

The new normal – balancing continues

Aki Niemi
Area President, China

September 24, 2015

Valmet in China

Contents

- 1 Valmet in China in brief
- 2 Market position, drivers and market review
- 3 Main competitors
- 4 Strategy and competitive edges
- 5 Summary
- 6 Appendix: References in China

China area overview

Focusing on businesses in pulp and paper industry

Our business

- We serve customers by providing technology and services for the pulp, paper and energy industries in China
- Improve customer relationship, understand the customers' real needs and provide competitive solutions

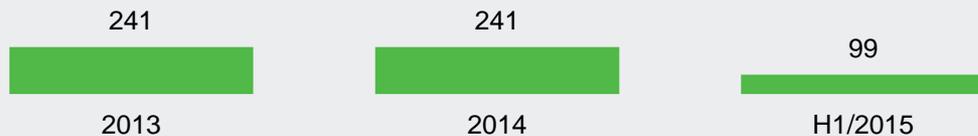
Our customers

- Our customers are in leading position in pulp and paper businesses
- Our customers are looking for opportunities in energy savings and efficiency

Our achievements

- Large installed base in pulp and paper industry
- Good reputation for lifecycle service
- Continuous technology development
- We have established strong local presence to serve our customers

Orders received



Valmet offering in China

Comprehensive offering in pulp and paper industry

- Complete paper, board and tissue making lines, rebuilds and key components
- Complete fiber lines and recovery islands, rebuilds
- Complete Automation offering for mainly pulp and paper customers
- Valmet full scope service for pulp and paper customers

We have strong position at high end technologies

Services



- Service net sales has increased roughly 90% in the past five years
- 65% of orders received is from 10 key corporations
- Agreement based business has started to develop in the past two years

Automation



- Totally 500 installed automation systems (Quality Measurement, Process Control, Web Inspection, Contioning Monitoring) including 20 competitor replacements only in this year
- More than 6000 pulp and paper analyzers and consistency measurements

Pulp and Energy



- 18 complete Valmet pulp lines are running at 13 customers
- We are #1 counted by delivered capacity of pulp lines and #2 by number of deliveries in wood pulp lines

Paper

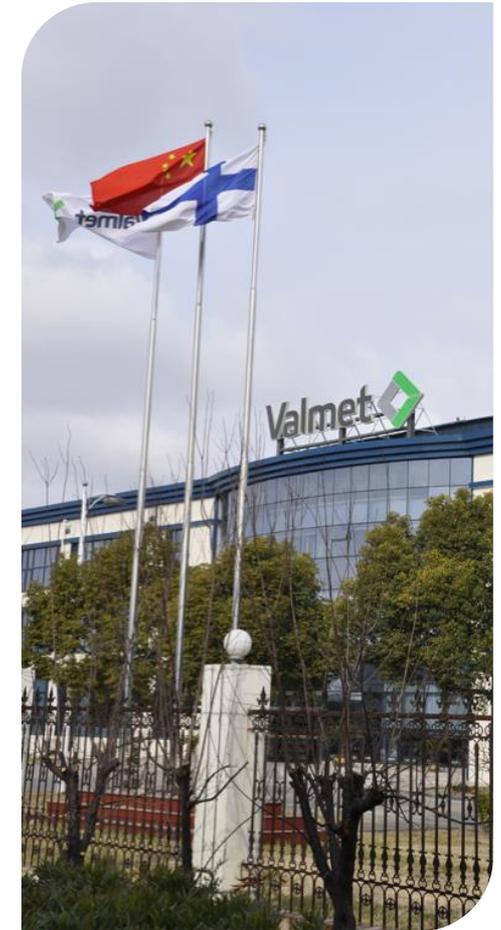


- More than 85 running Valmet paper and board machines and 17 tissue machines at 49 customers
- We are clearly #1 in paper and board machines and #2-3 in tissue machines

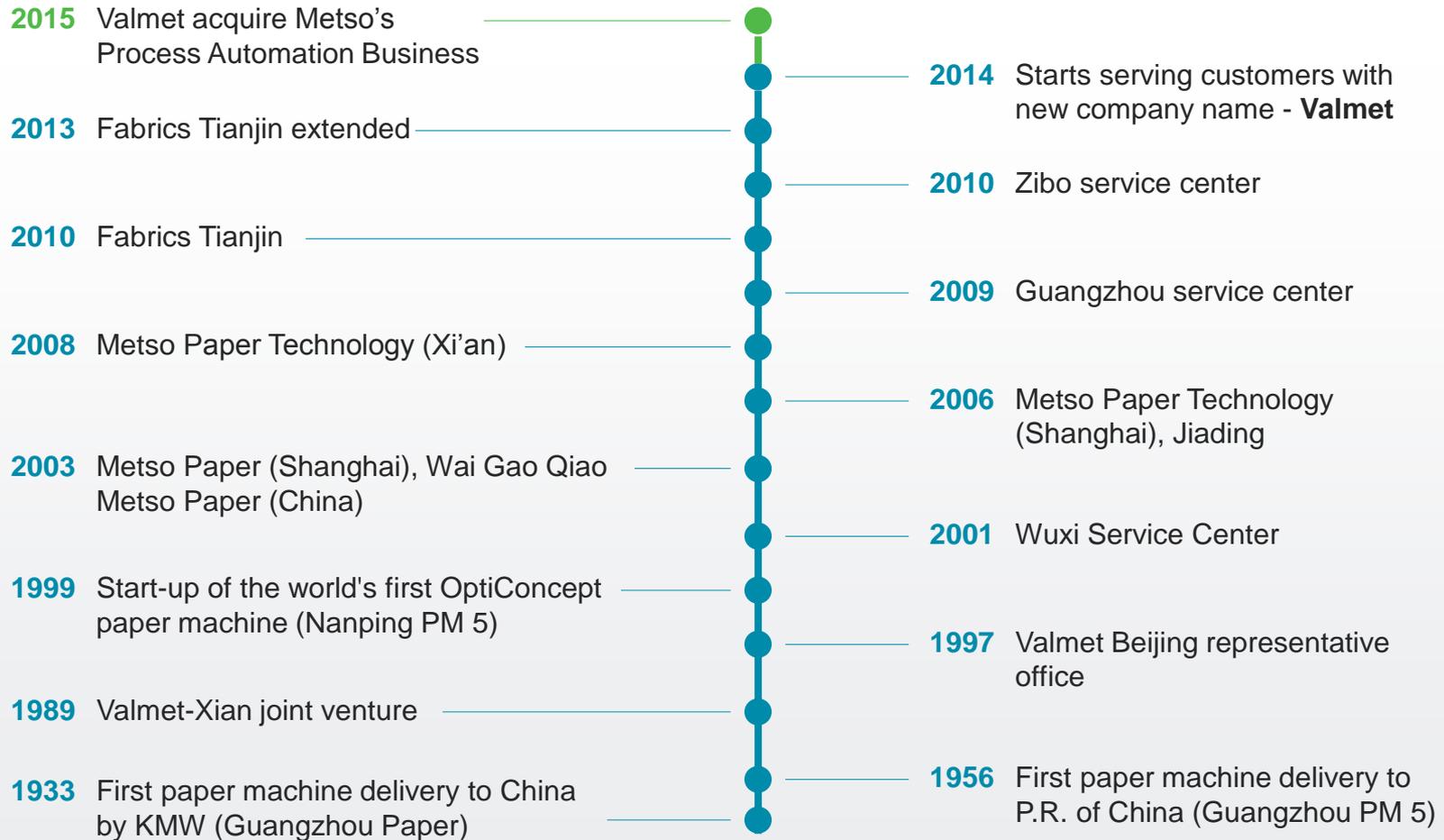
Valmet's operations in China

Serving the pulp, paper and energy industries

- A technology and services company with a unique customer offering – also including full automation offering for pulp, paper, energy and other selected process industries.
- About 2,000 employees serving customers through a local network of production, sales and service units
- 6 production units, 3 service centers and several branch offices with the support of Valmet's global network
- Valmet's first deliveries to China were in the 1930's (by Valmet's predecessor)
- The first joint venture (Valmet Xian) was established in 1989



Valmet's milestones in China



Local presence in China



- Factory**
- Shanghai (3)
 - Xi'an
 - Tianjin (2)

- Service center**
- Wuxi
 - Guangzhou
 - Zibo

- Office**
- Beijing
 - Ji'nan
 - Chengdu
 - Guangzhou
 - Taiwan

Strong regional customer base across China

Serving pulp, paper and energy customers



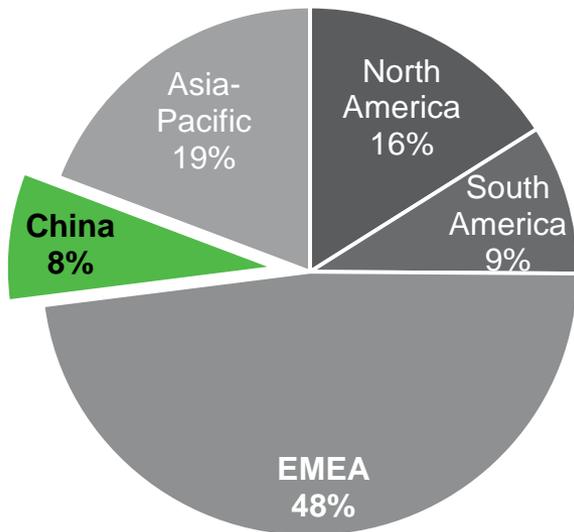
Valmet is a registered trademark of Valmet Corporation. Other trademarks appearing here are trademarks of their respective owners.

