

WORLD OF FIBRE – ARE WE HEADING FROM ERA OF RCP TO A FUTURE OF VIRGIN PULP?



A.I.A.C.

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 4. ARE THE CURRENT RCP SOURCES GETTING TOO SMALL ?
 5. HOW WILL NEW ROLE OF VIRGIN MARKET PULP BE DEFINED ?

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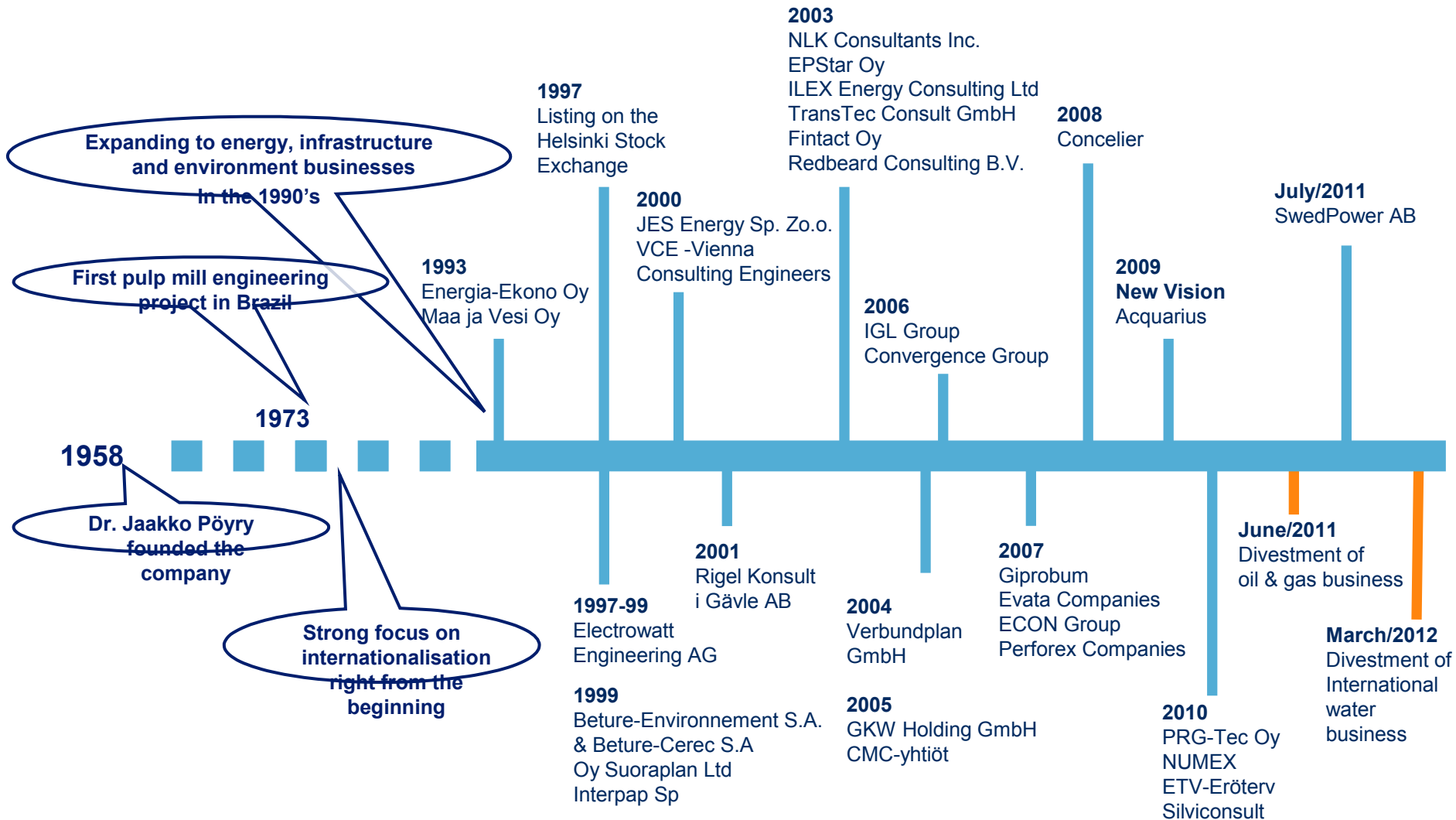
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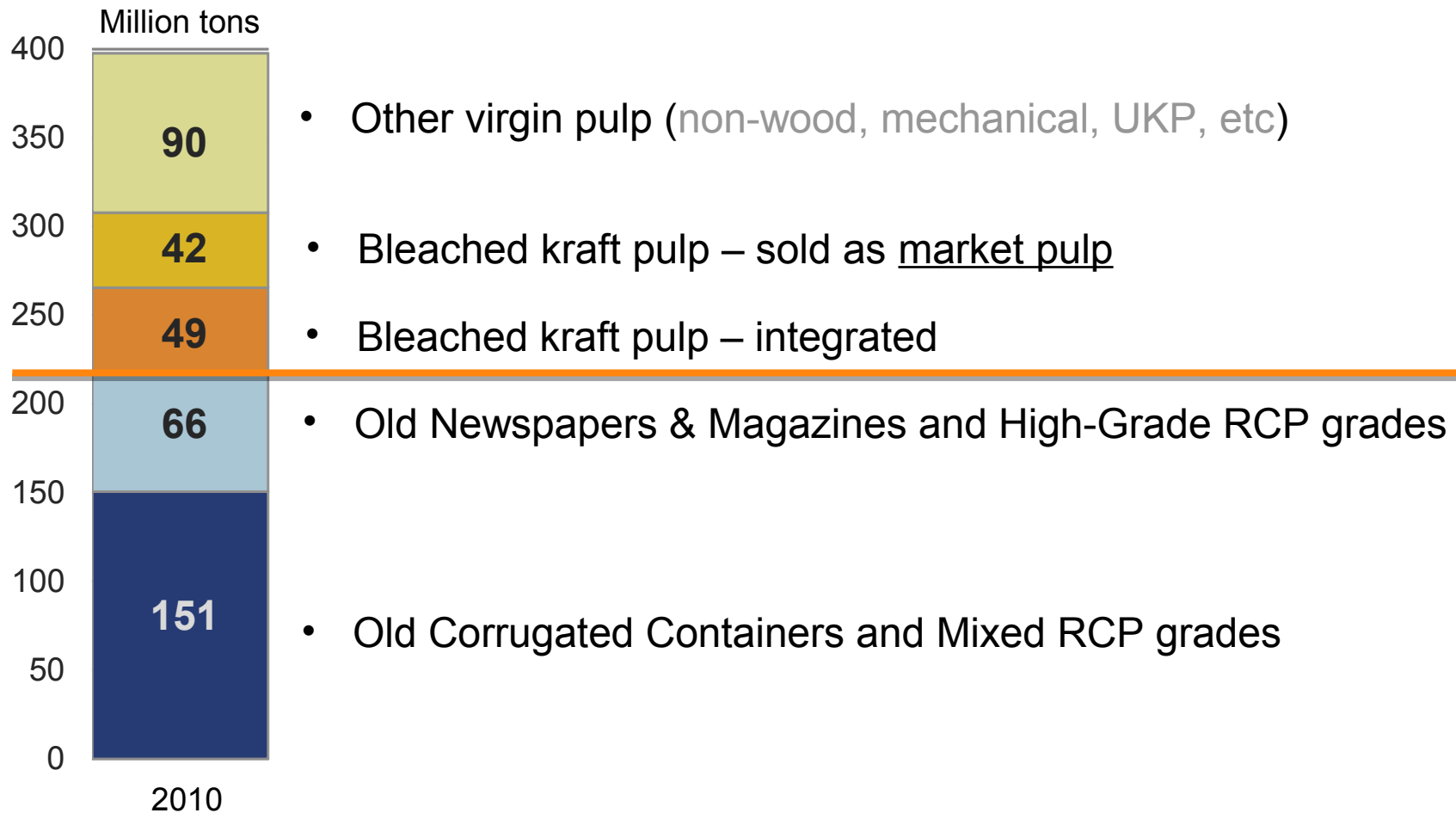


