



FIBRE & RAW MATERIALS

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Prima Trend Tracking Seminar

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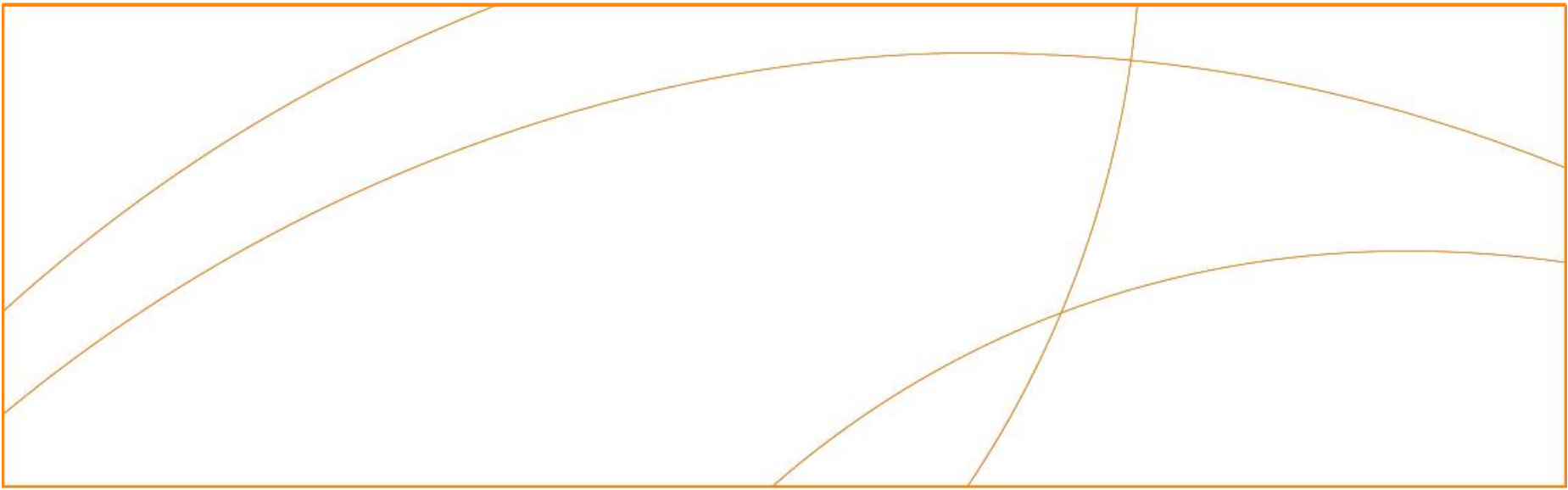
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GOOD NEWS – BAD NEWS

The world of fibre and raw materials is fraught with challenges, bristling with developments, charged with growth, but can very much be rife with confusion.

1. Background and context
2. The growth in fibre demand
3. Developments in BHKP
4. Developments in RCP
5. Conclusions



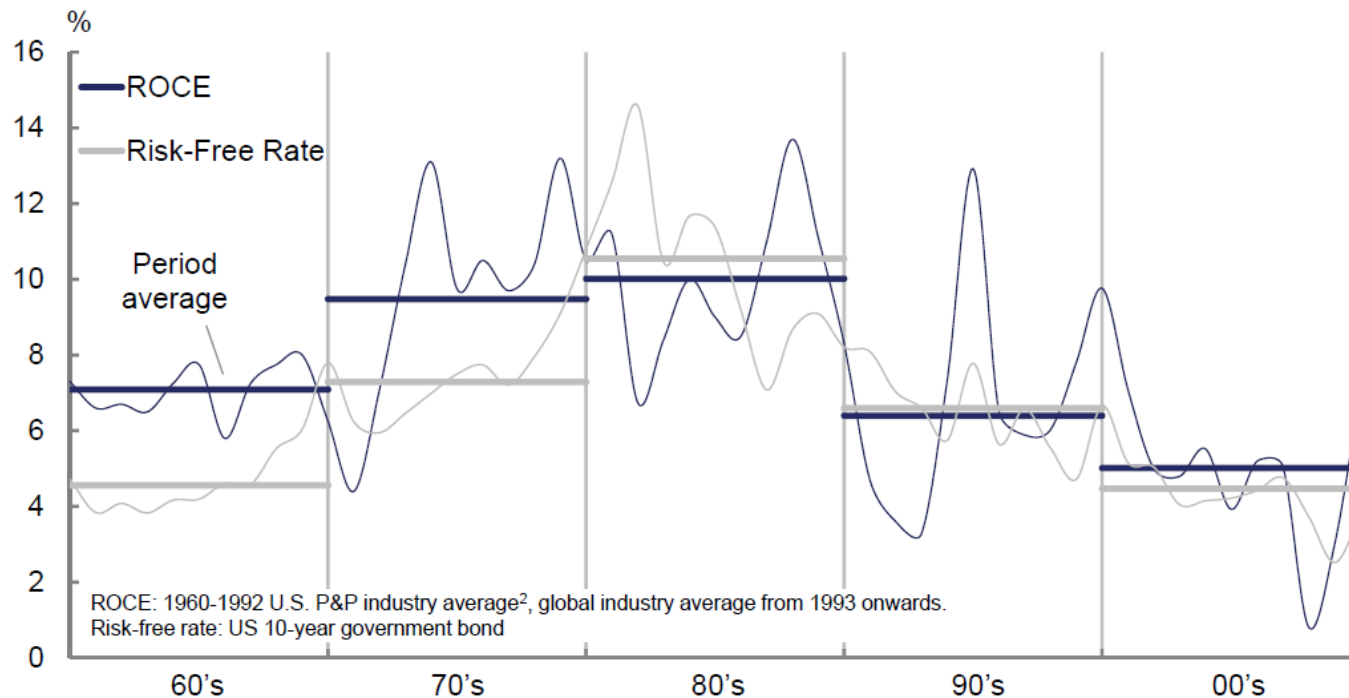


BACKGROUND & CONTEXT

PAPER INDUSTRY PERFORMANCE

It is clear that the current profitability of paper industry in general could be better. It is also clear that there are challenges to turn this around, especially with the graphic sector's market trends. But this does not mean that nothing can be done...

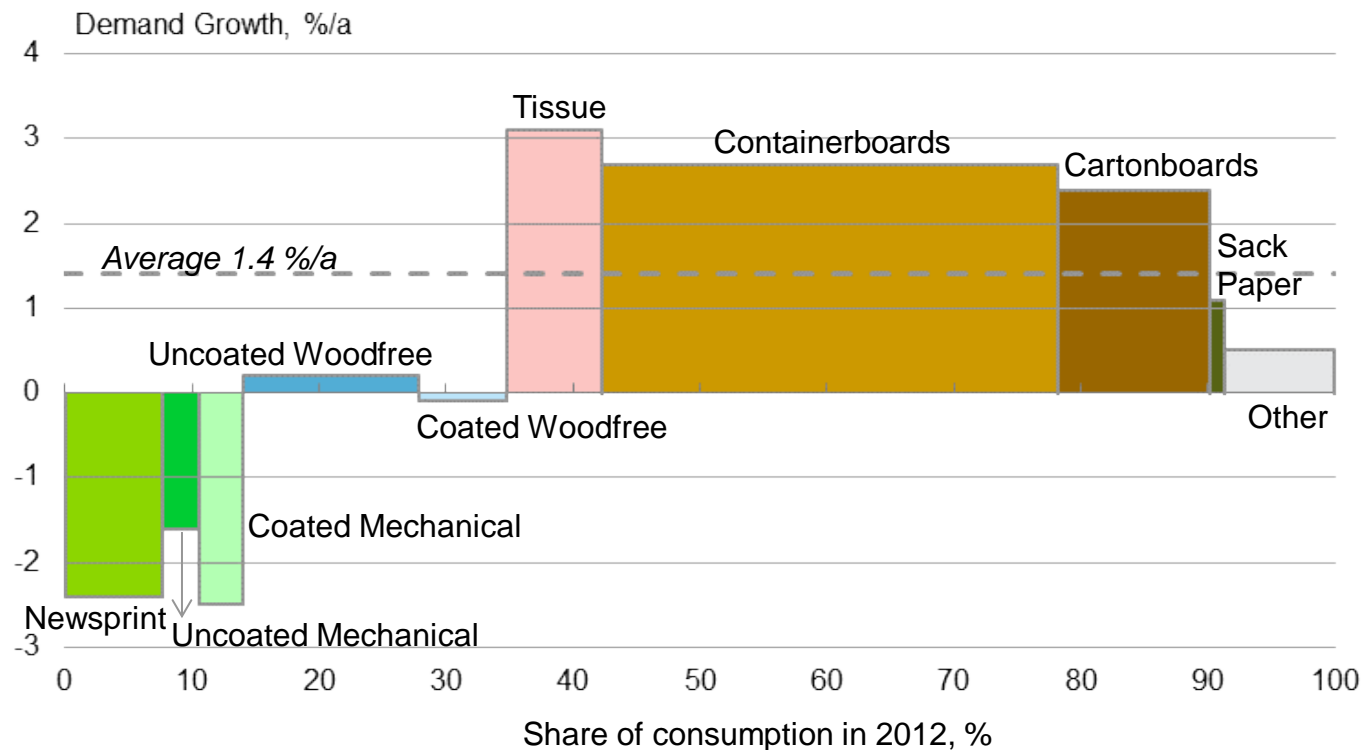
Development of profitability of global pulp and paper industry