The share of China in Valmet

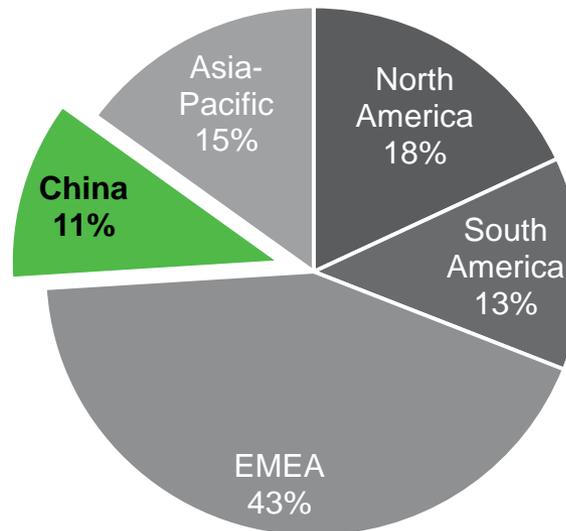
Financial figures in 2014

- China is still an important market for new board and tissue machines
- However, China's relative weight in Valmet's business is balanced

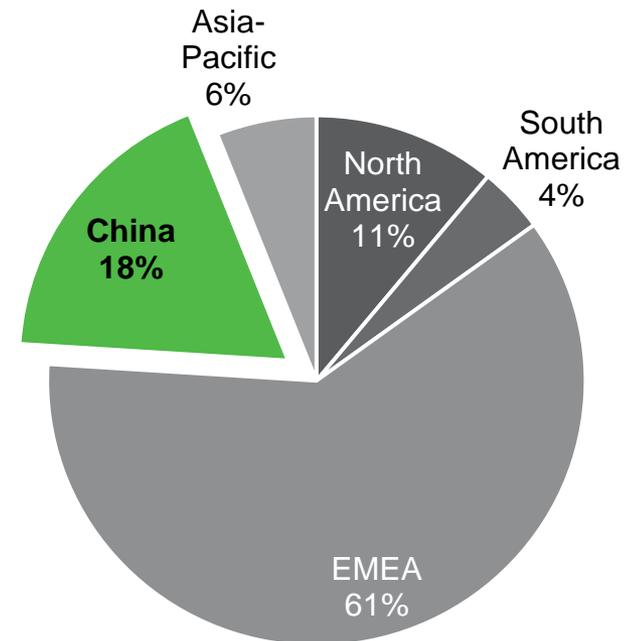
Orders received



Net sales



Personnel



Automation business line is excluded



Market position, drivers and market review

Market drivers

➤ Services

- Growth supported by significant amount of new capacity being installed during the last 15 years and the installed base is aging. New installations creating new growth opportunities.

➤ Automation

- Increasing demand for saving costs of raw materials, energy and labor drives need for automation
- Higher quality requirements drive the need for automation
- Aging automation systems installed during last 15 years drive upgrade and replacement business

➤ Pulp

- Increasing standard of living in Asia driving demand for paper, board and tissue based products, expected to increase the demand for fiber
- Demand for paper, board and tissue is growing fastest in Asia, especially China and India, which do not have sufficient domestic fiber resources

➤ Paper

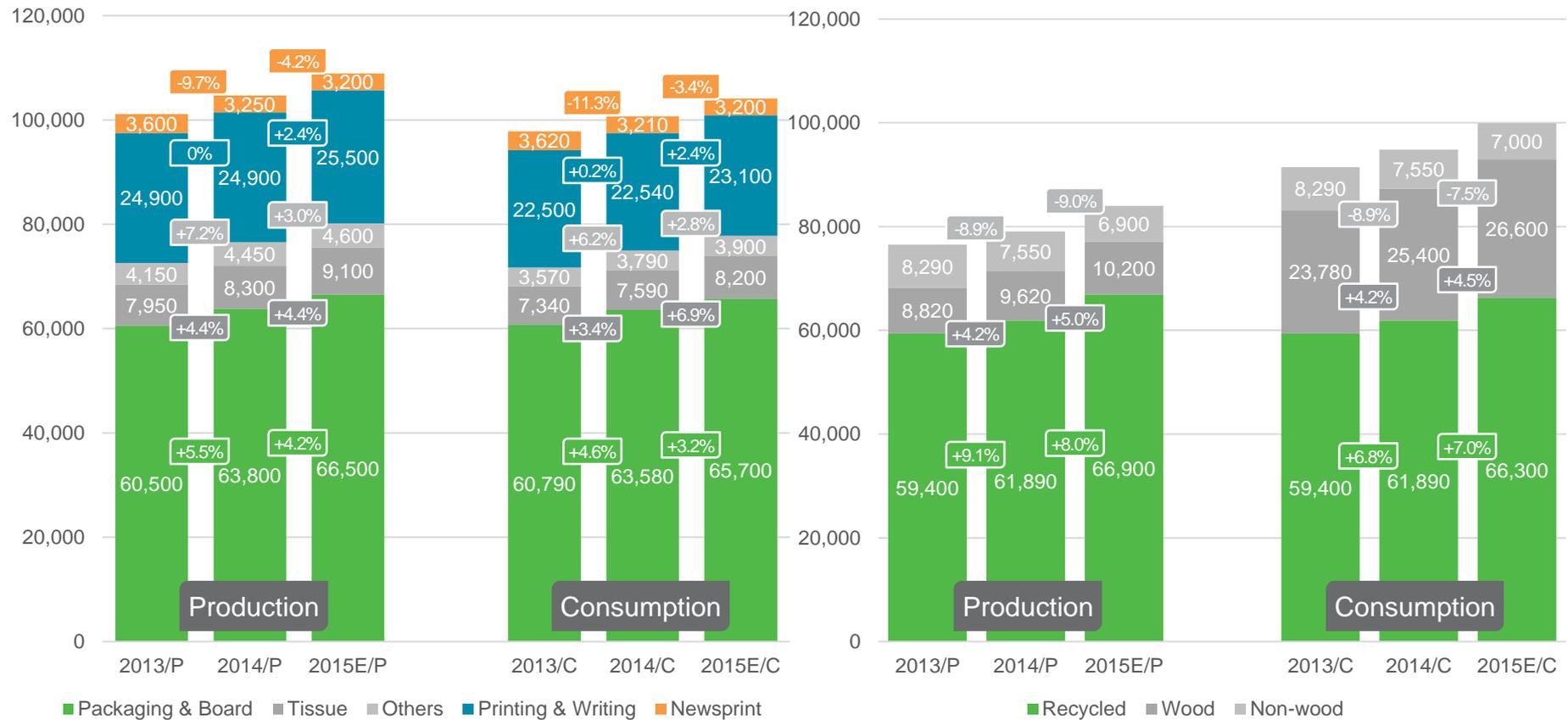
- Developing markets, e.g. China, expected to drive containerboard demand
- Higher product penetration together with improved product quality drive tissue consumption e.g. in China
- Trend for lighter basis weights in packaging

Annual review 2013 vs. 2014 vs E2015

Production and consumption in paper and pulp industry

Paper Review

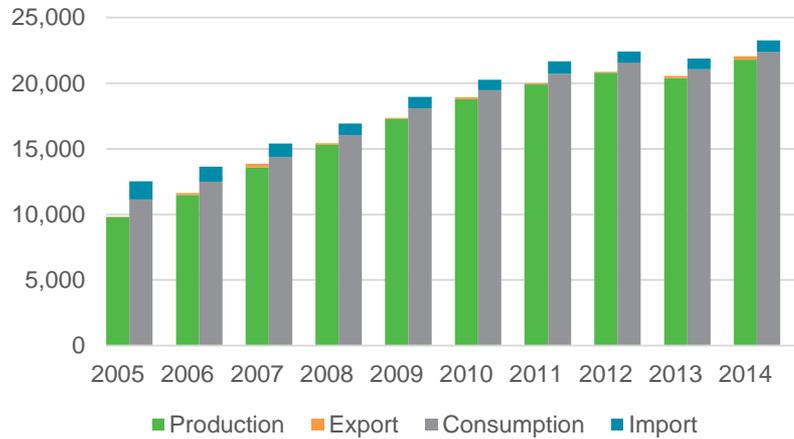
Pulp Review



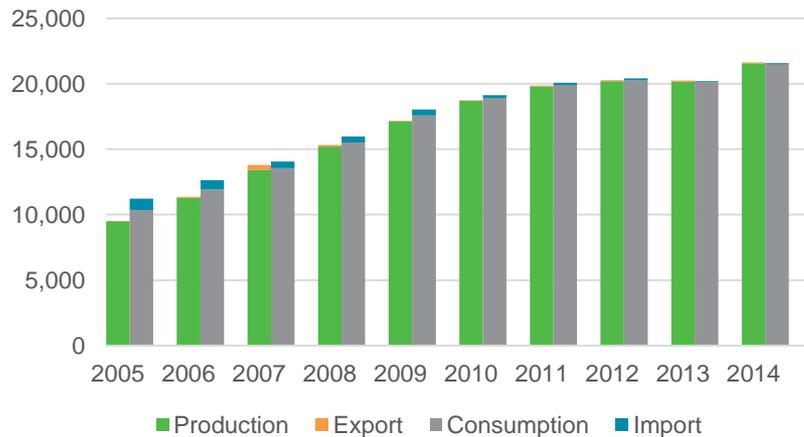
Production/Consumption: Containerboard

Market outlook by RISI

Linerboard

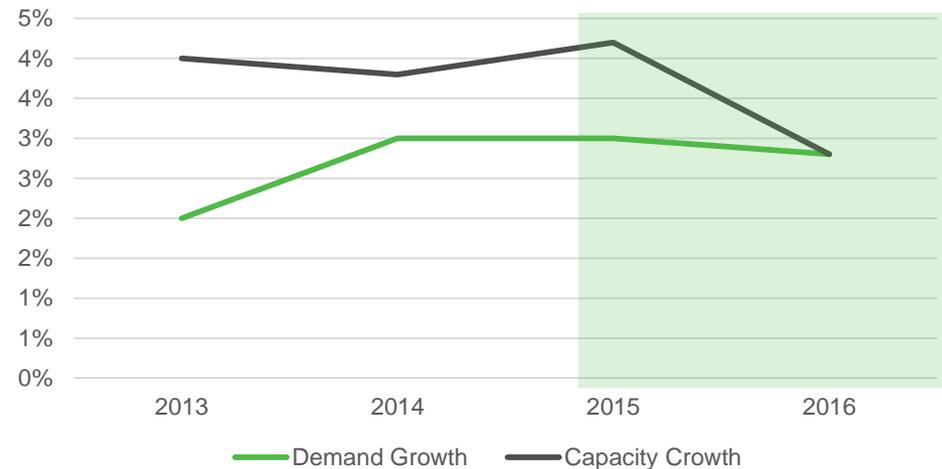


Fluting



Healthy balance with supply and demand. The growth is linked with economic activity. On-line shopping supports recyclable packaging growth.