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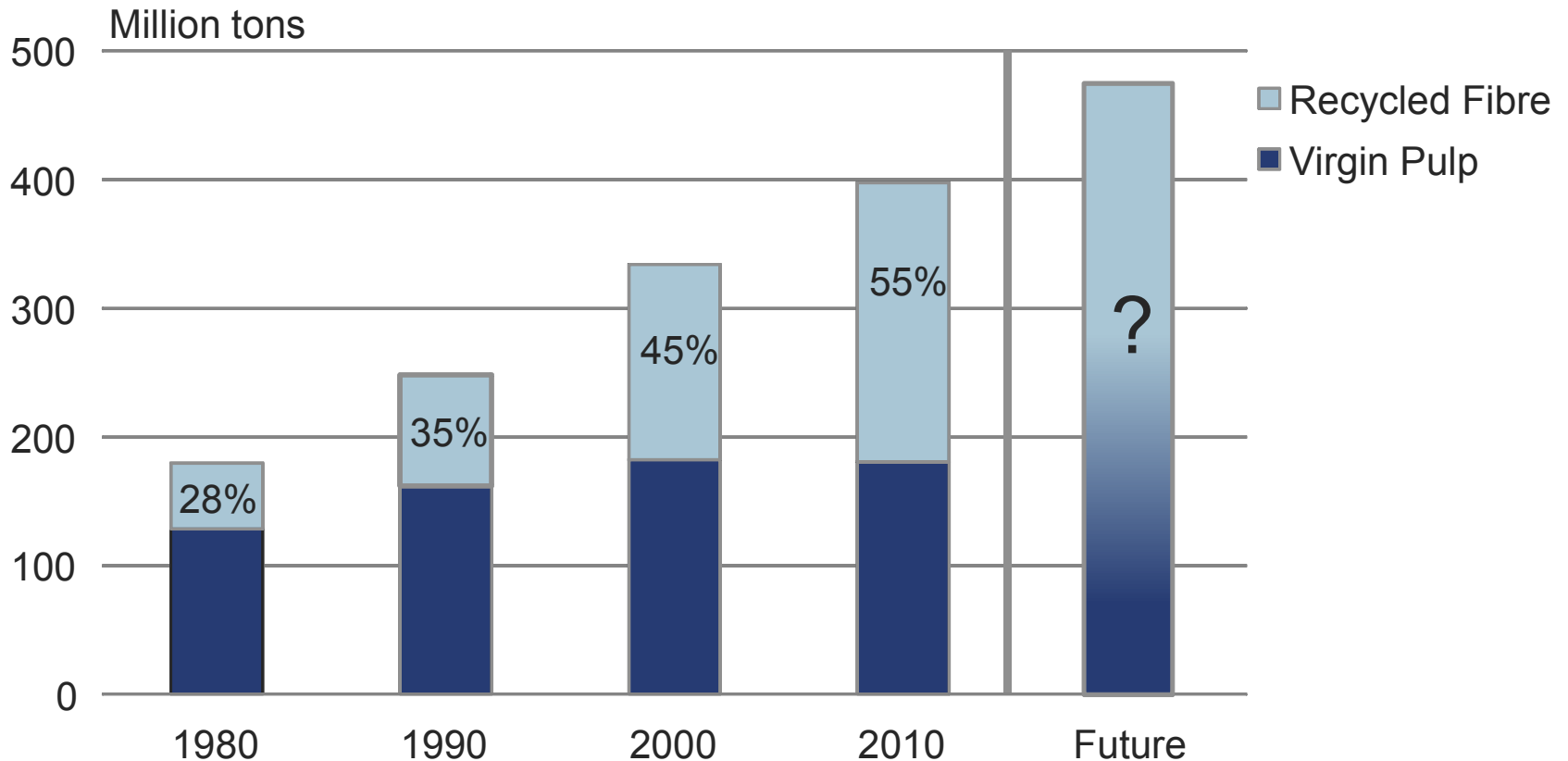
THE MAIN SOURCES OF PAPERMAKING FIBRE TODAY

Recycled fibre accounts for over half of the global fibre needs.



