wide Web & Screen Printing



**This is just a partial list of industries related to papermaking.**

# Hooray! 2022 Shipments Outpaced 2021

*December 2022 printing shipments  
came in at \$6.97 billion,  
Down from November's \$7.10  
billion.*

*But January-to-December  
shipments for 2022 came  
in at \$83.47 billion, an  
improvement over 2021's  
\$82.05 billion.*



# Interesting Facts About The Paper Industry

The Pulp and Paper industry is growing 2.0% annually.

The packaging sector will continue to lead the industry in demand and growth.

25 MM tons of new containerboard capacity in Asia.

Asia's cartonboard capacity boom is expected to continue.

Compared to Europe and North America, Asian and Latin

American companies have invested more in new paper machines and in keeping their existing fleets modernized.

With the newest fleet of machines, China remains the largest CO<sub>2</sub> emitter.

No single EU-based company has integrated to box/corrugated.

European containerboard mills are benefitting from on-site kraft pulp production, decreasing energy and carbon usage.

Industry consolidation will likely speed up.

Population and urbanization drive production.