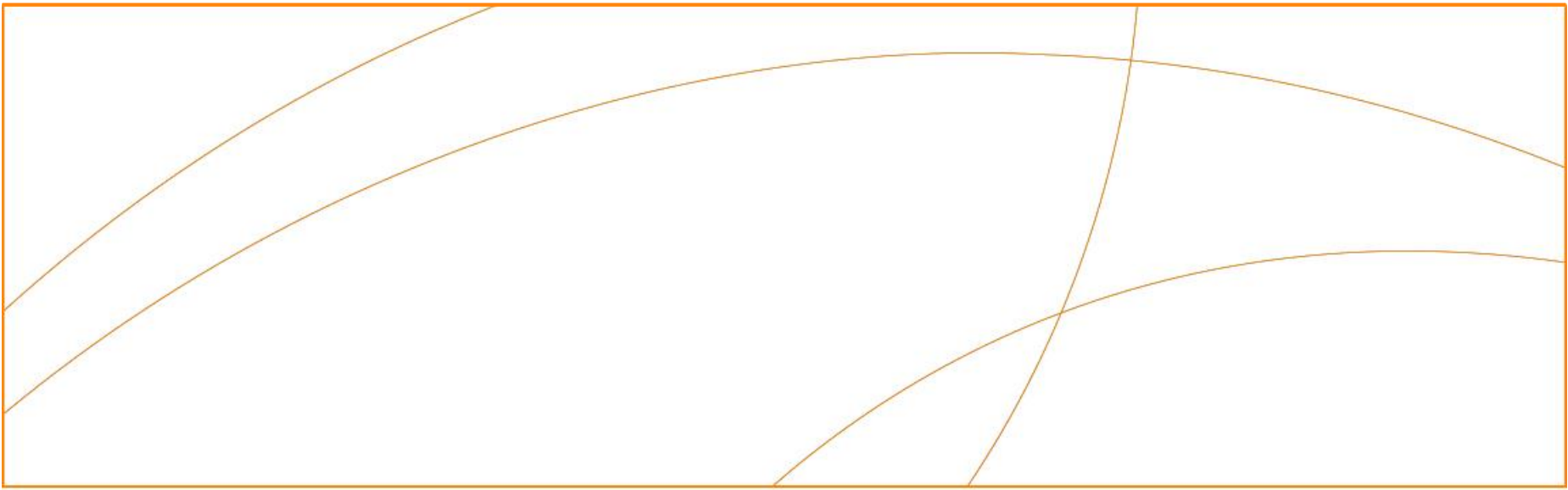


WORLD PAPER DEMAND IS DRIVEN BY TISSUE AND PACKAGING

Ours is still a growth market! However, whilst the outlook for tissue and packaging remains positive, the prospects for graphic papers continue to be gloomy.

World paper demand by grade 2012-25



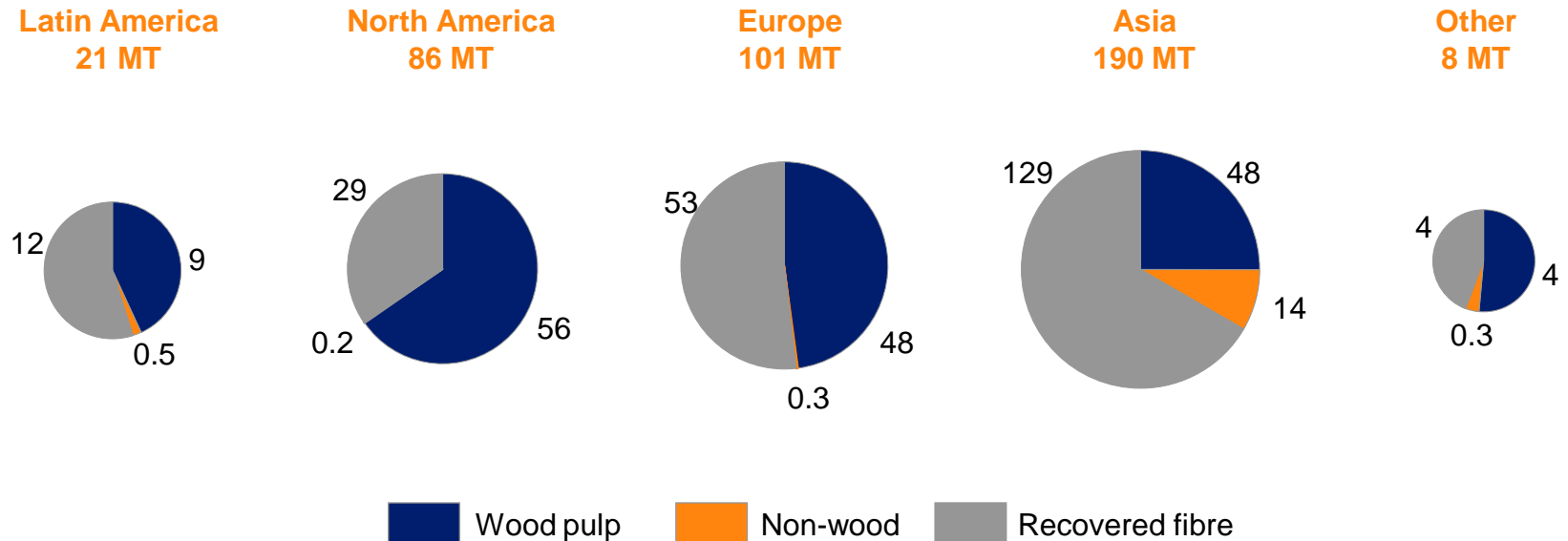


THE GROWTH IN FIBRE DEMAND

GLOBAL PAPERMAKING FIBRE CONSUMPTION

The world has changed. Asian total fibre consumption today is already higher than Europe and North America combined. All fibre sources are important.