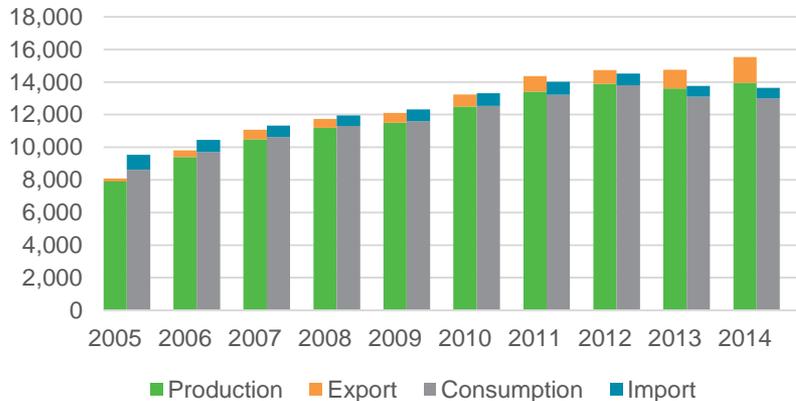
Containerboard Demand/Capacity



Production/Consumption: Cartonboard

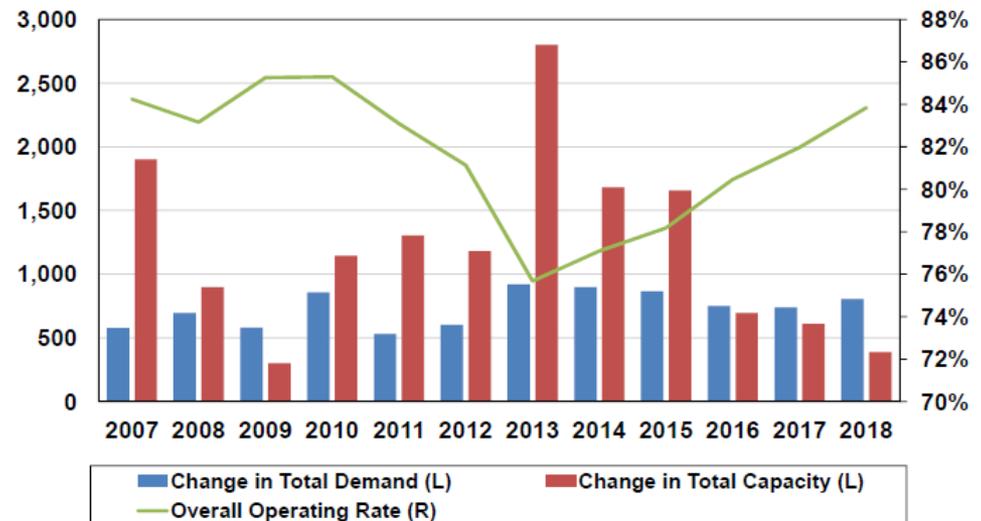
Market outlook by RISI

Cartonboard



Annual Change in Chinese Board Demand/Capacity, 2007–2018 (RISI)

- Recycled boxboard demand will continue to drag down overall growth, and a larger demand and supply gap has lead to tougher market competition for both import and export grades and more closures

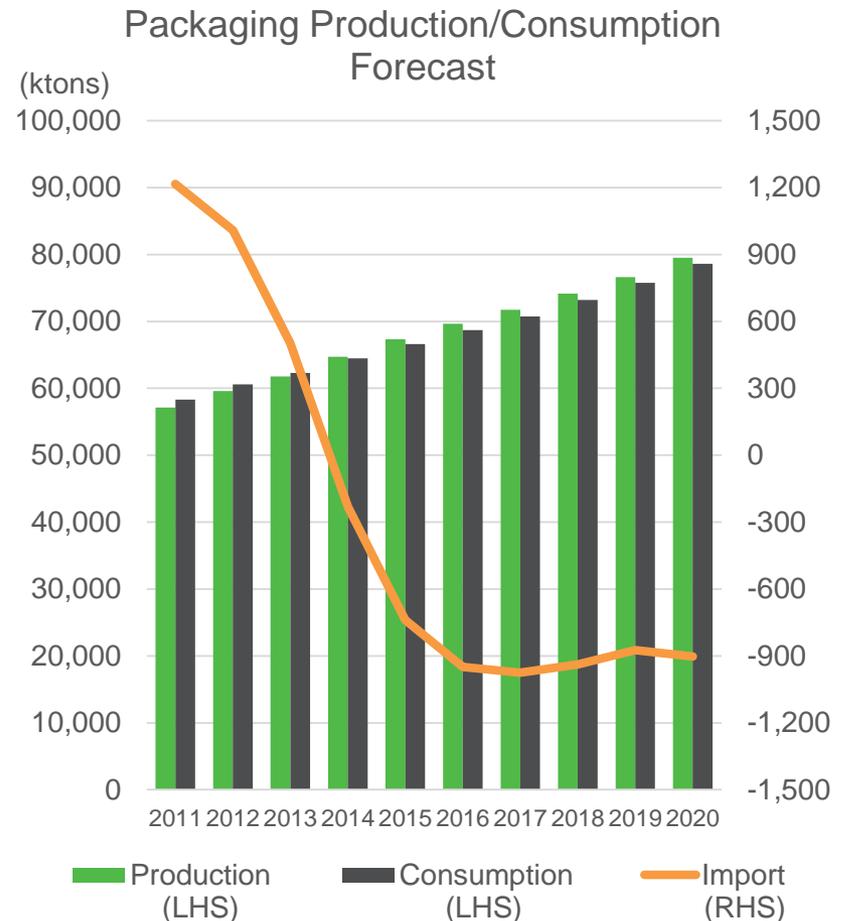


- China boxboard capacity has greatly outpaced demand, causing further imbalance in domestic market
- More than half of the 15 end-use sectors analyzed in this study indicate slower growth through the forecast period
- Domestic producers will compete to **increase exports**

Packaging grade summary & outlook

Some positive news

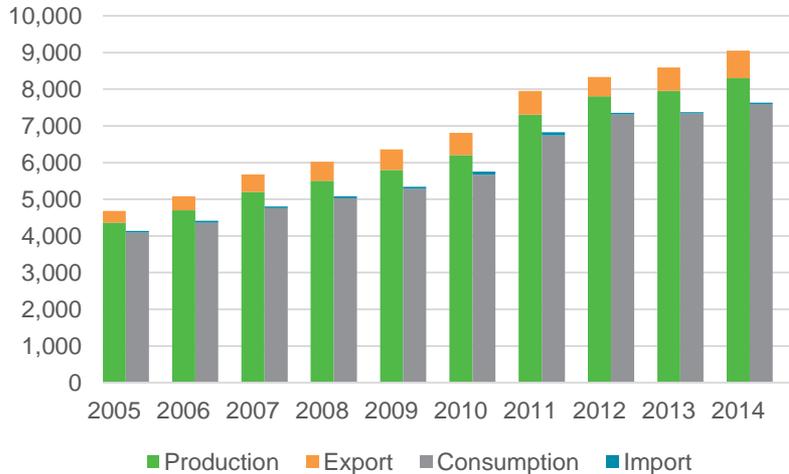
- Rebate of 50% on the value-added tax (VAT) on recovered fiber (RCF) based paper and board products from July.
- Recent investments often focus on lighter basis weights leading to faster board machines where Valmet is the strongest.



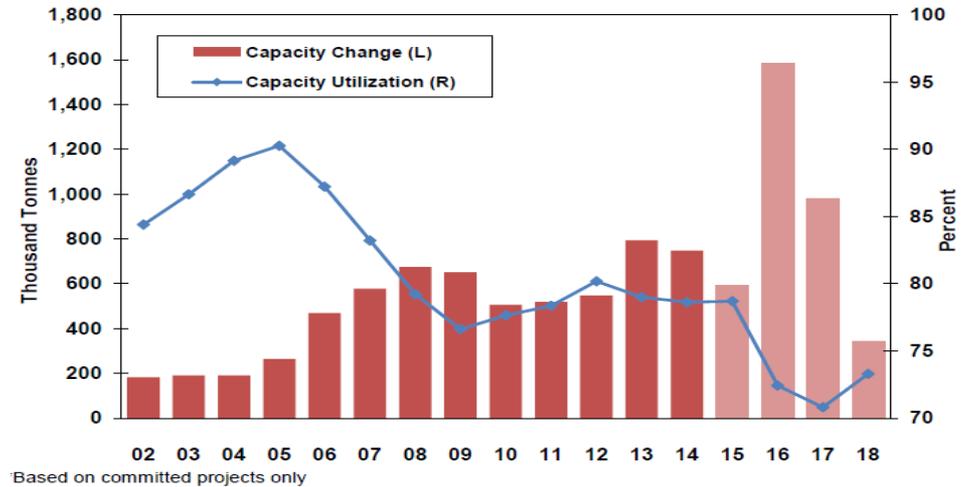
Production/Consumption: Tissue

Market outlook by RISI

Tissue



Net Capacity Change* and Capacity Utilization in the Chinese Tissue Industry, 2002-2018

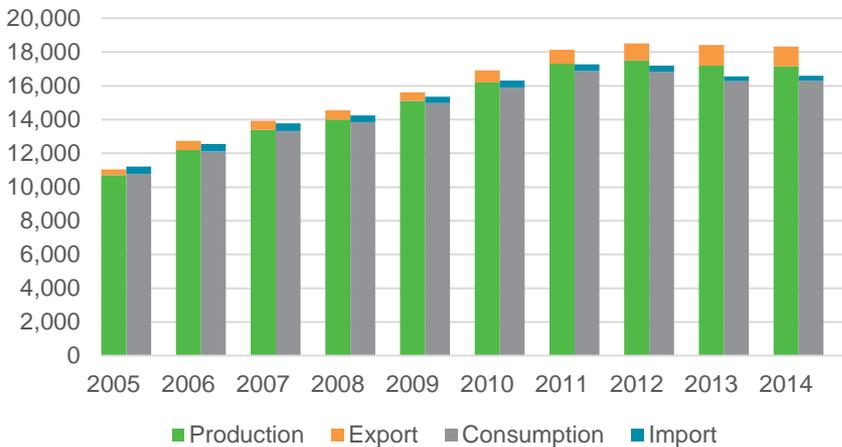


- China will continue to be the main driving force of global tissue industry expansion, followed by Latin America and the Middle East. Project delays will be common.
- The Chinese tissue industry seems to be in a structural change: small mills will disappear.
 - E.g. Guangxi Huamei (260,000 tons), and closure of smaller tissue mills in Dongguan City (total 200,000 tonnes).
- Tissue export will increase
- About 1.4 million tons gap between total installed capacity and effective capacity

