Asian Containerboard Markets
An Update on China: The Changes Keep Coming

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Points of Discussion

• Is demand in China’s containerboard market slowing?
• How are the latest government policies on recovered paper impacting domestic containerboard mills?
• How will Chinese mills meet their future fiber needs?
• How are the changes in China impacting the rest of Asia?
Snapshot of 2018 Asian Containerboard Demand

• Chinese demand is weak
  ▪ Economic growth is decelerating faster than many anticipated
  ▪ Substitution from paper to plastics due to high prices
  ▪ E-commerce trying to reduce its packaging footprint
  ▪ Lots of uncertainty on level of decline in 2018
    • Showing 4% drop ... could be greater?

• For the rest of Asia, demand growth projected to be steady at 3-4% in 2018
China’s Economy Is Decelerating in 2018

- Economic growth is slowing faster than many anticipated
  - Government policies to address high debt levels having an effect
  - Trade war with USA
  - Retail sales data showing slower growth
  - PMIs moving lower

![Graph showing economic indicators]
Containerboard Prices in East China Soared in 2017, But Lost Momentum in 2018

- 2017 driven by tighter markets and costs
  - Solid demand growth
  - Supply disruptions due to government RCP and environmental policies
- 2018 held back by
  - Weak demand
  - Already high prices
  - Better import planning
China’s Linerboard Imports Keep Rising in 2018

April-August 2018 data are RISI estimates based on source country data.
Chinese Imports of Corrugated Medium Are Strong

April-August 2018 data are RISI estimates based on source country data.
China’s Market Has Shifted Gears in 2018

Year-to-Year Change

- Demand growth turns negative at estimated -4%
- Plenty of capacity but output constrained by fiber
  - Mills taking downtime for fiber and market reasons
- Another increase in net imports
- Operating rates plunge
  - Uncertainty over capacity growth
Government RCP Policies Are Affecting the Way Chinese Companies Are Operating

• Constrained fiber supplies driving up trade and reducing production
  ▪ RCP imports expected to total 15 million tonnes in 2018, down from 25.7 million tonnes in 2017

• Potential ban on all RCP imports in near future
  ▪ Current scenario assumes 10 million tonnes in 2019, 5 million tonnes in 2020 and no imports in 2021
  ▪ Adapt thru combination of more local collection, less production, more imports, less demand and more recycled paper pulp

• Large players in the market are now making investments based on expected new RCP policies
  ▪ Import permits for the big three Chinese containerboard producers is 11.3 million tonnes in 2018
  ▪ Total RCP use by the current three largest Chinese PMs estimated at 26.3 million tonnes
What Investments Are Being Made?

- **Nine Dragons** (2018: 13.6 million tonnes of PPB capacity in China, 14.8 million tonnes RCP consumed, 6.1 million tonnes RCP permits)
  - Biron, Wisconsin: convert PM25 to containerboard and build two recycled pulp lines with 650,000 tonnes per year of capacity in fourth quarter 2019 or first quarter 2020
  - Rumford, Maine: add 410,000 tonne per year air-dried pulp machine
  - Old Town Pulp Mill, Maine: convert PM to 275,000 tonnes of UKP to start first quarter 2019
  - Fairmont, West Virginia: Acquiring 218,000 tonne per year recycled pulp mill from Resolute
  - Vietnam: greenfield mill in Haiphong with 1.2 tonnes of containerboard/boxboard capacity; possible start-up in late 2019 (?), still needs environmental permits
What Investments Are Being Made?

- **Lee & Man** (2018: 6.8 million tonnes PPB capacity in China, 6.8 million tonnes RCP consumed, 2.7 million tonnes RCP permits)
  - Vietnam: 500,000 tonne per year recycled containerboard machine at existing mill to start in 2019

- **Shanying International** (2018: 4.1 million tonnes PPB capacity, 4.7 million tonnes RCP consumed, 2.5 million tonnes RCP permits)
  - Wycliffe, Kentucky: Acquired idled Verso mill with 254,000 tonnes per year of coated paper and 30,000 tonnes per year of air-dried pulp

- **Sun Paper** (2018: 5.6 million tonnes PPB capacity, just 800,000 tonnes of containerboard, 952,000 tonnes of RCP consumed, 0 permits)
  - Laos: 800,000 tonnes per year of recycled containerboard (machines ordered) and 400,000 tonnes per year of recycled pulp at its existing mill
  - Arkansas?: Ongoing discussion of construction of kraftliner mill
What Happens to Capacity in China?