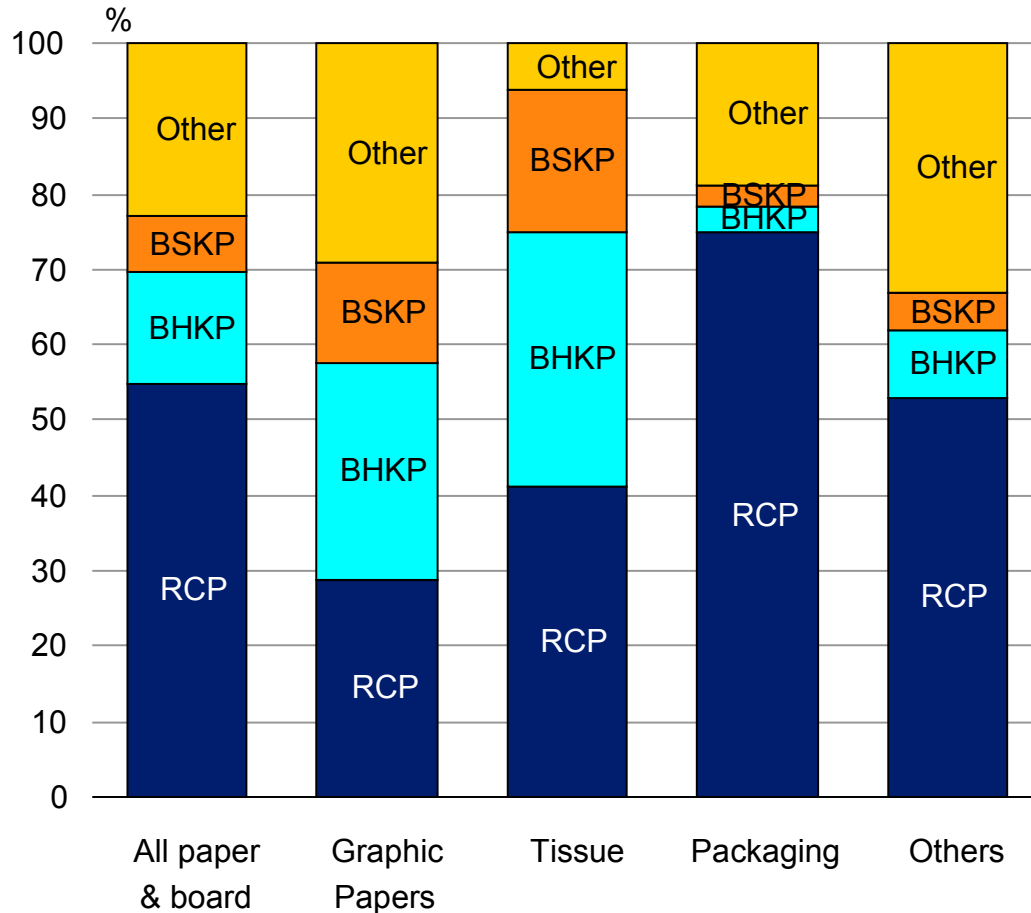
WORLD PAPERMAKING FIBRE DEMAND

Recycled Fibre Shortage? Future Role of Virgin Pulp?



GLOBAL FIBRE FURNISHES

The availability of recycled papers is under pressure, with consequences to the whole world fibre balance



RCP = Recycled paper

BHKP = Bleached hardwood kraft pulp

BSKP = Bleached softwood kraft pulp

Other = Mechanical pulp, sulphite, non-wood, unbleached kraft pulp

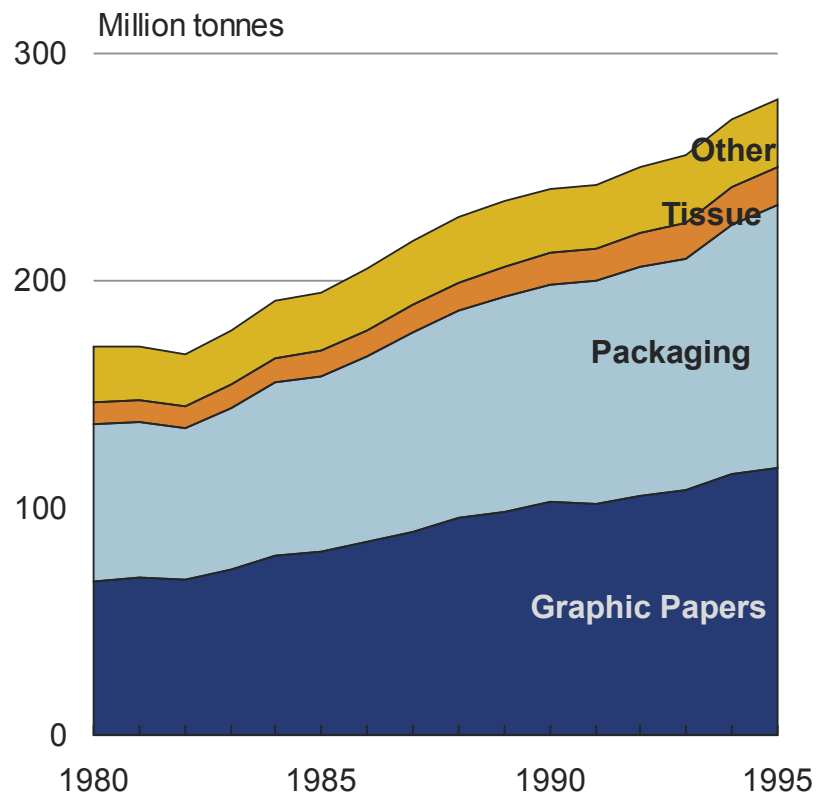
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WHO NEEDS FIBRE IN THE FUTURE ?