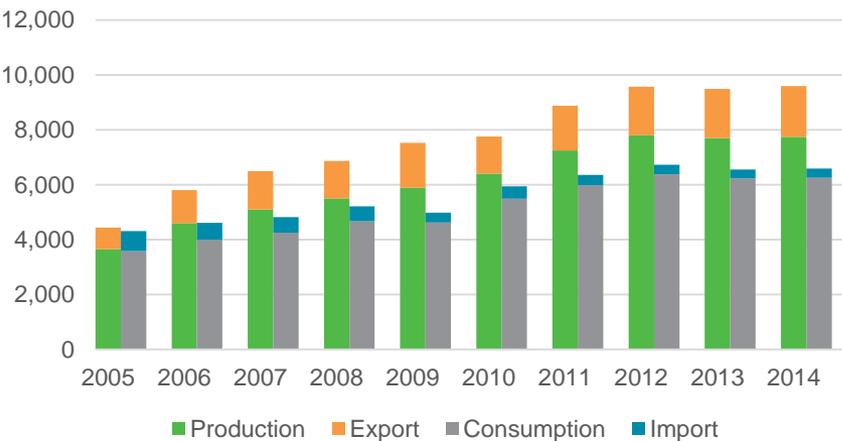
Production/Consumption: Graphic paper & newsprint

Market outlook by RISI

UWF(Uncoated Woodfree)



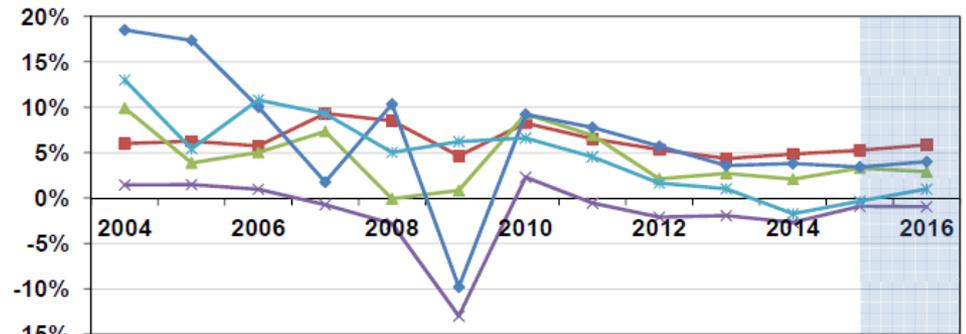
CWF(Coated Woodfree)



- **Newsprint: Permanent Decline**

- **Printing & writing paper:**

- Most Asian markets are growing
- The more mature markets will see continued decline.



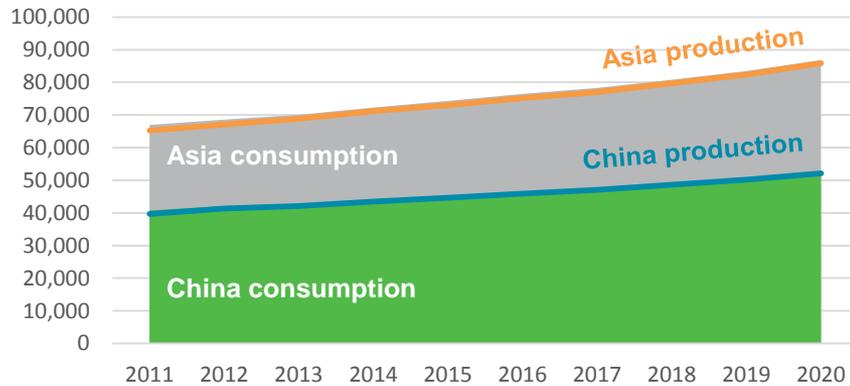
Declining

- India
- Other
- Indonesia, Malaysia, Philippines, Pakistan, Thailand
- Japan, South Korea, Hong Kong, Singapore
- China

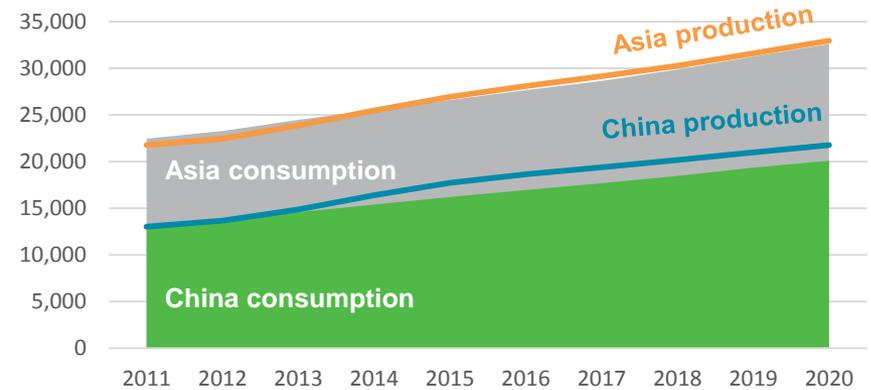
Production & Consumption outlook in China