• List of new projects in China remains long in spite of current and potential future fiber shortages
  ▪ There were 19 projects in 2017 with 4.3 million tonnes of capacity
  ▪ We show 28 projects with 8.6 million tonnes of capacity in 2018
  ▪ There are an additional 16 projects announced for 2019 with 6.9 million tonnes of capacity

• Lots of potential for closure or supply disruption
  ▪ Required conversion from coal to natural gas for mills in Dongguan
    • Current information suggests plans are in place to address this without disrupting operations
  ▪ Fiber constraints and higher costs due to changes in RCP policies
  ▪ Margins at Chinese containerboard mills have declined in recent months
Chinese Capacity Rising, But How Much Closure/Delay?
Change in Million Tonnes
Fiber Constraints Drive Up Chinese Net Imports

Year-to-Year Change

- Where will the imports come from?
- Concerns for the forecast
  - Will demand growth be even weaker?
    - Strength of China’s economy?
    - Will fiber shortages and price levels cause more use reduction?
  - Will imports really grow that much?
In Asia (Excl. China), Demand Growth Fairly Steady in 2018-2020

- Growth supported by continued strength in the global economy
  - Supports export-oriented economies
  - Better conditions in India
- Annual gain averages 3.3% or 1.1 million tonnes
- Risks
  - More pronounced slowing in China
  - Global trade wars

Southeast Asia includes Indonesia, Malaysia, Philippines, Singapore, Thailand and Vietnam.
Operating Rates in Asia (Excl. China) Rising as Both Demand and Exports Grow

Change in Million Tonnes

- **Demand**
- **Capacity**
- **Net Exports**
- **Operating Rate**

<table>
<thead>
<tr>
<th>Year</th>
<th>Demand</th>
<th>Capacity</th>
<th>Net Exports</th>
<th>Operating Rate</th>
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<tr>
<td>2013</td>
<td>0.82</td>
<td>0.80</td>
<td>-0.02</td>
<td>80%</td>
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<tr>
<td>2014</td>
<td>0.84</td>
<td>0.80</td>
<td>-0.04</td>
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<tr>
<td>2015</td>
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<td>0.80</td>
<td>-0.06</td>
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<tr>
<td>2016</td>
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<td>0.80</td>
<td>-0.08</td>
<td>92%</td>
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<tr>
<td>2017</td>
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<td>0.80</td>
<td>-0.10</td>
<td>94%</td>
</tr>
<tr>
<td>2018</td>
<td>0.92</td>
<td>0.80</td>
<td>-0.12</td>
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<tr>
<td>2019</td>
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<td>0.80</td>
<td>-0.14</td>
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<tr>
<td>2020</td>
<td>0.96</td>
<td>0.80</td>
<td>-0.16</td>
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</tbody>
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What We Need to Watch

• What policies are pursued by the Chinese government?
  ▪ Ban on solid waste imports including all recycled paper?
  ▪ Other environmental polices such as requiring reductions in coal use?
  ▪ Policies on eco-packaging and whether they encourage paper or plastics?

• E-commerce in China
  ▪ How rapidly will it grow?
  ▪ What steps will the industry take to reduce its packaging footprint?

• What policies are being pursued by other Asian countries?
  ▪ RCP controls/bans?
  ▪ Paper versus plastic?
Thank you!

For more information:

World Containerboard 5-Year Forecast  
www.risi.com/forecasts

Asian Paper Packaging 5- and 15-Year Forecasts  
www.risi.com/forecasts

Asian Pulp and Paper Monitor  
www.risi.com/appm

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