The Paper Markets

Myles Cohen
Today

- Briefly.....about Pratt
- Historical Trends of Recovered Fiber
- The Future of Recovered Fiber
- Quiz at the end...really
- Maybe a joke or two
Pay Attention!!

- There **WILL BE** a test
  - With prizes
- 97 slides in 30 minutes
Pratt Industries Overview

- $1.6 Billion, privately-held company
- Recycle 1.6 Million tons of recycled materials annually, saving...
  - 20+ million trees
  - 1 million tons of greenhouse gas emissions
- 5th largest U.S. paper and packaging company – 4,000 employees
- Largest 100% recycled containerboard company in U.S.
- State of the art alternative energy generation
- 16 Recycling Centers/MRFs
- 3 – 100% Recycled Paper Mills...+ Coming Soon – 4th (Valpo)
- 1 Clean Energy Plant
- 12 Corrugating Plants
- 26 Converting Plants
- 6 Display Facilities
- 9 Specialty Retail DCs
Pratt in the Northeast

- The ONLY Paper Mill in NYC @ Staten Island
  - (many originally knew as VISY)
- Consumes more than 400,000 tons of recycled fiber/yr.
- 24/7 x 361 days
- Box plants in Staten Island and New Windsor NY, Allentown and Reading, PA
The Paper Markets

Today’s Focus is on:
- North America Mill Consumption
- OCC
- ONP
- Mixed Paper
North American Recovered Fiber Collections/Consumption

North American Recovered Fiber Collections 2013 = 49.3 Million Tons

- **Domestic Mills**
  - 39%
  - 19.4 Million Tons

- **Exported**
  - 61%
  - 29.9 Million Tons
North American Recovered Fiber Consumption
(Percentage OCC vs. All other grades)

<table>
<thead>
<tr>
<th>Year</th>
<th>A/O</th>
<th>OCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>56.2%</td>
<td>43.8%</td>
</tr>
<tr>
<td>2009</td>
<td>57.4%</td>
<td>42.6%</td>
</tr>
<tr>
<td>2010</td>
<td>60.5%</td>
<td>39.5%</td>
</tr>
<tr>
<td>2011</td>
<td>63.0%</td>
<td>37.0%</td>
</tr>
<tr>
<td>2012</td>
<td>63.8%</td>
<td>36.2%</td>
</tr>
<tr>
<td>2013</td>
<td>65.6%</td>
<td>34.4%</td>
</tr>
<tr>
<td>2014 proj.</td>
<td>67.0%</td>
<td>33.0%</td>
</tr>
</tbody>
</table>
North American Recovered Fiber Consumption

- ONP in 15th Consecutive Year of Decline – Now <10% of total recovered fiber
- Only OCC and MP “Growing”
- High Grades declining 8%/year
- OCC dominates and is now nearly 8 times ONP
- Containerboard continues to grow, albeit slowly.
ONP – It’s NOT Coming back...ever
Tons-Millions – North American Consumption

<table>
<thead>
<tr>
<th>Year</th>
<th>Tons/Millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>6.4</td>
</tr>
<tr>
<td>2009</td>
<td>5.0</td>
</tr>
<tr>
<td>2010</td>
<td>4.5</td>
</tr>
<tr>
<td>2011</td>
<td>3.8</td>
</tr>
<tr>
<td>2012</td>
<td>3.0</td>
</tr>
<tr>
<td>2013</td>
<td>2.7</td>
</tr>
<tr>
<td>2014</td>
<td>2.2 (Proj)</td>
</tr>
</tbody>
</table>
So what...ONP and Mixed Paper have CONVERGED as a grade.

Northeast YS-H ONP vs. Mixed Paper Yearly Average
2004 - 2014 YTD

NE - MP (#1)
NE - ONP (#8)
So, to Recap the current State...

- 39% of collections are exported
- Of the 30mm tons consumed, 2/3 are OCC
- High grades, ONP, OMG, are in a death spiral
- ONP and Mixed Paper Converging
So what does the future hold?

Top 10 Predictions
The Future... #10

Exports Decline-Long Term

- China becomes more self-sufficient
  - More consumption of goods domestically
  - China Recycling Infrastructure grows
Quiz Rules

- Print LEGIBLY on answer sheet
- No using internet or any electronic media - no cheating
- MOST are people involved in the paper industry
- First few pictures easy...then it gets harder
- Spelling not important
- In case of a tie, random drawing amongst top winners
Quiz – Picture #1

You better know who this is!
The Future...

#9

- P.S.I. Redefines all paper grades
  - Multiple grades of OCC – not just “#11”
  - ONP redefined
  - Grades get consolidated
P.S.I. Specifications Summit

“SAVE THE DATE”

Feb. 25-26
Hyatt Regency
Dallas, Texas

Be a part of decisions that affect the future of paper recycling worldwide

“DON’T MISS OUT....BE AT THE TABLE”
FUTURE WASTE PAPER DEFINITIONS AND SPECIFICATIONS
Seeking Industry Input for Upcoming PSI Grade Changes That Will Take Effect January 2017

- Undertaking a thorough redefinition for most grades
- Solicit industry input
- Committees to be formed
- Your opinions only heard if you are in attendance

Topics of discussions will include:

- New grades to consider adding, such as a new grade of OCC - Asian/non-domestic OCC, or Wax OCC, for instance, or any other new grades to be added?
- Which grades are irrelevant and should be deleted
- Update definitions and acceptable percentage of prohibitives, outthrows, contaminants, and moisture.
- Grades that should possibly be consolidated?
- Define a process for deductions, downgrades, excess moisture, and disputes.

Looking for input from MRF operators, packers/dealers, exporters, consuming mills, and brokers, to tackle these issues and then present to the specifications committee, for an ultimate vote and recommendation to the ISRI Board of Directors. PSI members and non-members are invited to participate in this kick-off session, and to provide input regarding the formation of several committees. Don't be left out of this important industry decision-making process.

But only members can VOTE!!!
Quiz – Picture #2

Spelling does NOT need to be correct
The Future...

#8

- ONP withers
- To insignificance by 2018
Quiz – Picture #3

Name BOTH for Bonus Points – P.B. & S.S.
ONP and Mixed Paper TOTALLY converge by 2018
Buys a lot of corrugated boxes and bought a newspaper company
The Future...

#6, #5, and #4

- OCC “Premium” gets established as a grade
- OCC “Regular” gets redefined
- OCC “short-fiber” gets established as a grade
Quiz – Picture #5

D.H.
Quiz – Picture #6

G.R.
Quiz – Picture #7

In Remembrance
The Future...

#3

- For curbside, water finds its economic level
- Glass gets deleted or upcharged for processing
Quiz – Picture #8

My daughter Kandice and N.d.T.
The Future...

#2

- OCC Grows in curbside collection

amazon.com
The Future... #1

Containerboard and Tissue thrive and drive the Recovered Fiber and Mill Industry
Quiz – Picture #10
Quiz – Bonus Picture
Thank You

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