Compared with Asia totals by different grades

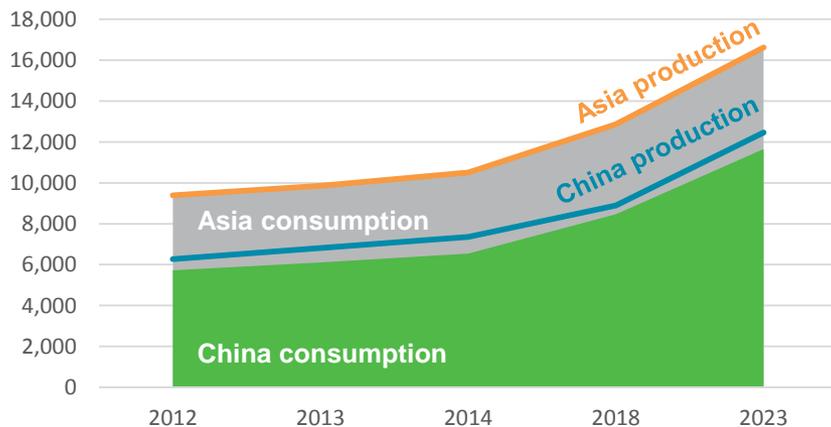
Containerboard



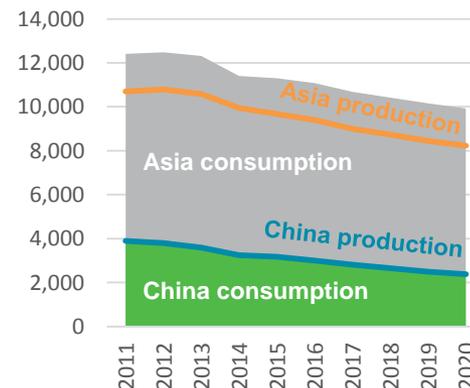
Cartonboard



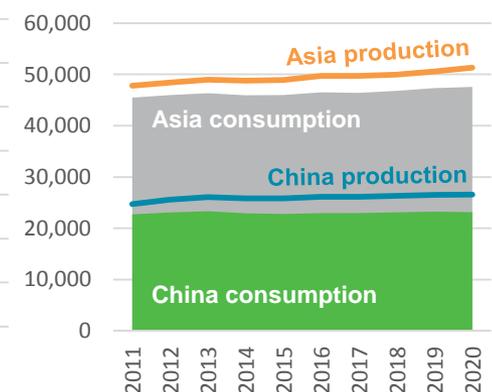
Tissue



Newsprint

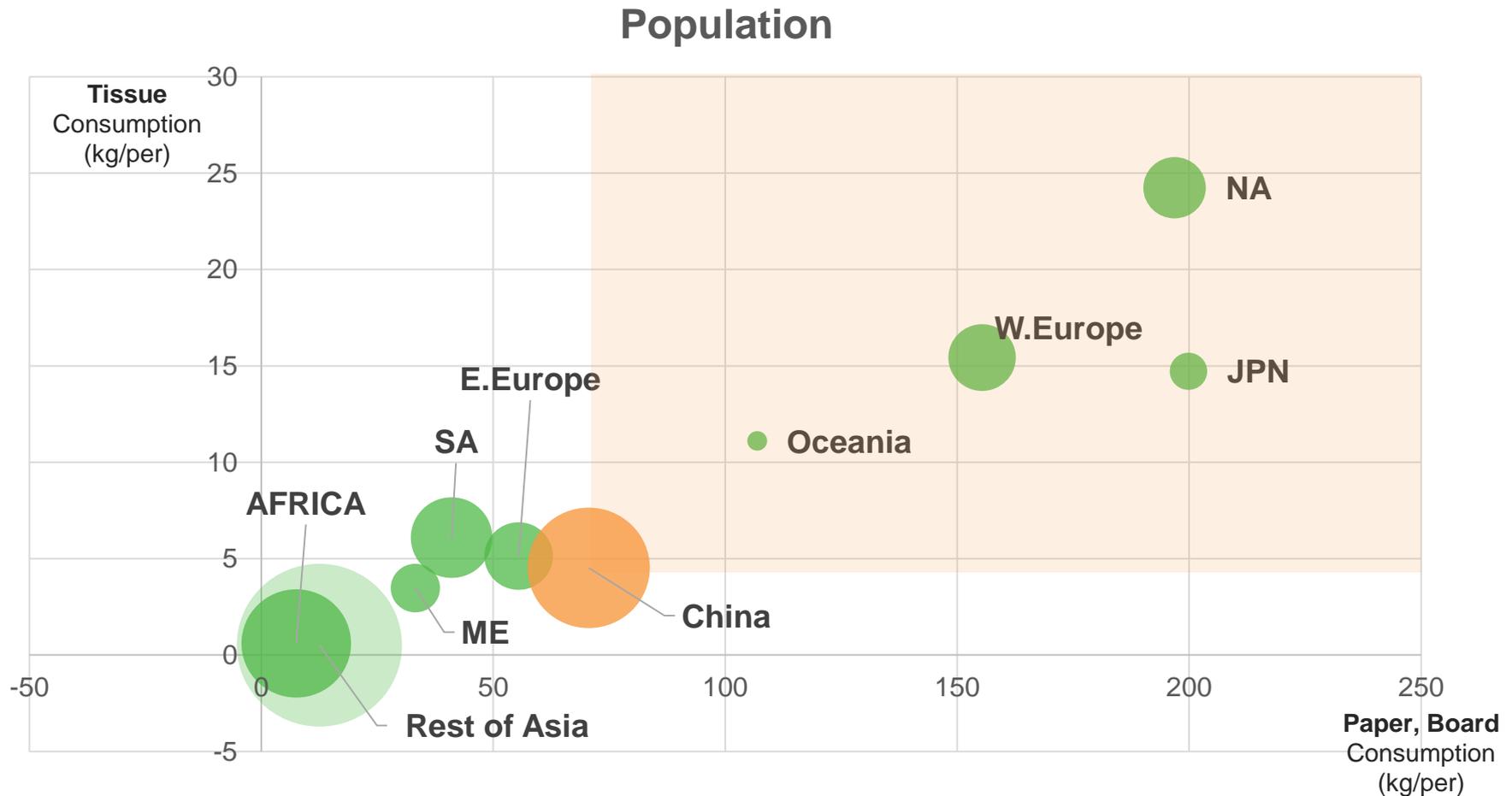


Printing & writing



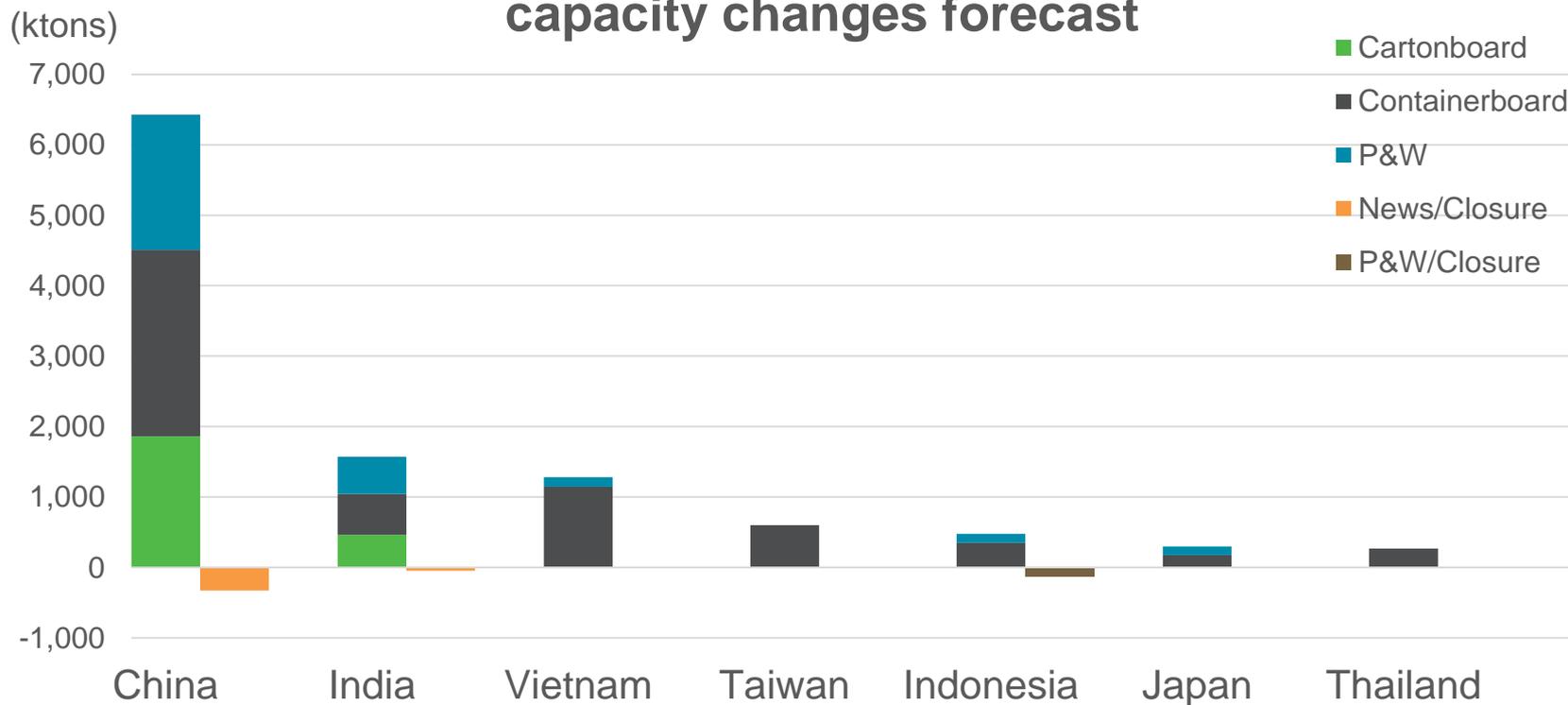
Consumption per capita

Chinese consumption **far away** from the level at the Western world



China will remain important market for new machines

2015–2017 Paper & board capacity changes forecast



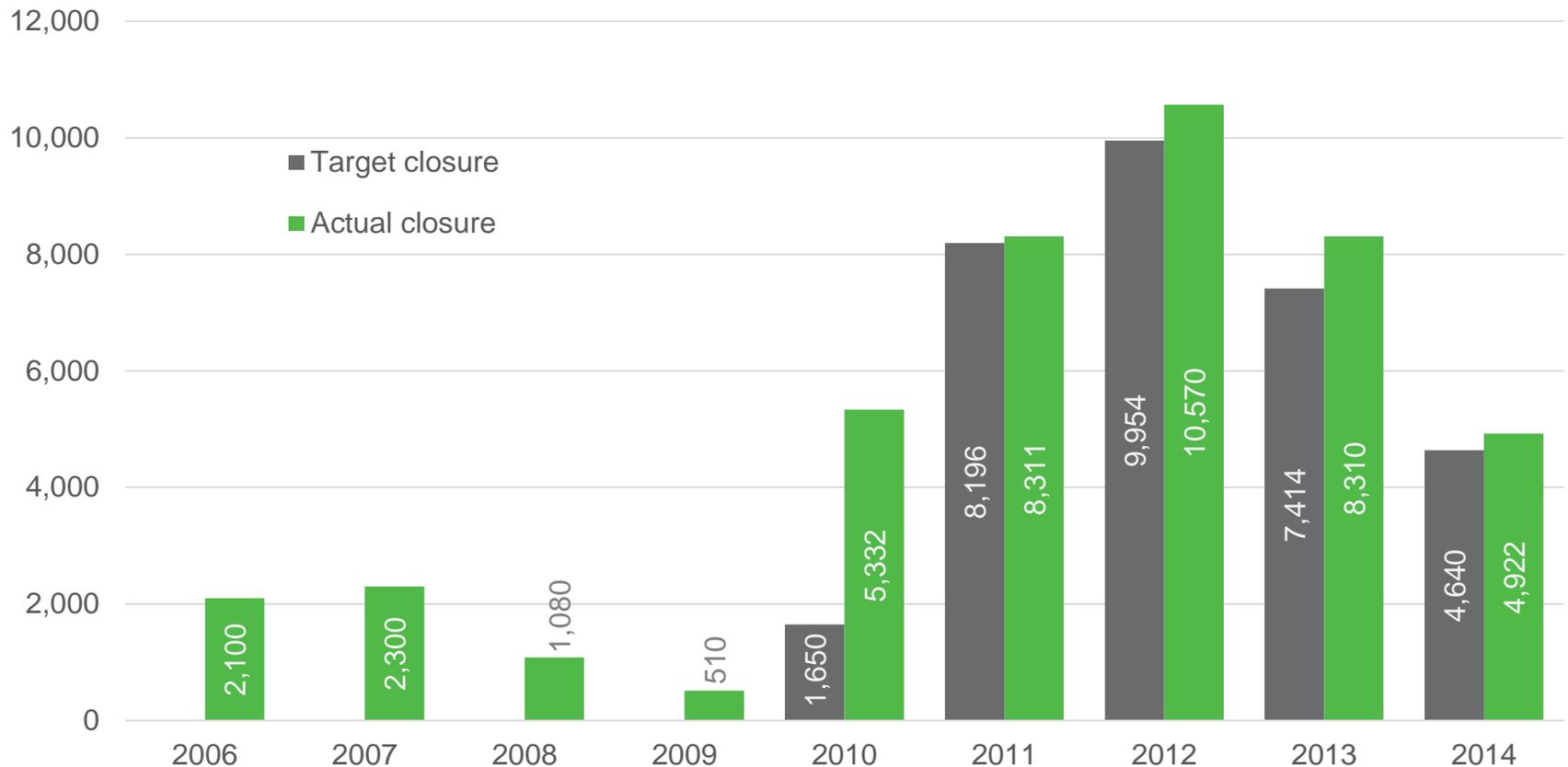
Environmental issues

Government fight against water pollution

- Dongguan city has shut down 57 paper mills by June
 - According to the plan, some 104 industrial plants, including 57 paper mills, was shut down permanently. The campaign was targeting board mills with a capacity below 200,000 tons/a and tissue plants with a capacity below 50,000 tons/a.
 - This year, the pulp and paper equipment closure targets include
 - Wood pulp lines with a capacity < 51,000 tons/a
 - Non-wood pulp lines < 34,000 tons/a
 - Recycled fiber-based pulp lines < 10,000 tons/a
 - Newsprint machines with a capacity < 50,000 tons/a
 - Printing and writing paper units < 1.76 m wide and with a speed < 120 m/min
 - Cartonboard and recycled containerboard machines < 2 m wide and slower than 80 m/min.
- These closures are good for balancing the market and environment. The players in the market can be get more integrated.
- Bigger containerboard customers benefited from the price increase in June 2015.