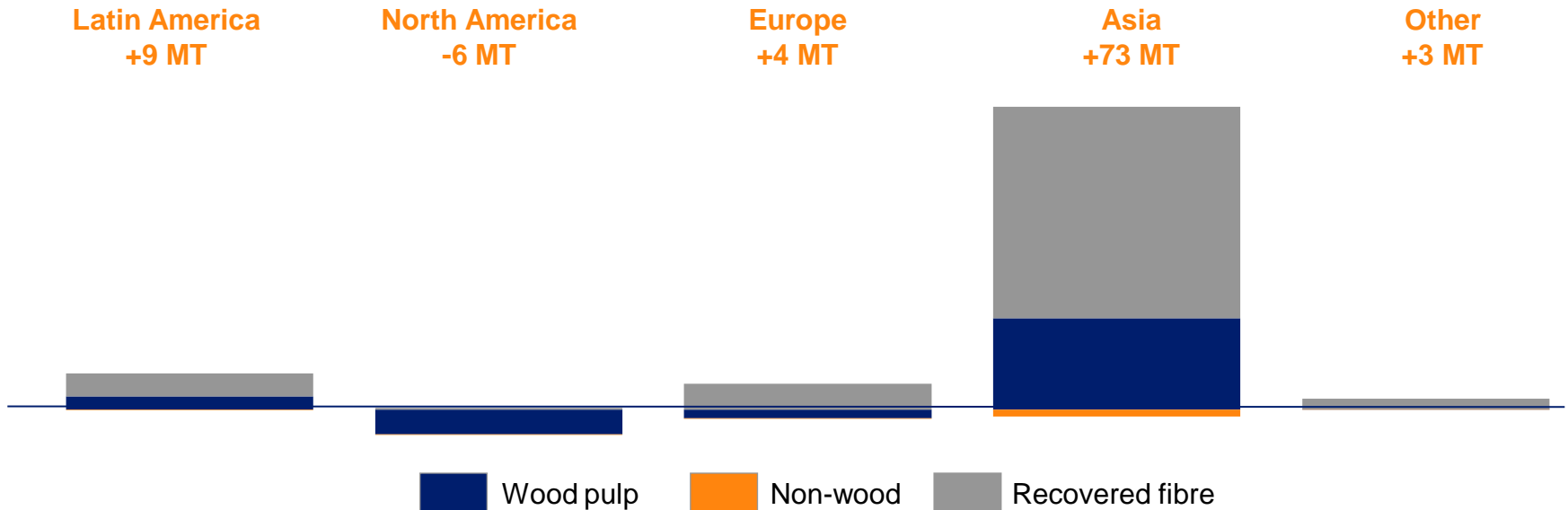
Regional fibre consumption in 2012



GROWTH EXPECTATIONS

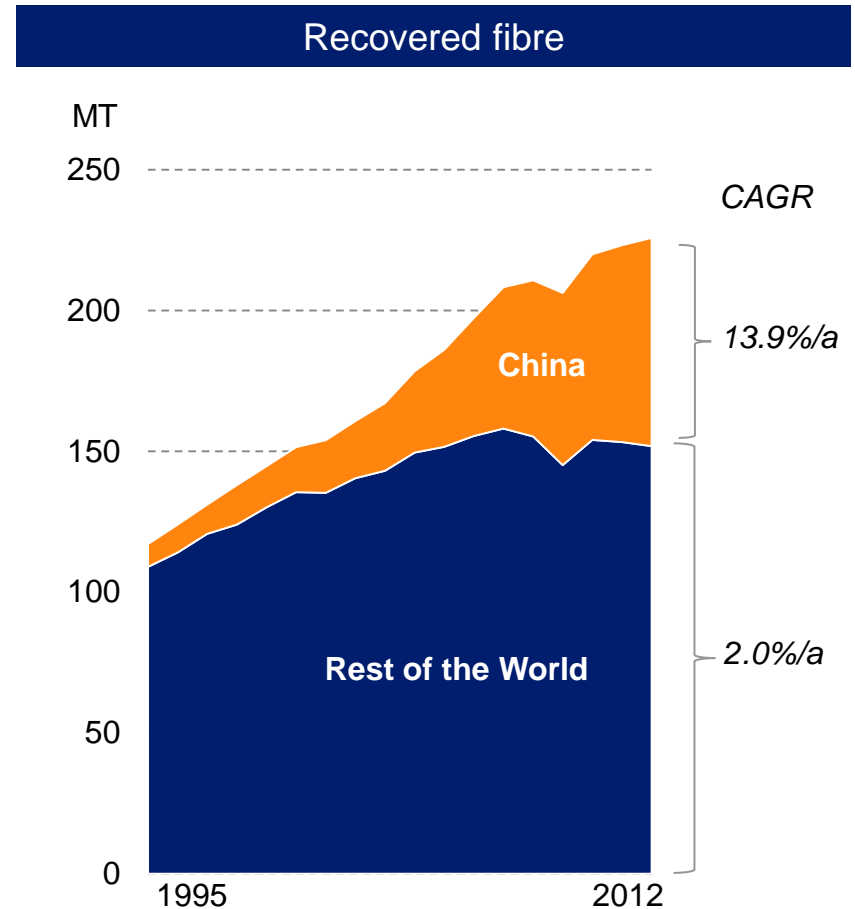
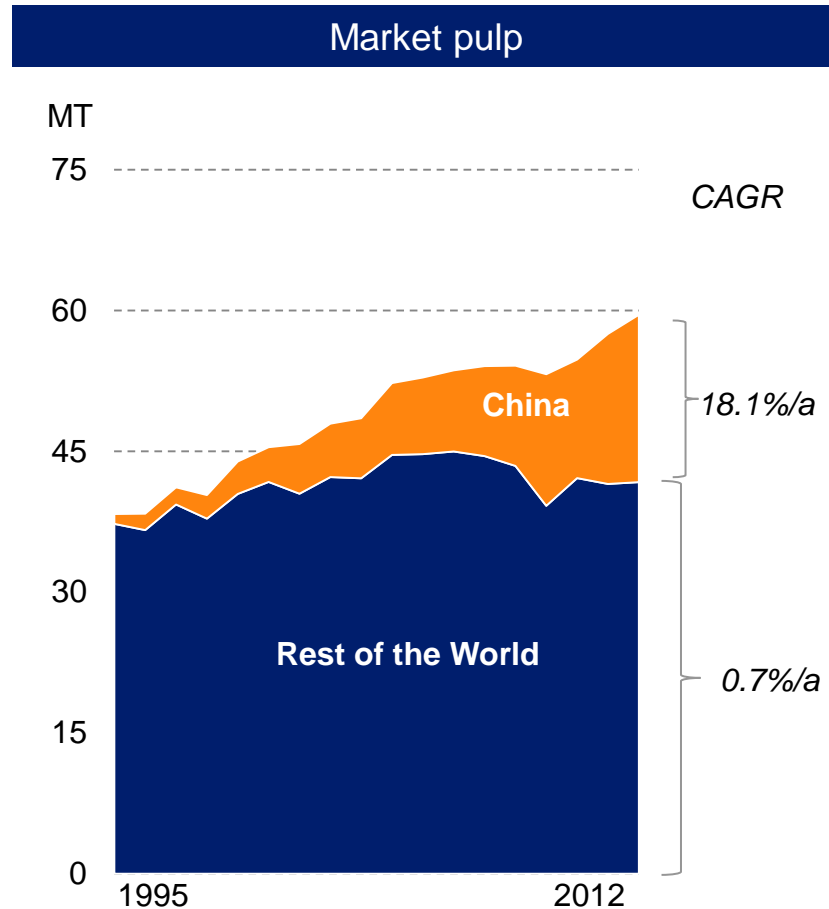
Asia will continue to be the major growth engine for both virgin and recovered fibre. 90% of the growth is in Asia! It has a seemingly insatiable appetite.