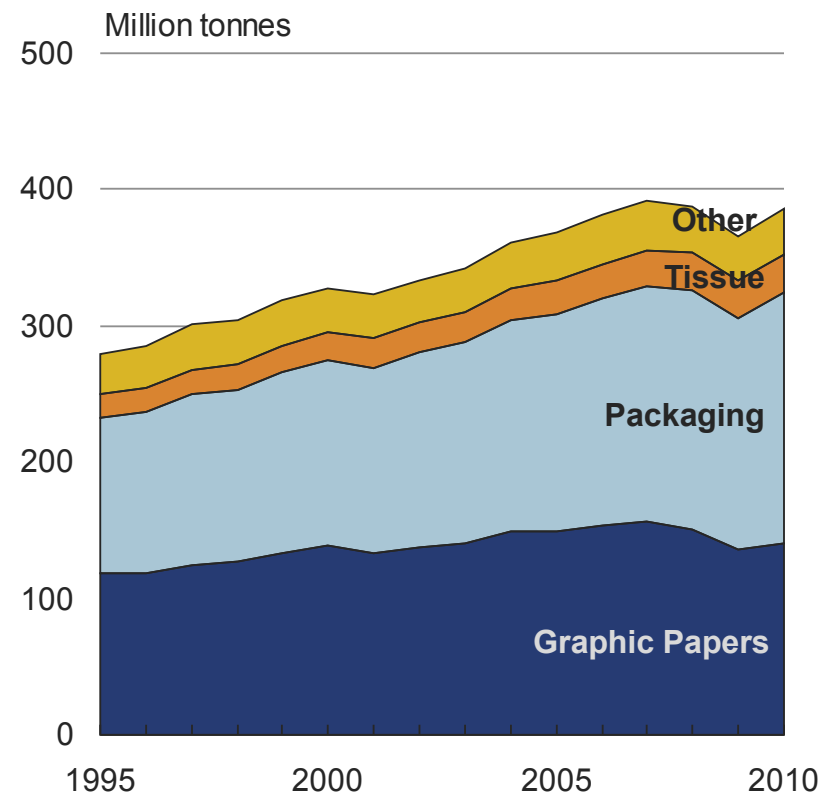
WORLD MARKET FOR PAPER AND PAPERBOARD

When looking backwards, back in 1995, global demand for graphic papers was healthy. But during the last 15 years something has changed...

1980-1995



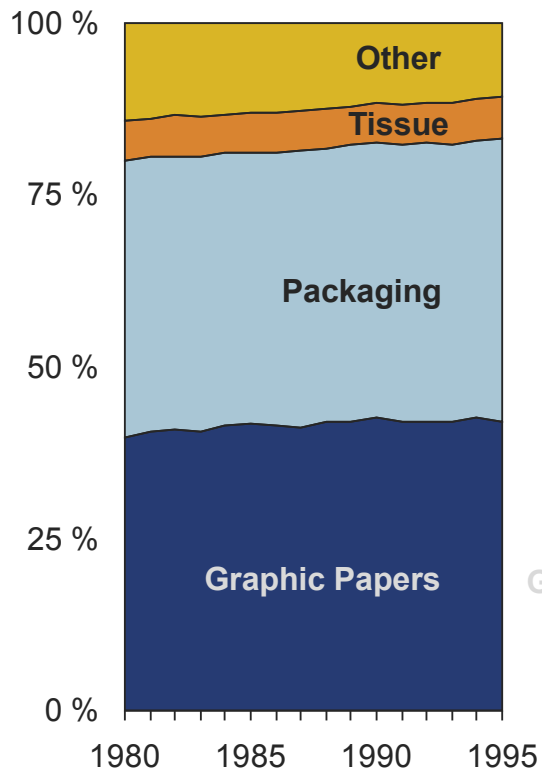
1995-2010



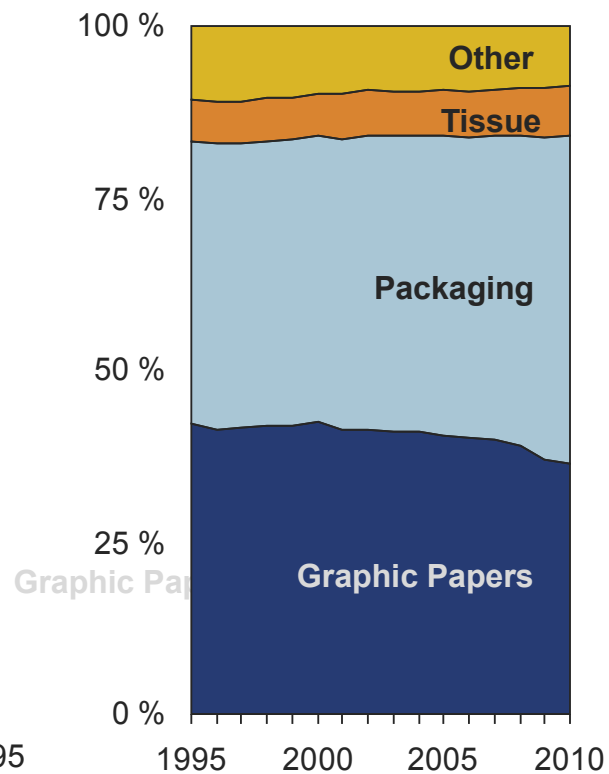
THE REDUCING SHARE OF GRAPHIC PAPERS

It is clear that graphic papers are losing market share. This impacts the global fibre balance while the sector acts both as a user (destination) and as a source of fibre.