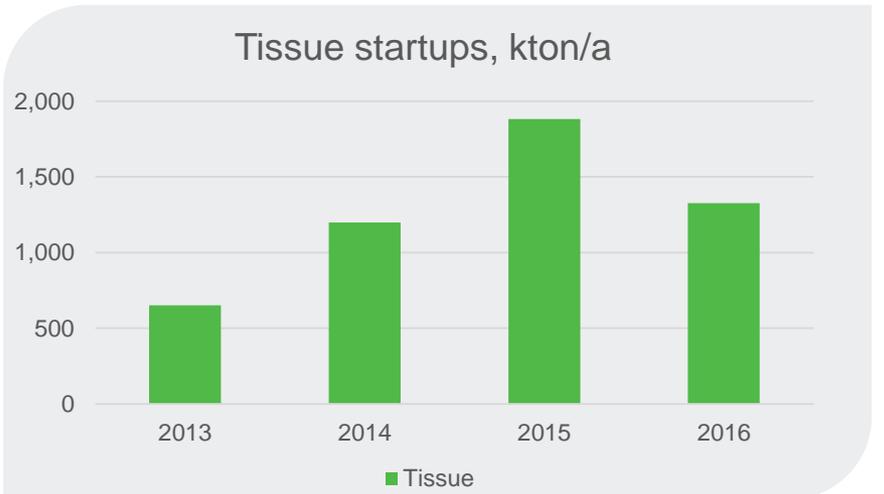
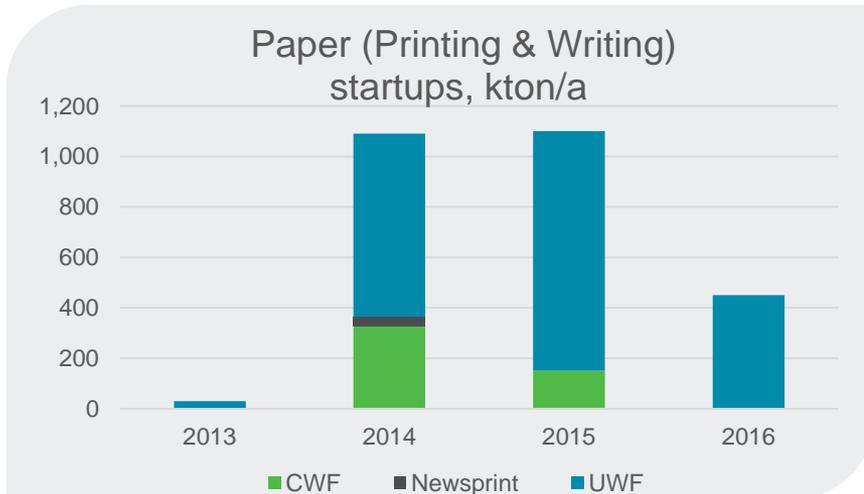
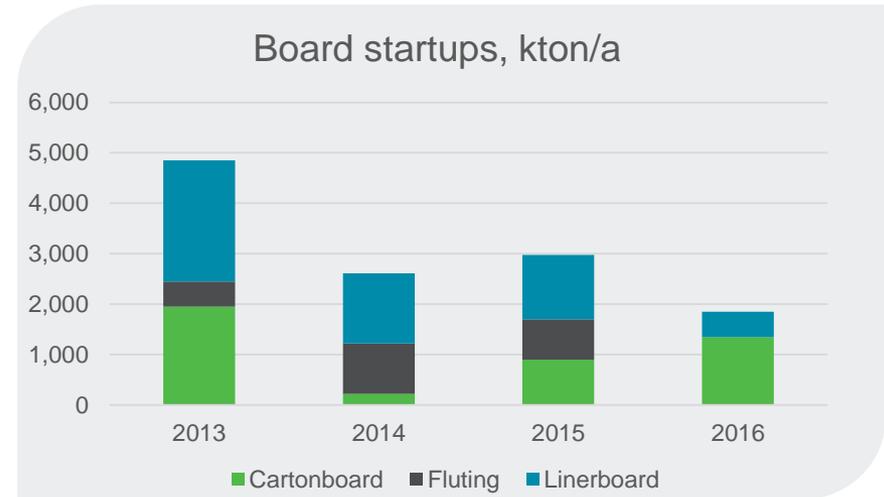
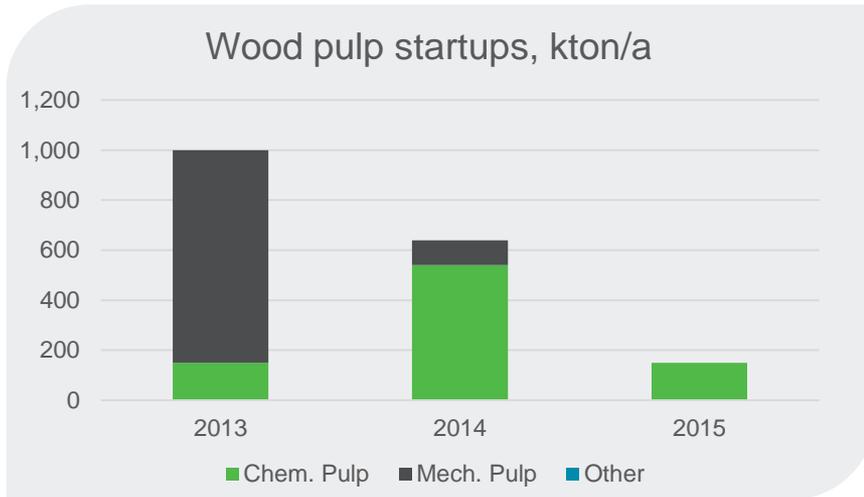
Old facility closure in pulp and paper industry

Closures on high level in the past 5 years



Total new installations by startup year

Overcapacity in coated boards, tissue and coated fine papers



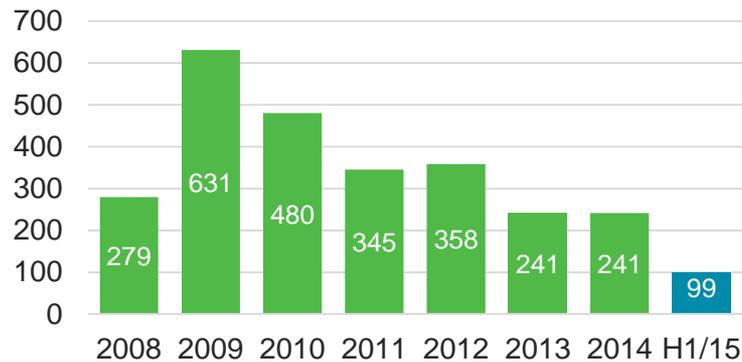
Development of paper industry in China

- Long-term trends
 - Production and consumption will grow, but growth rate will be slower
 - Competition will be tougher, winners and losers expected - consolidation
 - Industry integration and elimination of out of date capacity will continue
 - Paper and board export can grow, but fiber including virgin fiber and recycled fiber import will continue
 - Policy and management on energy saving and pollution control will be strengthened
- 2015 market perspective
 - Still restructuring and rebalancing, but recovering
 - Container board investments continue (mainly mid-size machines)
 - Cartonboards suffering heavily on overcapacity
 - Tissue investments estimated to slowly recover in next years, but winners and losers
 - Some grade conversion rebuilds and even new paper machines planned for paper grades. US antidumping actions may impact on balance.



Development of net sales and orders received

Orders received



Net sales



- Orders received and net sales have been levelling in the past 2-3 years
 - Record order intake and net sales years just after financial crisis
 - Strong stimulus-driven investments led to overcapacity in most paper grades (like in many industries in China)
 - Printing and writing paper consumption has been impacted by digital media
 - Growth in packaging board and tissue consumption, but linked with overall economy development
 - China’s volumes are in “new normal” levels having higher ratio of Services.
 - We have adapted to this market and expect this to continue with normal annual cyclicality

Changes in the market environment

Market environment

- Growth opportunities in services, market growth mainly in services
- Fiber market will remain about the same level as today
- Bioenergy market is expected to grow fast, but not in focus now.
- Paper market flat, investment mainly on mid-size board grades with occasional large machines

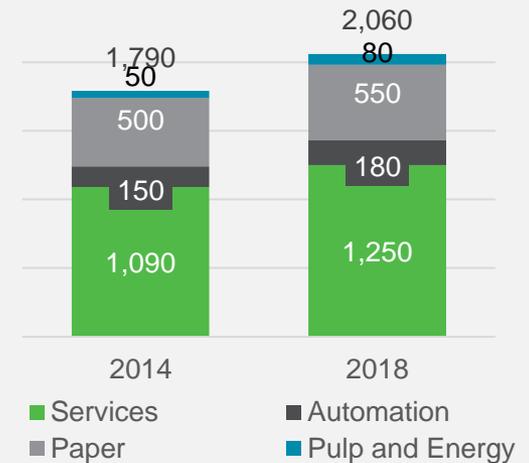
Customers

- Profitability lower by slower market growth and overcapacity
- OPEX and cash flow is the main concern currently
- More cost and investments on environmental issues
- Bio-based power generators are struggling with many uncertain drivers

Effects to us

- In new investment business focus more on mid-size segment, key components and rebuilds
 - => Competition in mid-size segment with smaller international and local competitors
 - => Further development of local capability, utilize capacity for global deliveries
- Services business having more local and international competitors
 - => Development of combined offering like agreements and process competence
 - => Development of local presence close to customer