Regional fibre consumption growth to 2025



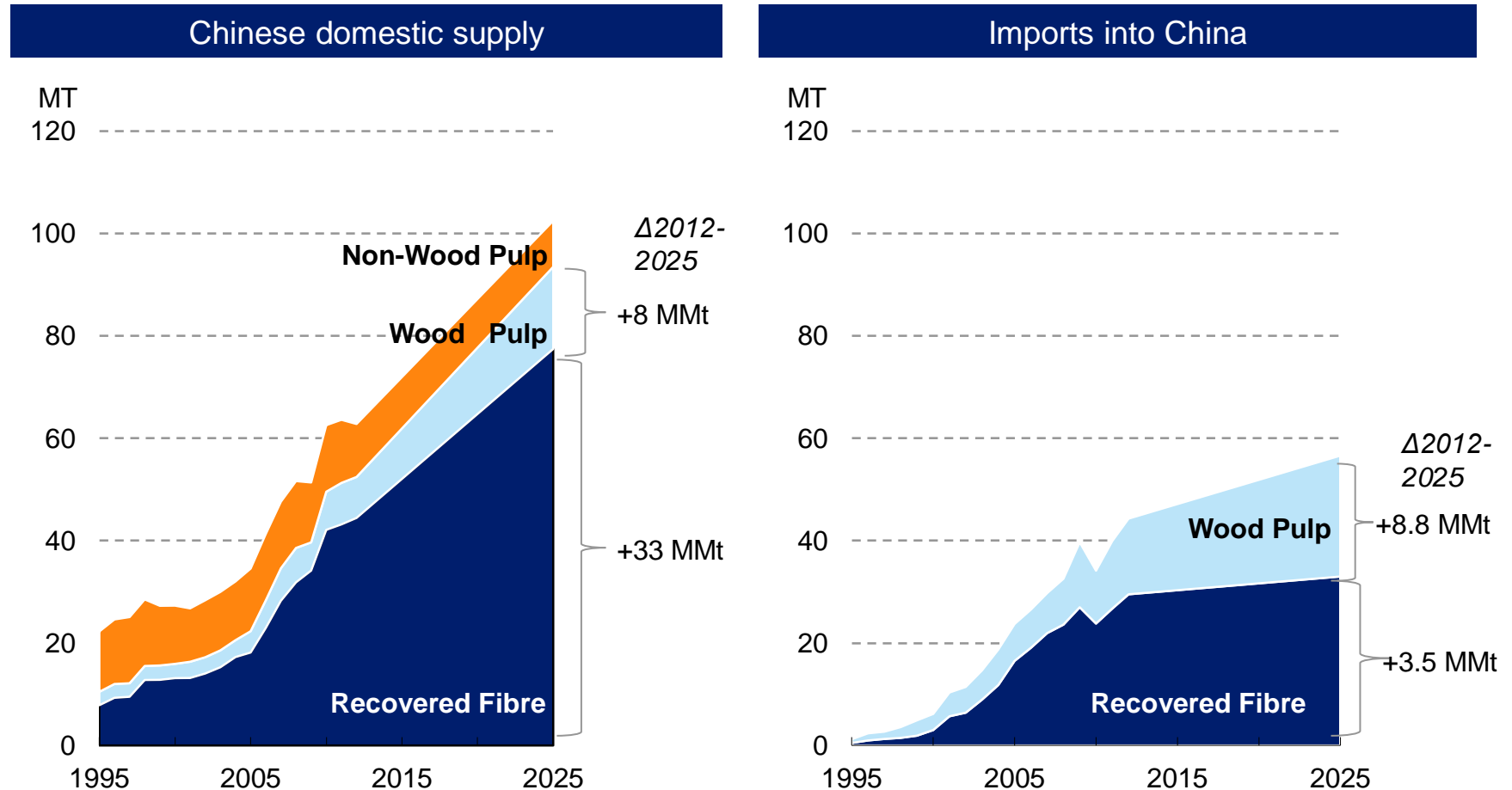
SEGMENTING BY FIBRE TYPE

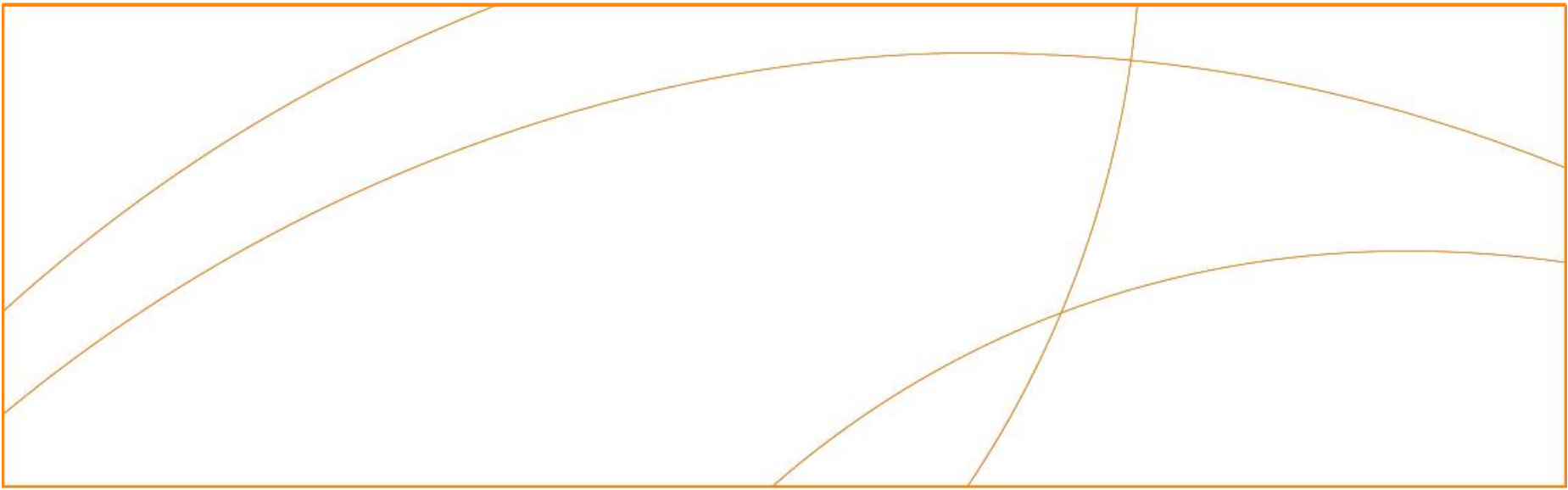
China led the growth during the last decade for both market pulp and recovered fibre. The rest of the world has though has had positive growth rates – if modest.



HOW WILL FUTURE FIBRE DEMAND BE FULFILLED IN CHINA?

In addition to its fast growing domestic supply, China will remain a net importer of both virgin and recovered fibre – setting challenges and determining dynamics.



