



Footwear Packaging Materials Update

September 2018

Introduction

- Paper disruption in China and parts of SEA
- Some quick mitigation ideas
- Sustainable packaging materials

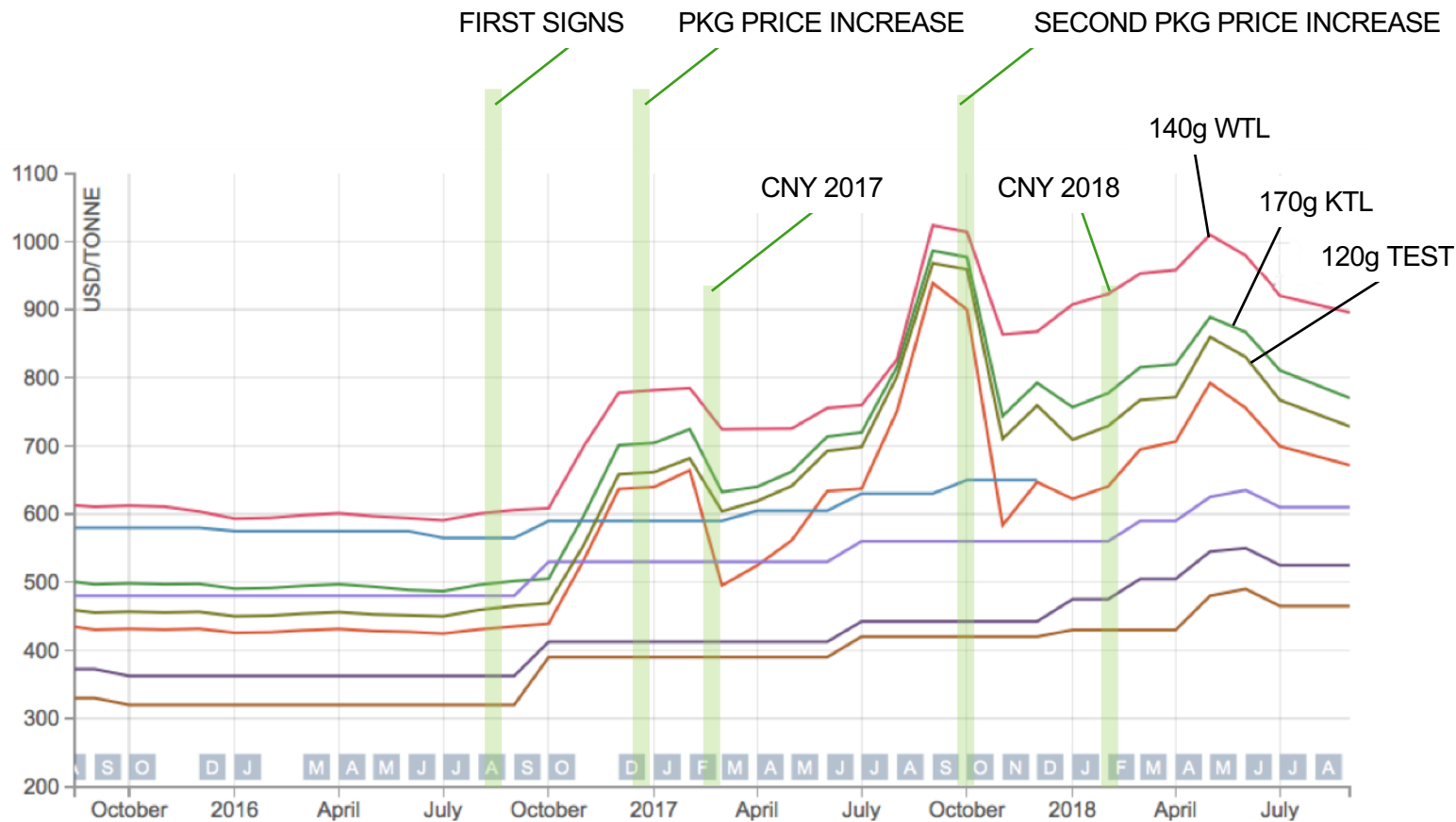


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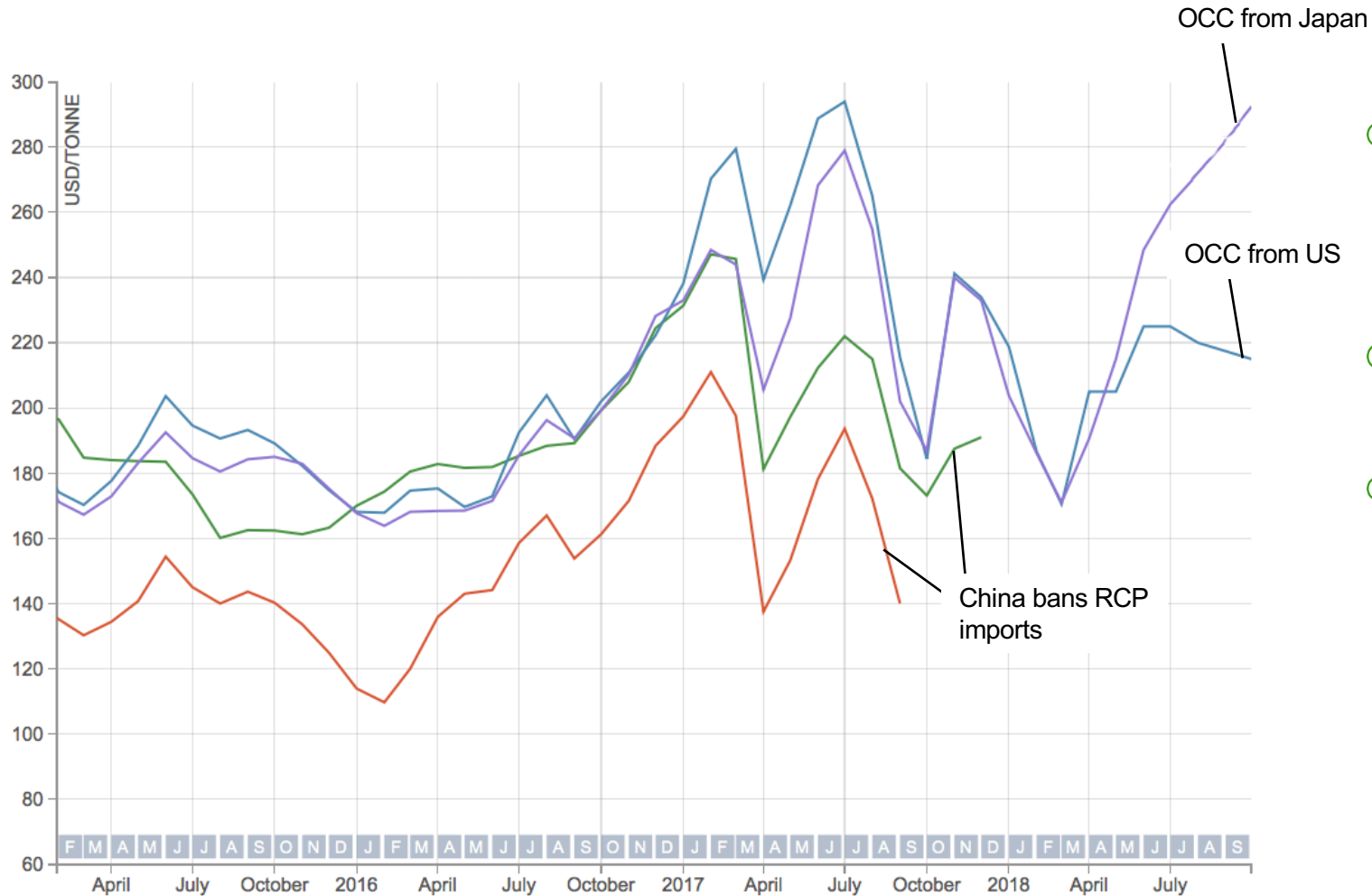
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Paper price disruption