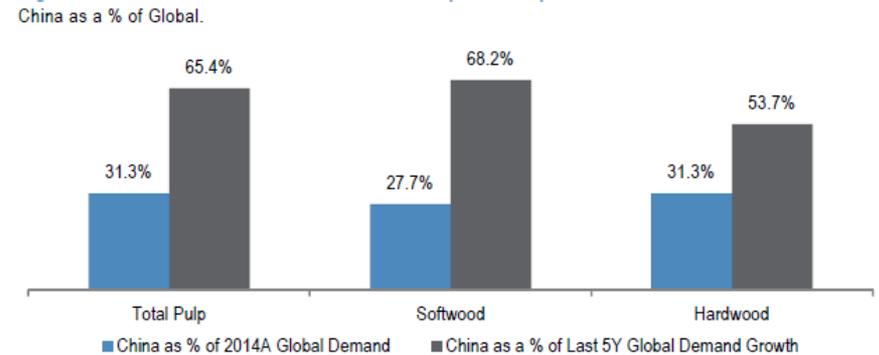
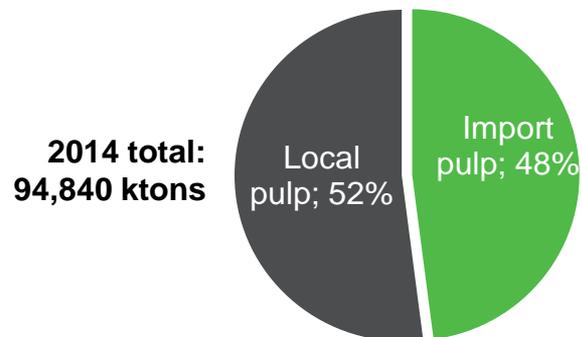
Target market size
(EUR million)



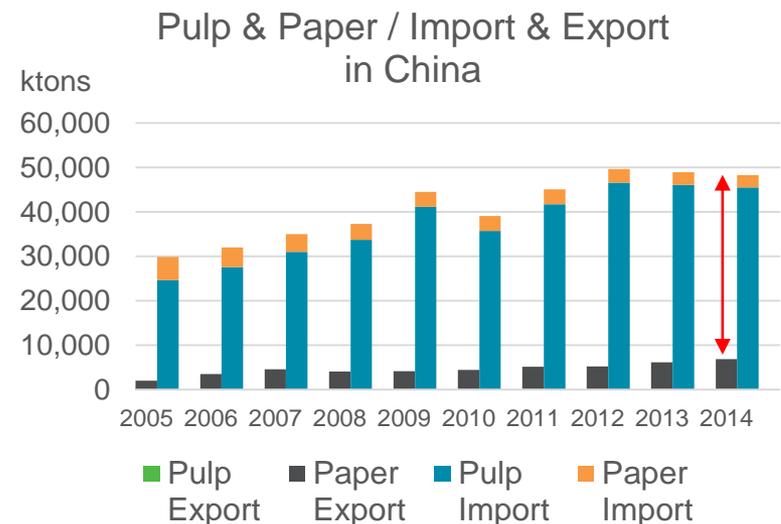
Exchange rate affect pulp and paper industry

China plays an important role in global paper industry

- China as a high portion of global demand and global growth
- Cost structure is critical to the paper and board mills in current market
- China is largely dependent on fiber imports (almost 48% in total, 2014)
- Currency variation will impact on imported fiber cost and to some degree on paper exports



Source: RISI and J.P. Morgan

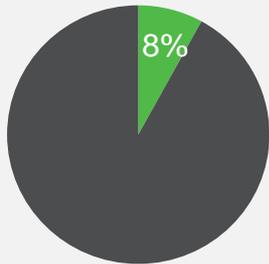




Main competitors

Valmet's market position in China

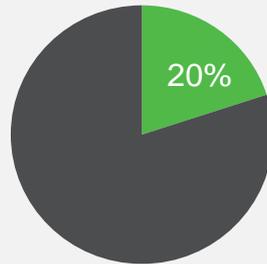
Services



Valmet's market share of target market

The service market is fragmented, with Valmet, Voith and Andritz having about the same market share.

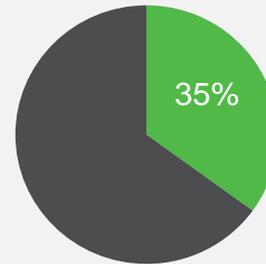
Automation



Valmet's market share of target market

Valmet #1-3 in different Automation applications in China. ABB and Honeywell the main competitors.

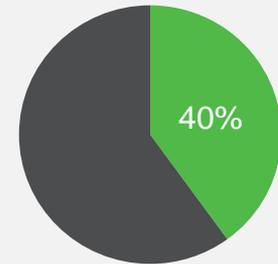
Pulp



Valmet's market share of target market

Valmet #1 in Pulp in China. Andritz the main competitor.

Paper



Valmet's market share of target market

Valmet #1 in Board and Paper. Tissue more fragmented with Valmet, Andritz and Toscotec having about the same market share.

Competitors

Number of competitors in all business segments

- Global 1st tier competitors expand local presence
- Global 2nd tier competitors finding cooperation with local suppliers for new installations and actively competing with key components
- Local competitors are seeking technology development and expanding to Asian market

Services	Automation	Pulp and Energy	Paper
<ul style="list-style-type: none">• Voith Paper• Andritz Pulp & Paper• Number of suppliers strong in selected products / technology, like AFT for baskets, BTG for doctor etc.• Numbers of maintenance suppliers, like PMT, UP-Tech, Refine etc.• Numbers of paper machine clothing suppliers like Albany, Xerium	<ul style="list-style-type: none">• ABB• Honeywell• Siemens• Voith• Procemex• Isra• BTG• PulpEye• Hollysys• Supcon• Hangzhou Huazhang• Sichuan Tongcheng	<p>Pulp mill competitor</p> <ul style="list-style-type: none">• Andritz Pulp & Paper• GL&V• Wenrui Machinery• Fujian Sanming Paper Machinery• Other local suppliers• Huaji Group <p>Energy competitor</p> <ul style="list-style-type: none">• Wuhan Boiler• Western Power• Hangzhou boiler• Wuxi boiler• Jinan boiler• Chempolis• Dong Energy	<p>Paper & board</p> <ul style="list-style-type: none">• Voith Paper• Yueli Machinery• China Paper Machinery Corporation (CPMC)• Bellmer• Number of local suppliers• Kadant BC <p>Tissue</p> <ul style="list-style-type: none">• Voith Paper• Andritz Pulp & Paper• A Celli• Toscotec• Kawano Zoki <p>Key components</p> <ul style="list-style-type: none">• PMP, PMT, ABK, GapCon, GL&V and others



Strategy and competitive edges

We achieve our strategic targets through the implementation of must-wins

The facts

- Valmet has established strong position in pulp and paper industry
- Market
 - Equipment business has levelled to current volumes with mid-size board grades, rebuilds and tissue
 - Service market is expected to grow but impacted by customer profitability
- Our customers are looking for opportunities in energy savings, efficiency and lighter basis weights
- Competitors
 - Global competitors have strengthened their local presence
 - Local suppliers are trying to grow with mid-size capability and increase competence
 - Cost competitiveness is critical

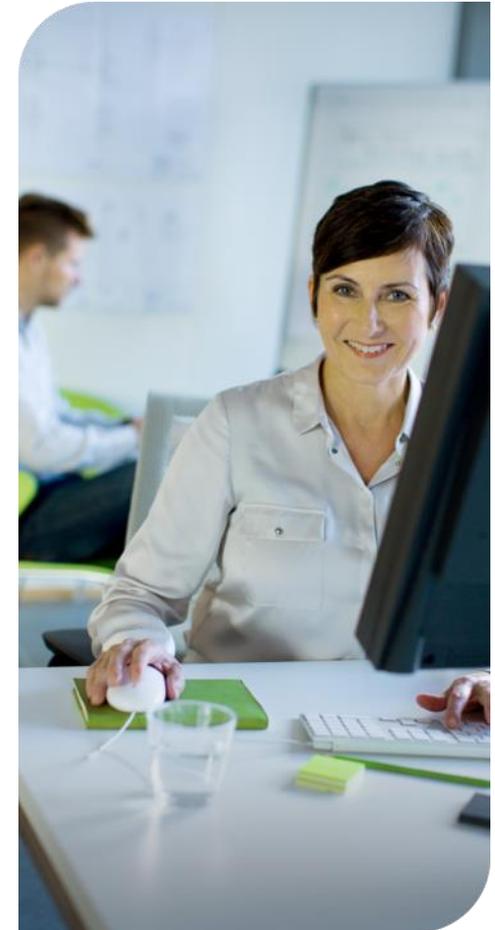
Our way Forward

- Maintain our leading market position in capital business and service business growth
- Strengthening key account and reference management
- Market penetration of modularized technology with cost competitiveness and leading technologies
- Improving cost competitiveness through productivity development and capacity cost optimization
- Continuous development of process know-how, bundling service business
- Competence development to support business targets
- Increasing Automation market share with new technology and products

Valmet's competitive edges

Why has Valmet premium pricing?

- Value of our technology and engineering
- Value of our quality of manufacturing
- Value of our smooth start-up and lower OPEX
- Value of our services



Capitalizing the service potential

Installed base



Large installed base providing good opportunity to increase services.

Key Account Management



Strengthen Key Account Management to improve contribution from key accounts.

Agreement-based business



Continue to develop agreement-based business.

Cost competitiveness



Cost competitiveness to improve customer OPEX and to beat low-cost supplier.

Spearhead products



Introduce spearhead products to market.

How to improve profitability in China?

Competitive cost of raw materials and other procurement

- China is still competitive sourcing area
- Increase the share of subcontracting and reduce own capacity cost
- Localize component sourcing further

Manufacturing efficiency and WTO

- Further optimize capacity cost
- Basic productivity development
- Modular manufacturing
- Implement Lean
- Increase the share of local engineering and project operations
- Continue to reduce quality cost
- Low investment needs – less cost pressure from depreciation costs in coming years.



Summary

Summary

- The installed base is still young and the service culture yet underdeveloped, which offers good possibilities to grow in services
- Board and tissue consumption is growing
 - Supported by megatrends
 - Overcapacity still impacting market in short-term
- Valmet has adapted to current market situation and we can further improve competitiveness with own actions.
- Our strong focus on Key Account Management, performance and technology development will keep us ahead of competition.