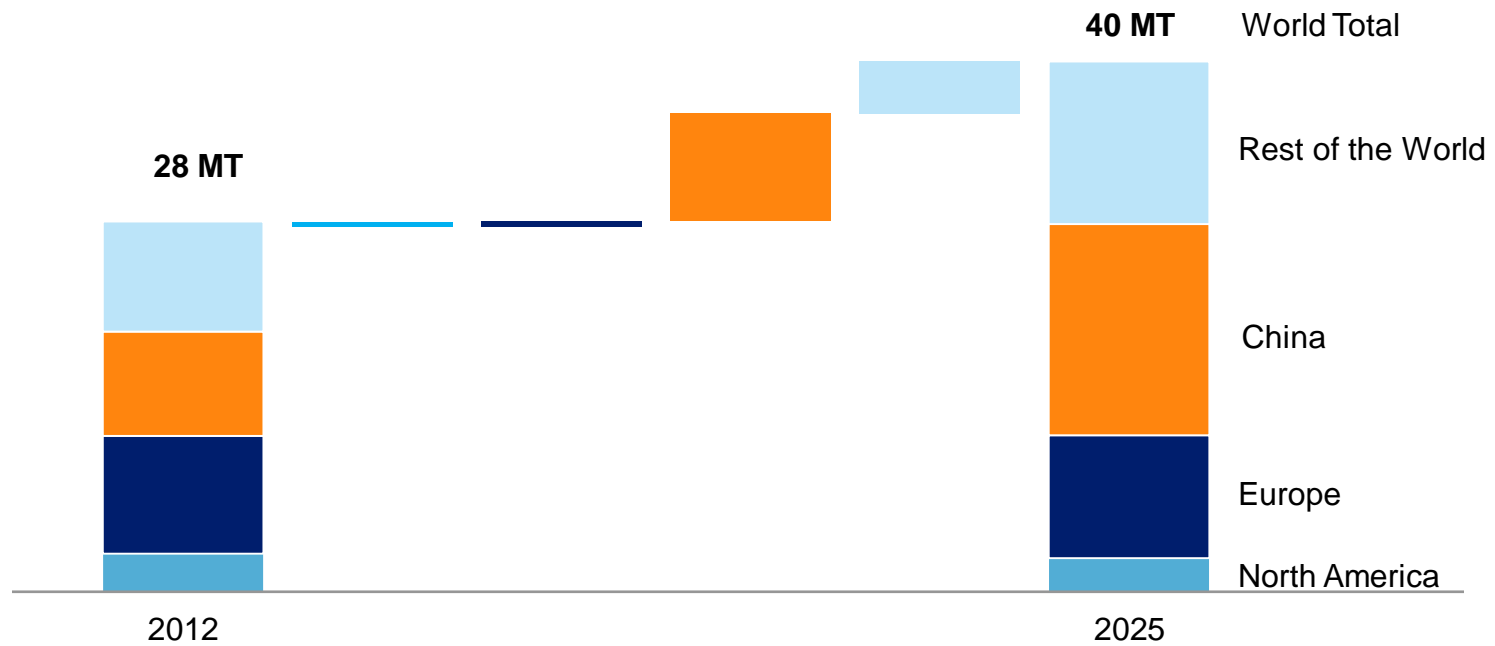


DEVELOPMENTS IN BHKP

BHKP DEMAND GROWTH

China's role as market pulp consumer will continue to grow – it will need an additional 8 million tonnes of BHKP market pulp by 2025 with further growth coming in other parts of Asia and Latin America.

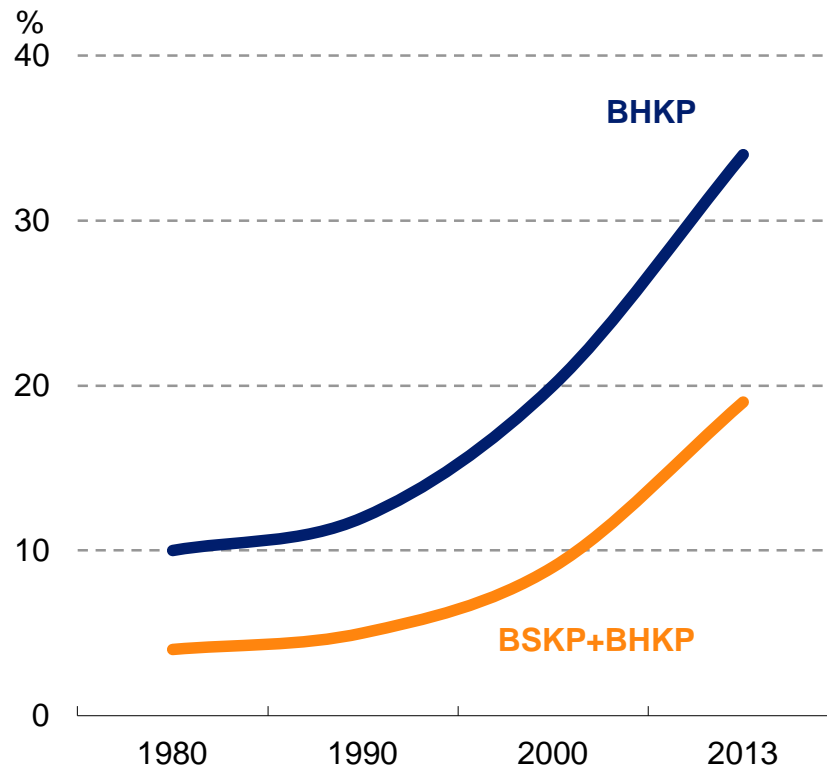
Global market BHKP demand growth



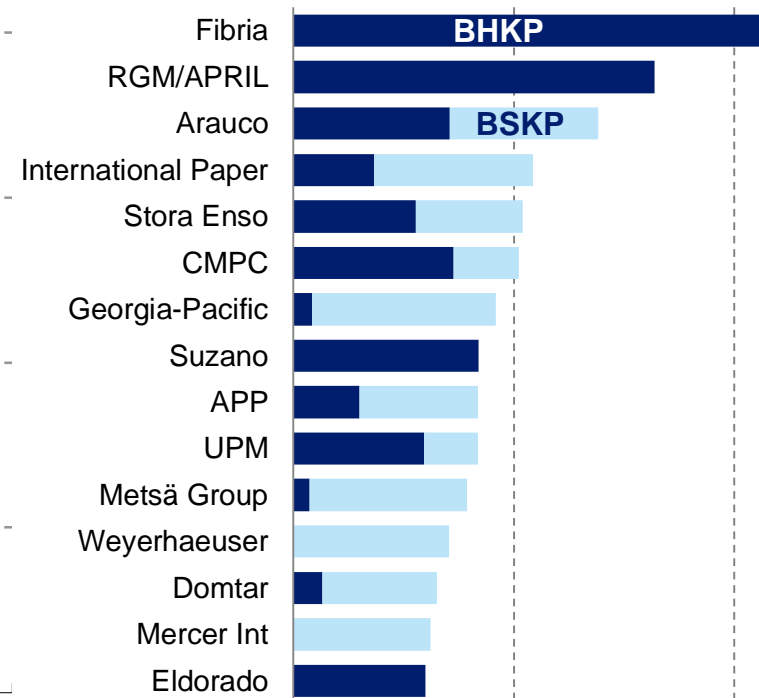
INCREASING SHARE OF BRAZILIAN MARKET PULP

On the whole pulp tends to be produced where low cost fibre is available. It is this availability of low-cost high-quality fibre has driven the development of the South American pulp industry

Brazilian share of bleached kraft market pulp



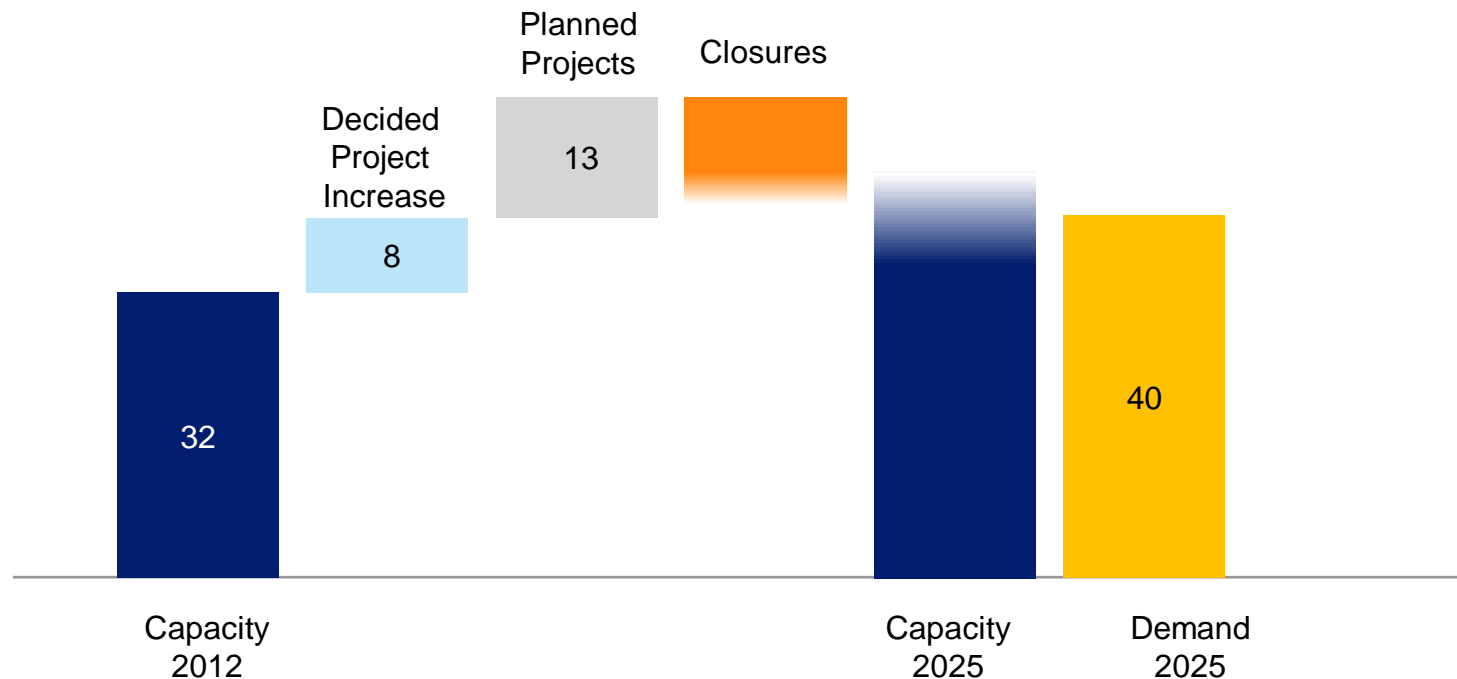
Top bleached kraft pulp producers, 2013



DEMAND GROWTH SET THE LIMITS FOR BUSINESS GROWTH

New project timing is even more critical when the plant size is increasing. Although some of the decided capacity increase is in Asia, most is in South America – the availability of low cost fibre is continuing to attract pulp investment.