- ⊗ In 2016 and 2017 there were sharp increases in paper prices for a variety of reasons:
 - > Chinese government policies
 - > Ban on recovered paper
 - > Environmental reasons
- ⊗ Prices seem less volatile following CNY this year when compared to previous
- ⊗ China's need for recycled fiber will drive the market

Recovered paper prices



- ④ Recovered paper (RCP) and Old Corrugated Containers (OCC) are key input for grades of paper used in footwear packaging
- ④ The Chinese paper market will be heavily influenced by the demand for RCP
- ④ By 2020 there will be a 22% increase in mill capacity in China and 9M tons of RCP will be needed to supply the increase in capacity

Additional Developments to keep an eye on



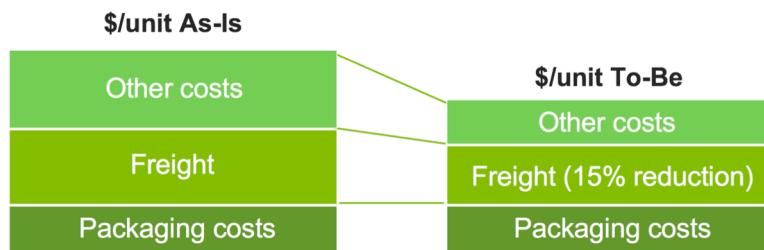
<https://research.rabobank.com/far/en/sectors/fa-supply-chains/impact-of-china-rcp-policies.html>

- ⓧ The Chinese domestic recycling market can only supply about a third of its own need for RCP – cost of this fiber is high and the amount of virgin fibers is low – this poses a risk to packaging strength
- ⓧ The Chinese Government just announced 25% retaliatory tariff on US recycled pulp (8/23)
- ⓧ Concerns about the quality of imported recycled materials has spread to other SEA countries who are implementing their own restrictions – this is going to put further pressure on supply of fiber
- ⓧ Recent moves by the Chinese government indicate a commitment to the total ban of imported solid waste by 2020 – this includes recovered paper and OCC
- ⓧ This year's import quotas are expiring on 12/31 - there is uncertainty around next year's implementation of quota permits and the imposed quality standard .5%

How to mitigate these impacts?

- Control your packaging: ensure that the right box made from the right materials is used in the supply chain - **controlling your packaging** has significant value – especially during these market disruptions
- Use of virgin packaging papers can stabilize your overall packaging costs in conditions like these
 - Virgin fiber packaging papers are renewable, lightweight and strong – you get more packaging strength per ton of paper
- Eliminate high ecommerce shipment costs by packaging “ready to ship” at source
 - Eliminate overpack and reduce dim-weight freight rules

The cost to use packaging is a more important number than the unit cost



SAVINGS POTENTIAL:



Supplier

- Lowered 1st cost for packaging
- Reduced damage
- Reduced trucking to port



Origin operations

- Reduced container freight station costs



Carrier

- Reduced spend on ocean and air



Brokerage

- Reduced spend on brokerage due to fewer entries



Inbound transport

- Lowered trucking costs
- Reduced drayage cost



Distribution center

- Improved capacity due to fewer inbound receipts
- Reduce corrugate spend by increasing carton reuse



Outbound transport

- Reduced spend on outbound deliveries



Retail

- Improved back-room capacity
- Reduced handling

Sustainable packaging principles

Sustainable packaging:

1. Is beneficial, safe & healthy for individuals and communities throughout its life cycle
2. Meets market criteria for performance and cost
3. Is sourced, **manufactured**, **transported**, and **recycled** using renewable energy
4. **Optimizes the use of renewable or recycled source materials**
5. Is manufactured using **clean production technologies** and best practices
6. Is made from materials healthy throughout the life cycle
7. Is physically designed to optimize materials and energy
8. Is effectively recovered and utilized in biological and/or industrial closed loop cycles

No ranking is implied in the order of criteria.