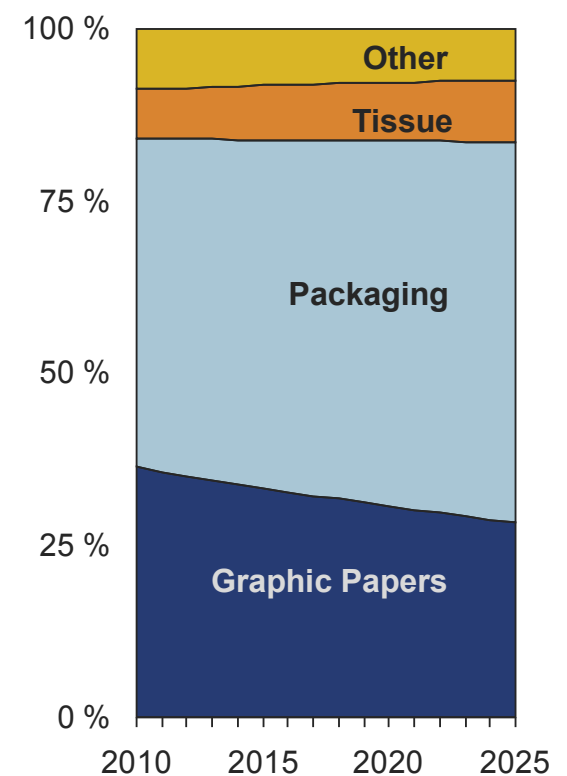
1980-1995



1995-2010

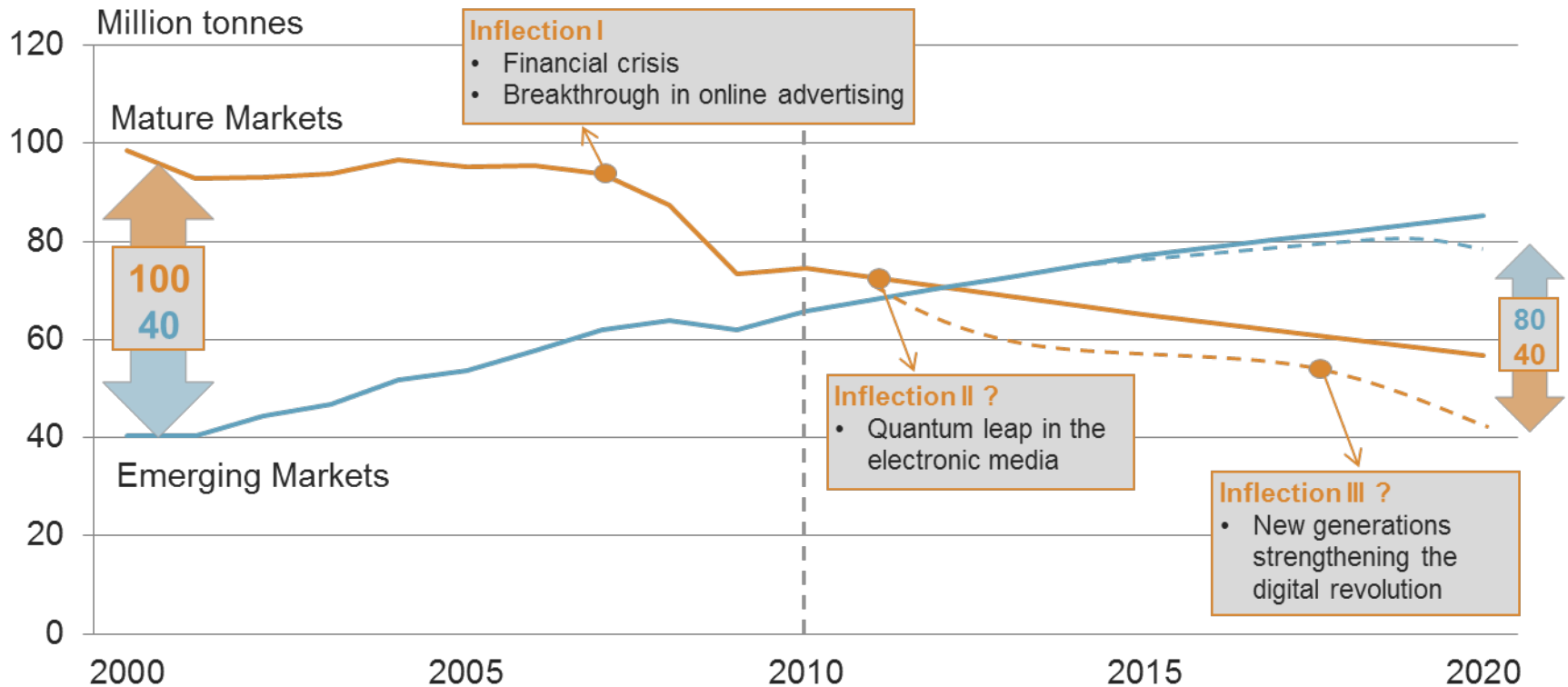


2010-2025



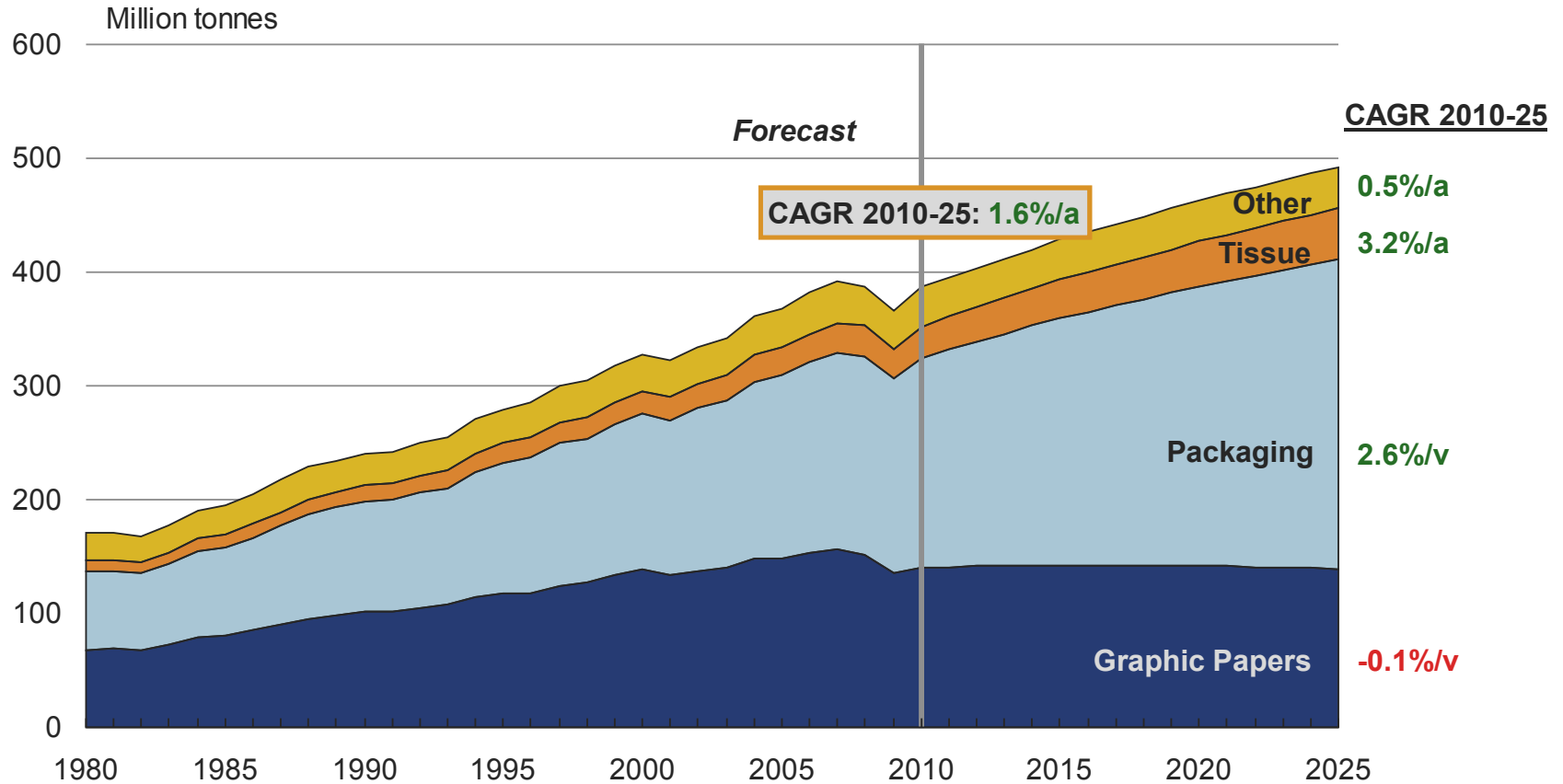
GRAPHIC PAPER SUNSET – FUTURE INFLECTION POINTS?

Rapidly changing balance of power between mature and emerging regions



BEYOND GRAPHIC PAPERS...

When we look at the big picture, it is easy to see who needs fibre in the future. To put it simple, all growth is in tissue and packaging.