Global market BHKP supply growth

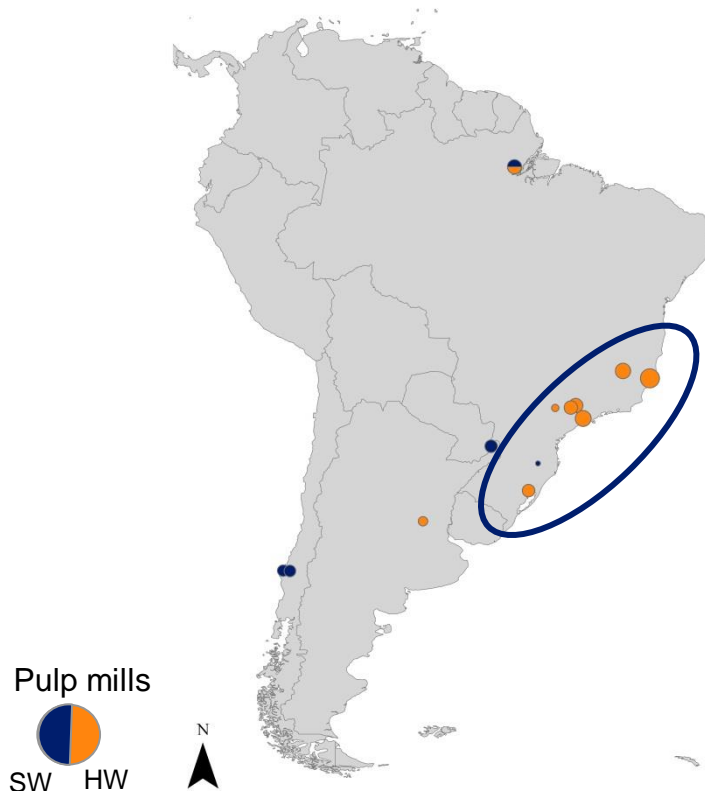


Million tonnes

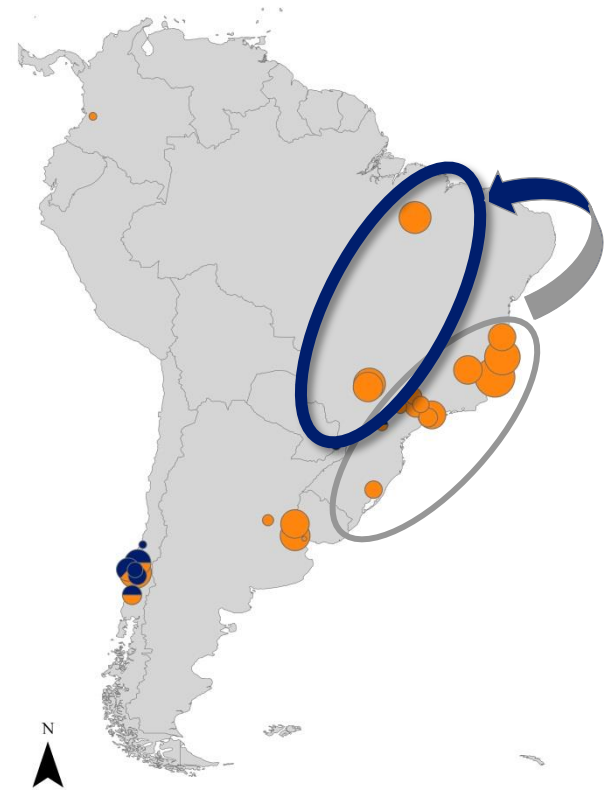
INCREASING LOGISTIC COSTS ARE PROVIDING CHALLENGES

Availability of costal greenfield pulp production sites today is limited.. Furthermore the customers in China are tending to move further inland too. This is providing challenges to logistics costs at both ends of the supply chain.

Pulp capacity in 1990



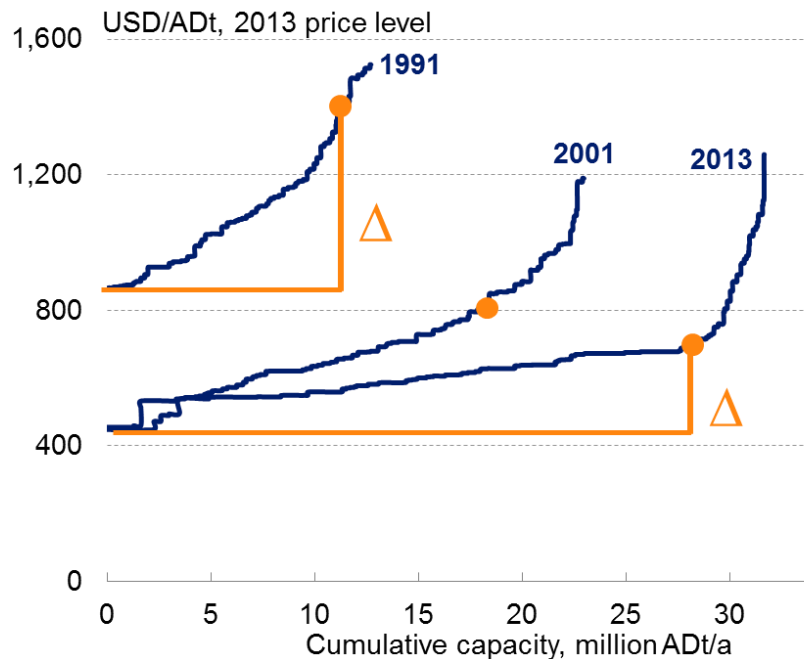
Pulp capacity in 2014



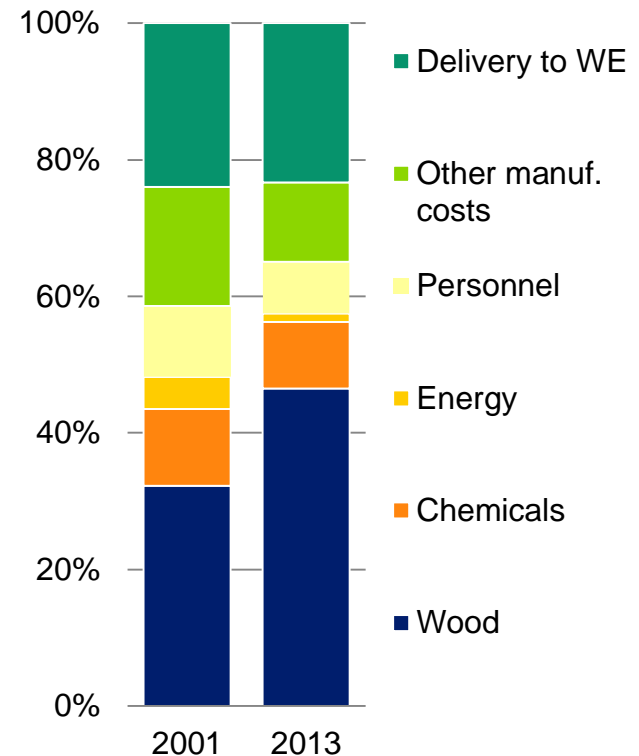
MARKET PULP PRODUCERS ARE FACING CHANGES

Flattening cost supply curve decreases the marginal cost and triggers intense competition. A stronger Brazilian currency and increased stumpage costs are further factors changing the competitive dynamics

Cost curves – Brazilian producers



Brazilian average producer



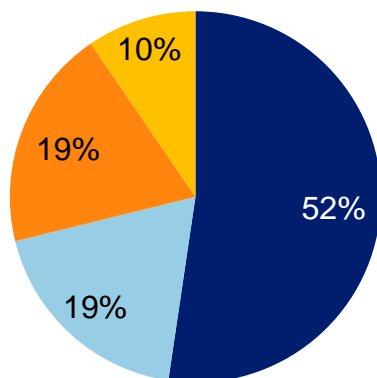
An abstract graphic consisting of several thin, curved orange lines within a rectangular frame. The lines are smooth and flowing, creating a sense of movement and design.