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COALITION®**

<https://sustainablepackaging.org>

BillerudKorsnäs by the numbers

Net sales approx.

2.6

Billion USD



A focus on customer value, innovation and sustainability

Operating profit approx.

244

Million USD



4,400

Number of employees



8

Production units

Beetham
Frövi
Rockhammar
Gruvön
Gävle
Karlsborg
Pietarsaari
Skärblacka

Business areas



Corrugated Solutions



Consumer Board



Packaging Paper

Global Offices

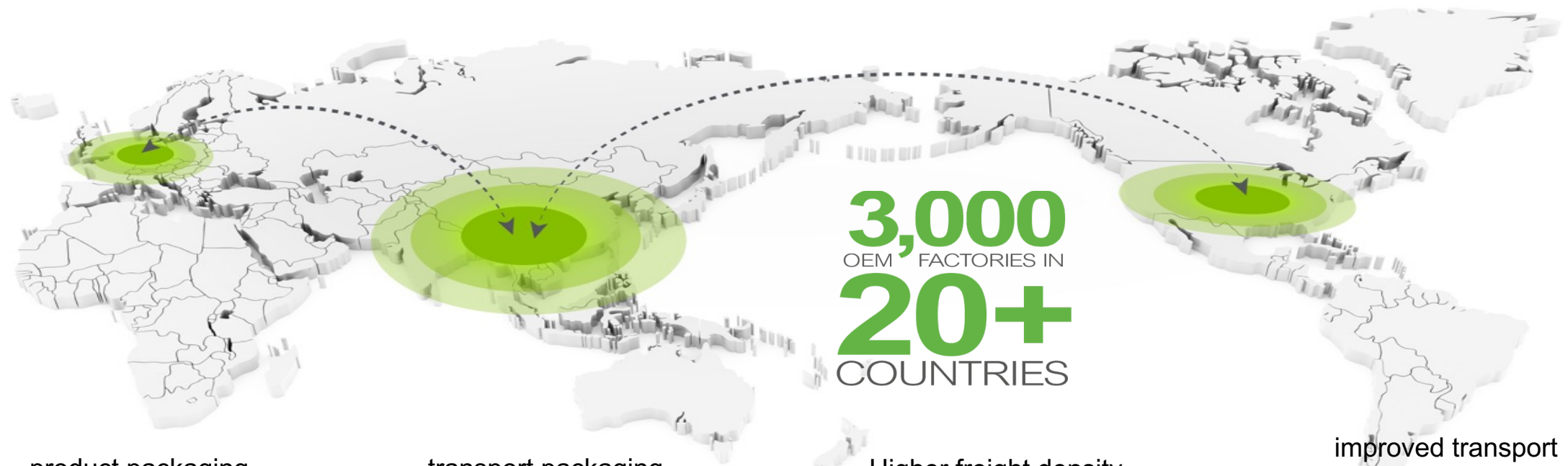
United States:
Portland, Chicago,
Miami

Europe: Sweden,
Germany, Italy, France,
UK, Spain

Asia: China, India,
Vietnam, Cambodia,
Bangladesh, Indonesia,
Thailand

Managed Packaging Solutions

We manage and control your packaging supply chain so you don't have to



product packaging



transport packaging



Higher freight density



improved transport through supply chain



Sustainability credentials

MEMBER OF
**Dow Jones
 Sustainability Indices**
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September 13, 2018:

Each year over 3,400 public companies around the world are analyzed, the top 10 percent are included in the Dow Jones Sustainability World Index. This year BillerudKorsnäs is the industry leader in the category Containers & Packaging and achieves industry top scores for its climate strategy, customer relationship management, supply chain management and talent attraction & retention.



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