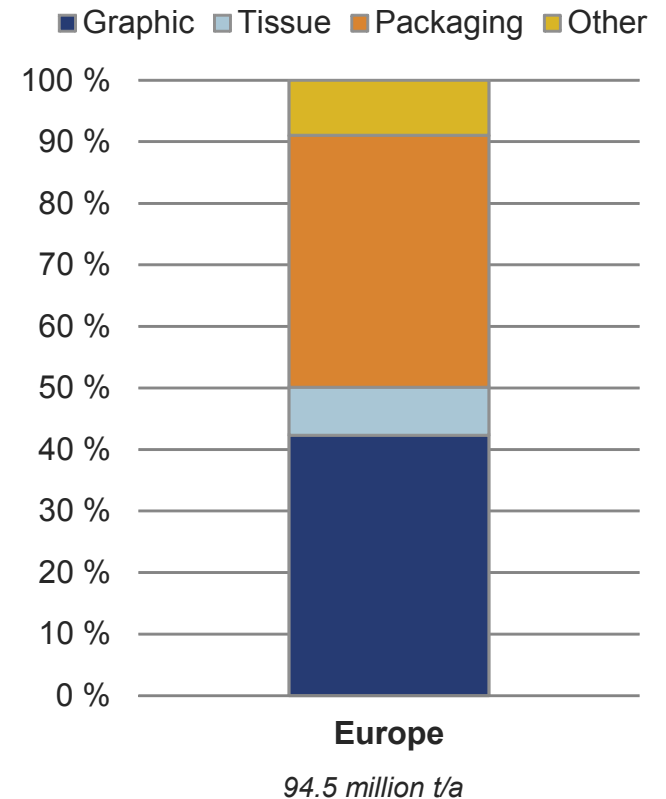
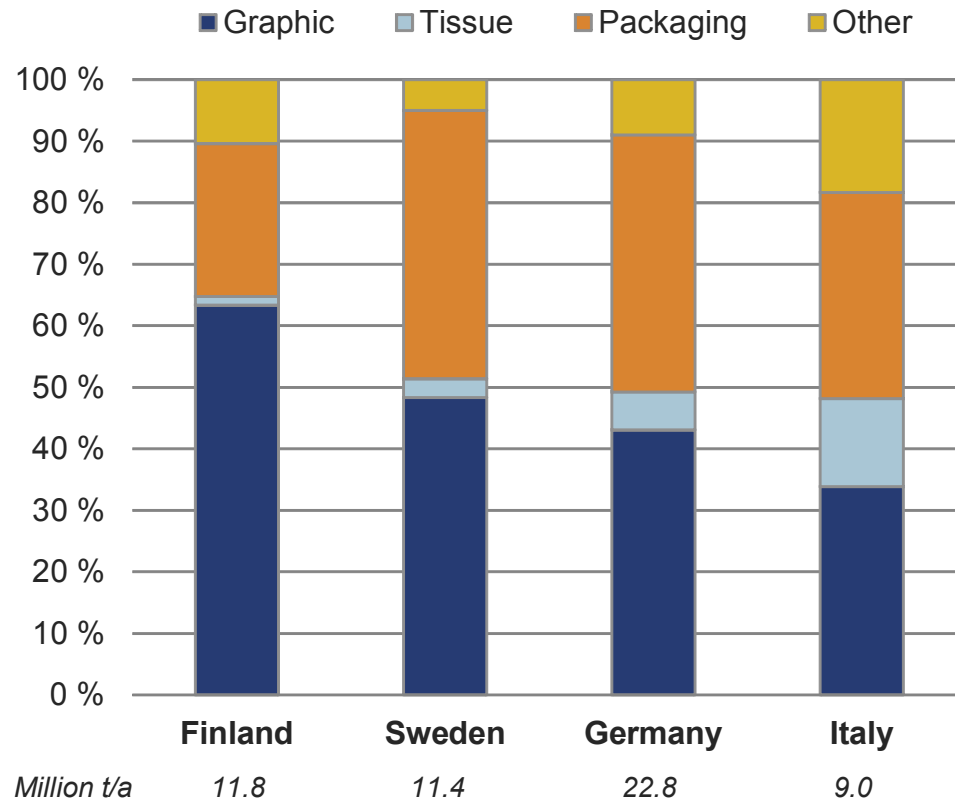


INDUSTRY STRUCTURE IN SELECTED EUROPEAN COUNTRIES

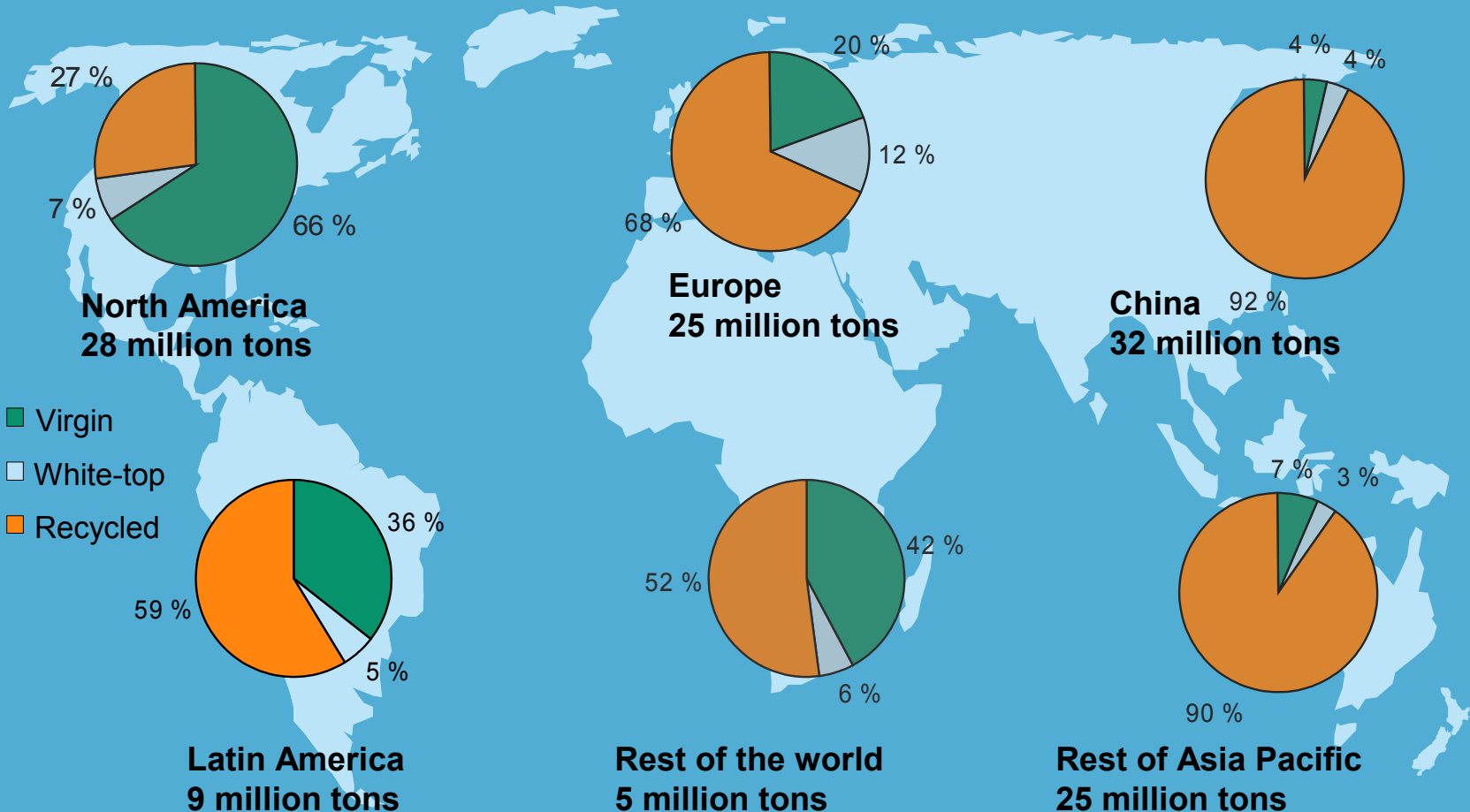
Production structure in Sweden and Germany corresponds with the European consumption breakdown.