DEVELOPMENTS IN RCP

RECOVERED PAPER CONSUMPTION BY GRADE

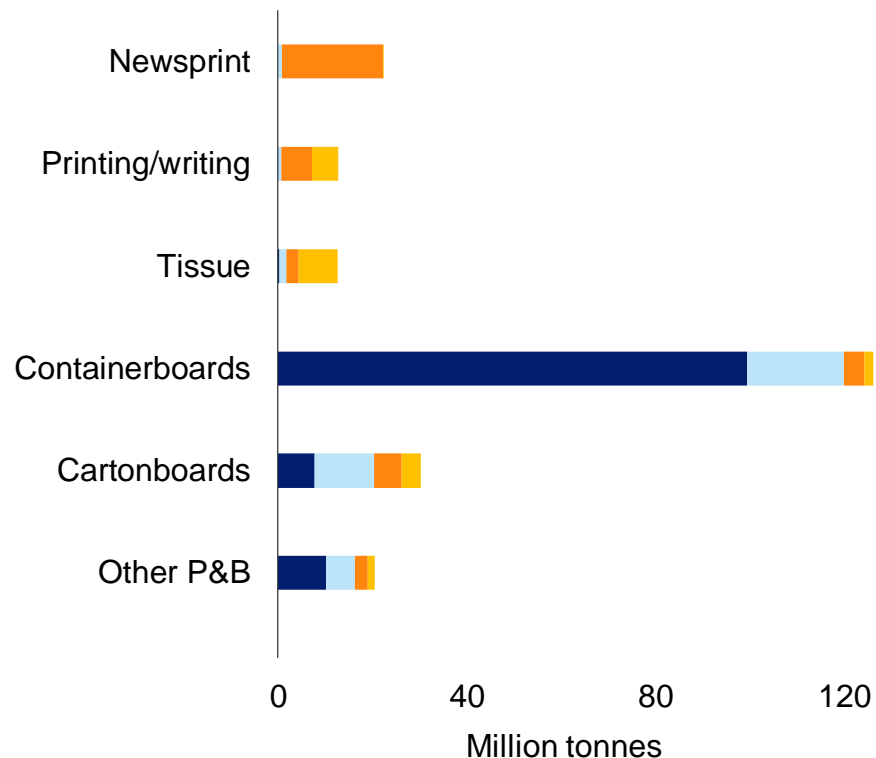
OCC and Mixed grades cover around 70% of the recovered paper. This is linked to RCP's main consumption in the packaging sector.

Indicative global recovered paper consumption,



Total: 225 million tonnes

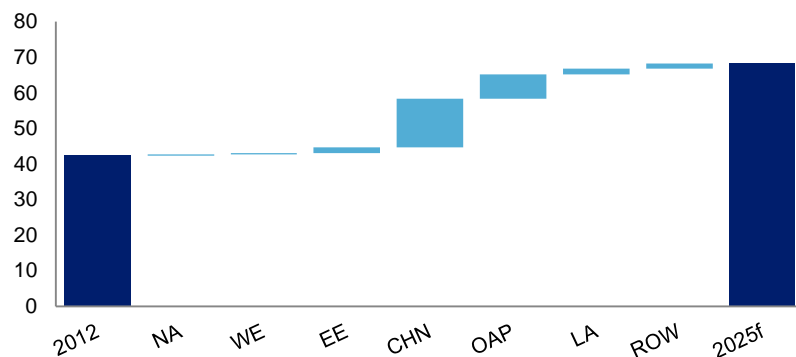
■ OCC
■ Mixed
■ News&PAMs
■ High Grades



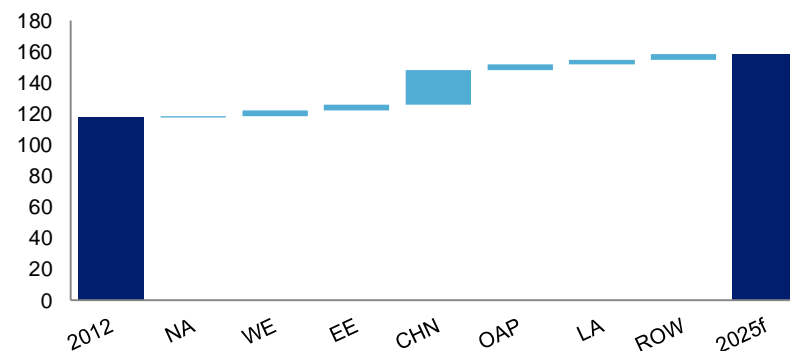
RECOVERED PAPER DEMAND FORECAST BY GRADE

There is growth in most regions and most grades, but the significant growth is all focused around China and packaging. Note the differing y-axis scales below.