Appendix: References in China

Our success in moving forward in China

New orders in 2015

- About EUR 110 million order from Huanggang Chenming
 - Able to produce softwood kraft pulp and dissolving pulp depending on the market needs. Estimated start-up in 2017.
- Lee & Man PM21
 - Container board, Testliner, 1,100m/min, 1,060 ton/d
Repeat order of OptiConcept M by Lee & Man
- Yuen Foong Yu, Taiwan
 - Containerboard, 300,000 tonnes, design speed 1,200 m/m, OptiConcept M
- Jingxing PM12 Rebuild, Kraftliner boxboard
- Environmental protection projects
 - Air pollution control equipment Sun Paper, Zhan Jiang Chen Ming and HaiNan Jinhai mill
- Automation: 20 competitor replacements, mainly QCS and Profilers. E.g. Jin Feng Huang Paper, Long Chen Erhlin, Huangchong Yinzhou, Dongguan Shunyu.



Our success in moving forward in China

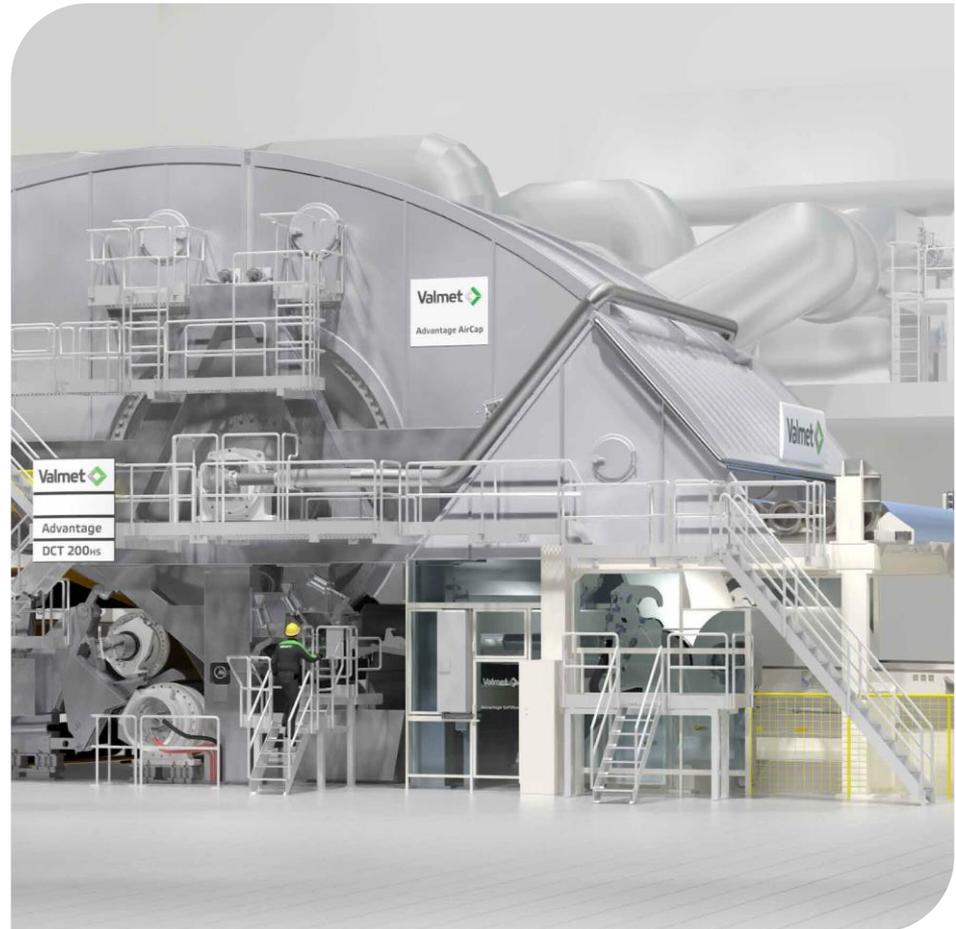
Well recognition from Tissue makers

Lee & Man TM4 ordered in 2014

- Site: Chongqing
- New tissue machine: Advantage DCT 200 HS
- Design speed: 2000 m/min
- Estimate start-up: In 2015

Placed repeat orders in 2015: TM5 & TM6

- Site: Chongqing
- New tissue machine: Advantage DCT 200 HS
- Design speed: 2000 m/min
- Start-up : In 2016



Our success in moving forward in China

Successful new startups in 2015

- Zhanjiang Chenming PM3 relocation
 - Old Jilin Shixian PM10 relocated to Zhanjiang
 - Grades: Offset, LWC, Art Paper
 - Design speed at reel 1600 m/min
- Zhejiang Long Chen Paper PM7
 - Containerboard, 900 m/min. Estimate start-up : Late half of 2015
- Fiberboard project
 - 3 deliberator systems have been started up in Hubei Jixiang, Heze Yalian, Jining Wandu by end of July
 - 2 more deliberator systems in late half of 2015.
- Automation project
 - Package projects
 - Direct sold projects
 - Tralin PM9/16, DCS/QCS
 - Sun Paper PM29, DMM/PQV
 - Taiwan ChingTshui TM9
 - Wuhan Jinfenghuang PM6/7/8, QCS
 - Zhenjiang Dadong PM10, QCS



Our success in moving forward in China

New developments in 2015

Services capacity

- Valmet LiteFit and LiteCompact holders production launched in August, 2015, in WaiGaoQiao, Shanghai. Aiming to serve China and Asia-Pacific market.
- 2000th roll delivered from Guangzhou Service Center on August 8, 2015

Xian improved environmental performance

- In 2014, Xian workshop replaced old coal boilers with a natural gas heating system, the improvement made key contribution to the decreasing of Valmet's CO₂ emissions last year.



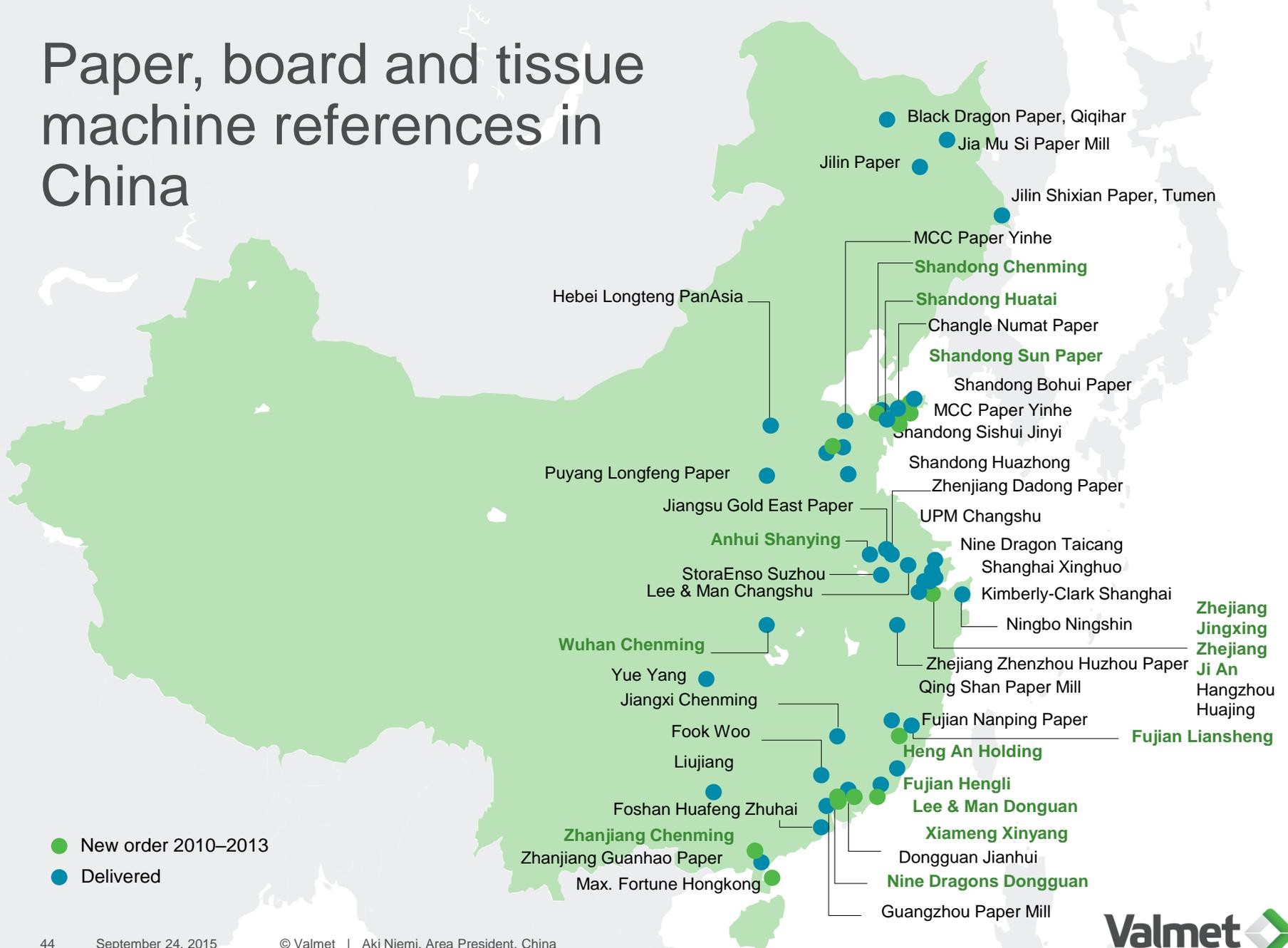
Contributing to the well-being of communities and the education



We continue the programs that are helping to education and build the well-being of communities

- Donate 2 sets of water filters to Kengzheng Primary school at Jiaxian, Yulin, Shaanxi Province in June, 2015.
- Valmet (China) Co., Ltd. awarded “Labor Prize of Shanghai” and “Top 10 of Publicity of Democratic Management in Shanghai” by Shanghai Federation of Trade Unions, for its excellent results in internal communication and for having established a harmonious labor relationship.
- Provide scholarships to top industry universities since 2009.
- Working with the Chinese Red Cross, we supported rebuilding of two schools in Sichuan Province after the 2008 earthquake.

Paper, board and tissue machine references in China



Pulping references in China



Automation references in China