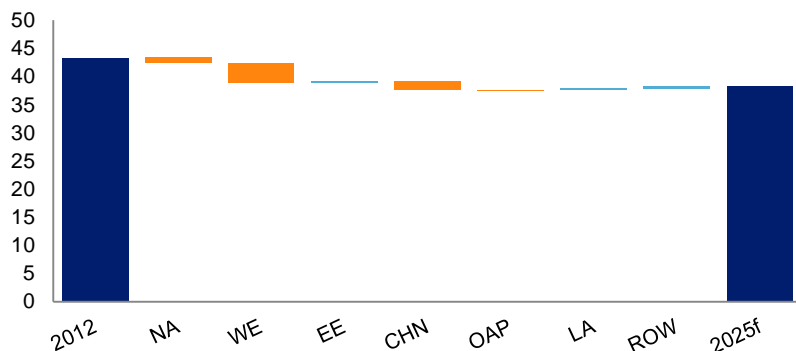
Mixed paper



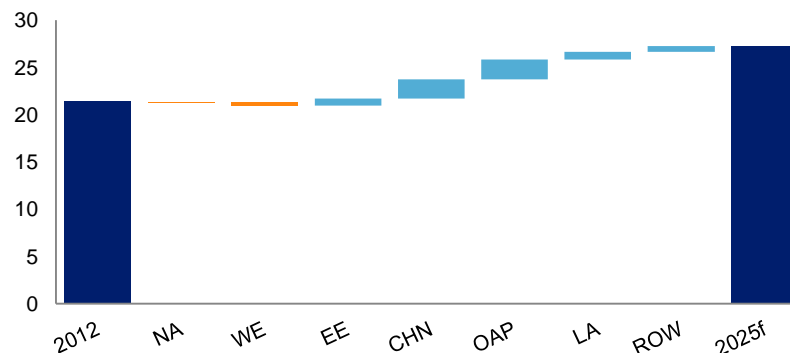
OCC



News & PAMs



High grades

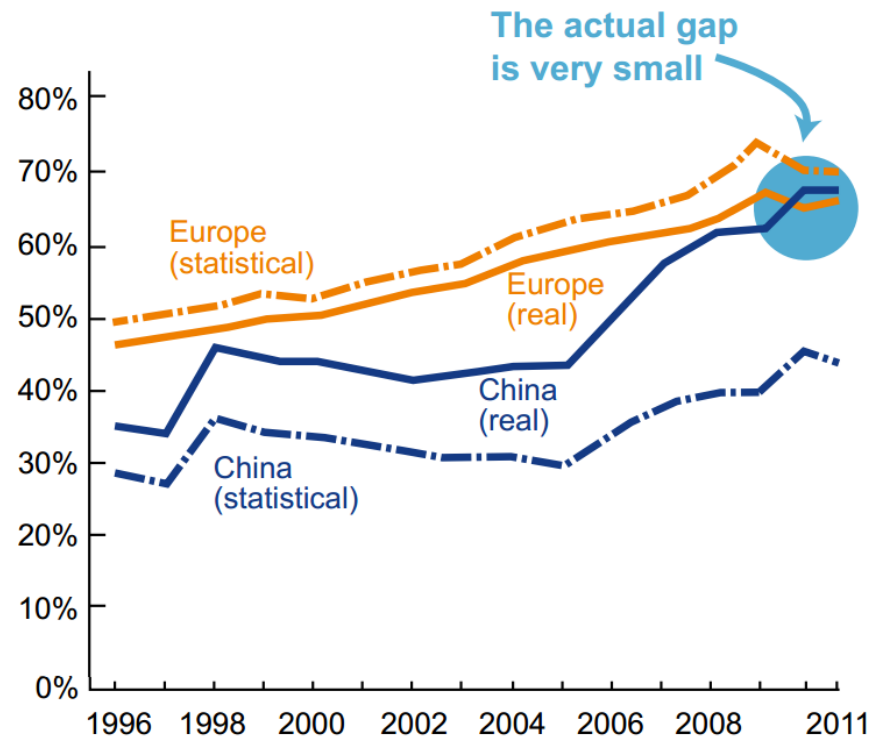


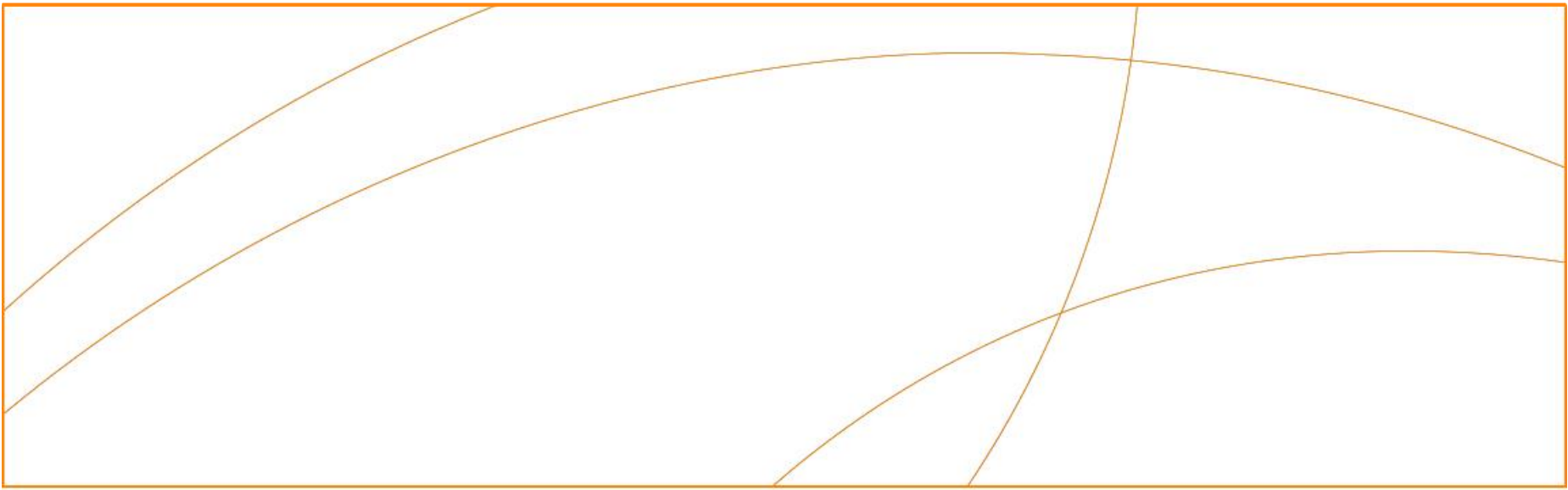
STATISTICAL VERSUS ACTUAL COLLECTION RATE HISTORY

Collection rates have increased in both China and Europe. Whilst there looks to be a big difference between the stated statistical numbers, the reality is that collection rates are very similar.

China plays a key role in the global recovered paper markets. It accounts for 20% of the world's manufacturing yet only 6% of consumer spending. i.e. a large share of the paper consumption in China ends up in other countries in the form of exported packaging – which is then brought back to China in the form of recovered paper.

RCP collection rates



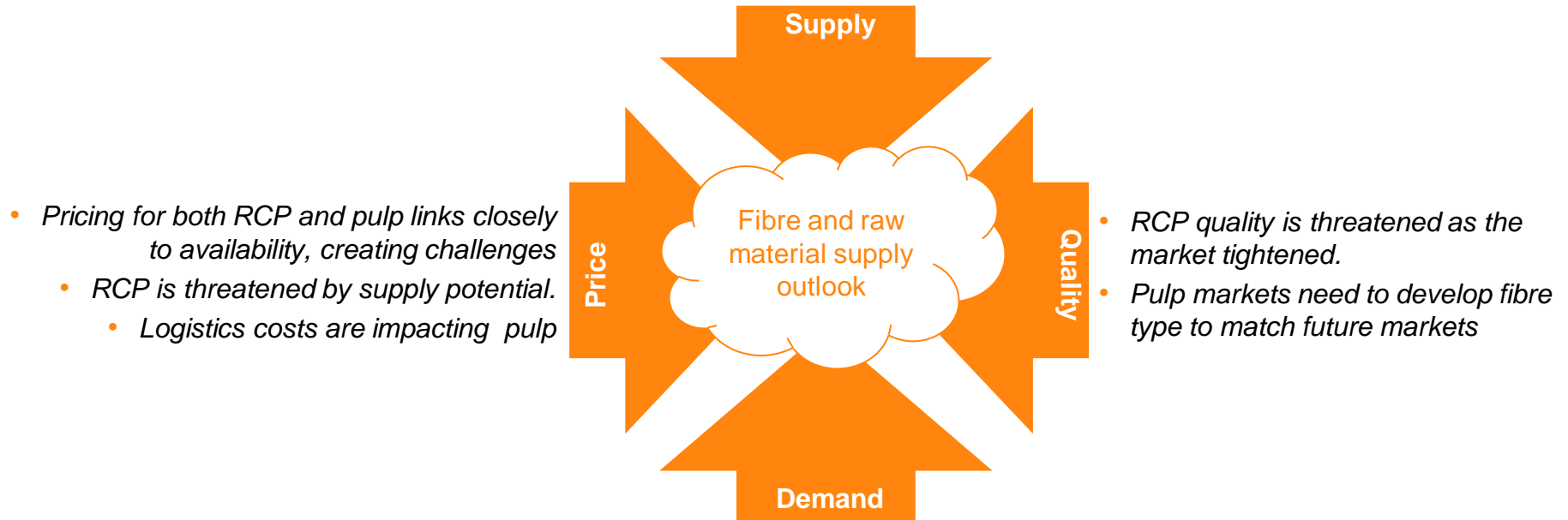


CONCLUSIONS

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The global pulp and paper sector is continuing to grow, and with that growth comes challenges and threats for its fibre and raw material supply.

- The RCP supply:demand balance is tightening, threatening availability - collection rates are approaching maximum.
- Pulp capacity is coming on-line, but large sizes of new mills make the development lumpy



- China and packaging are the two big driving forces in the demand for both pulp and RCP.
- There are other positives – tissue, Asia, 1.4%CAGR, etc.



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