Production structure in selected European countries

Consumption structure in Europe



CONTAINERBOARD MARKETS BY REGION IN 2010

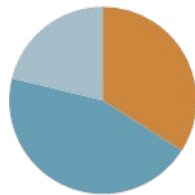


TOP TISSUE PRODUCERS HAVE DIVERSE FIBRE STRATEGIES

Driven by market segment/product quality focus (At-home and Away-from-Home), scale and technology.

NORTH AMERICA

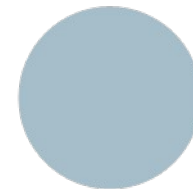
Georgia-Pacific



Kimberly-Clark

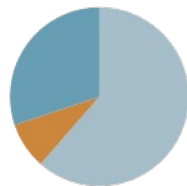


Procter & Gamble



EUROPE

SCA



Sofidel



WEPA

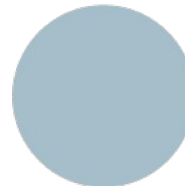


CHINA

APP/Sinar Mas



Hengan International



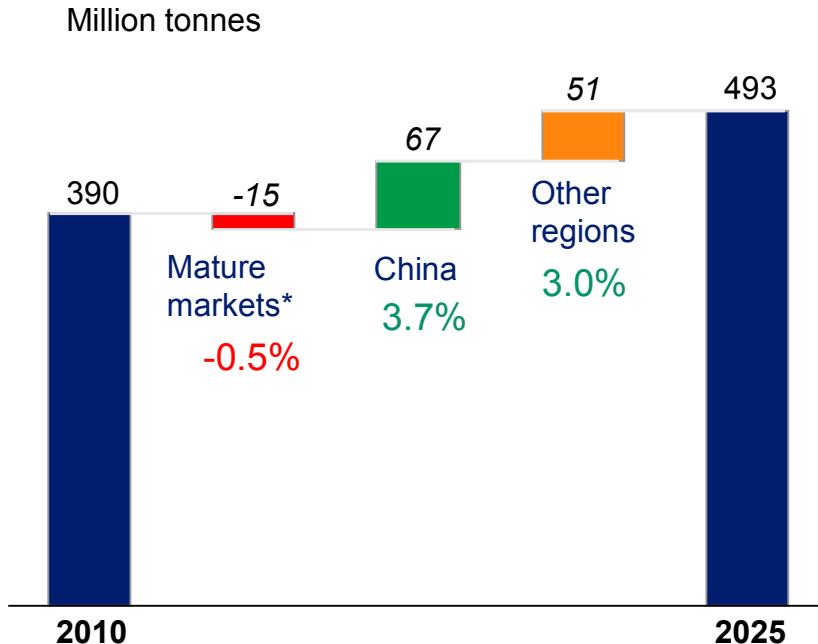
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WHERE IS FIBRE MOSTLY NEEDED ?

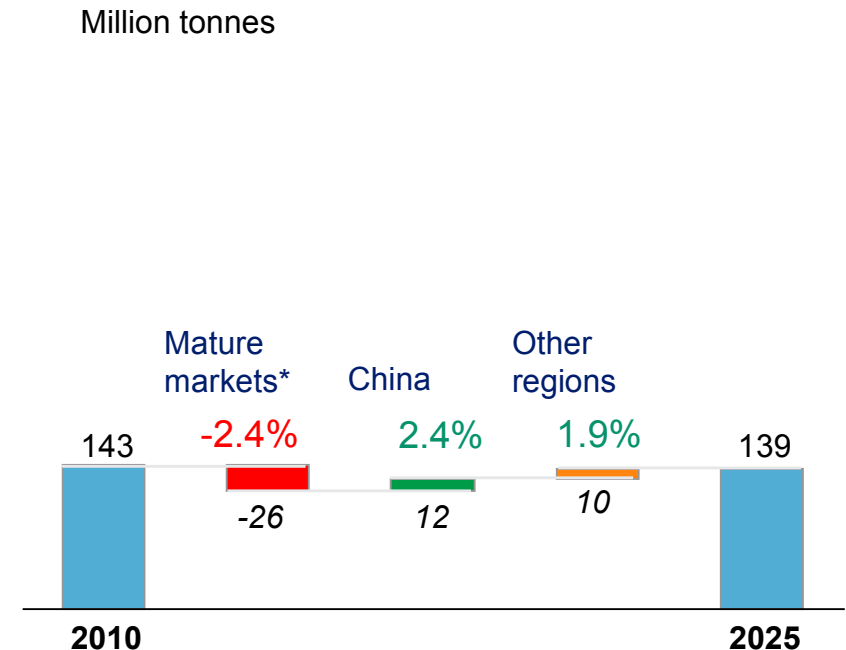
SO WHERE IS FIBRE NEEDED ?

The growth of paper and paperboard production is expected to be highest in China and other South East Asia. Graphic paper production will decrease globally.

Total Paper and Board Production



Graphic Paper Production

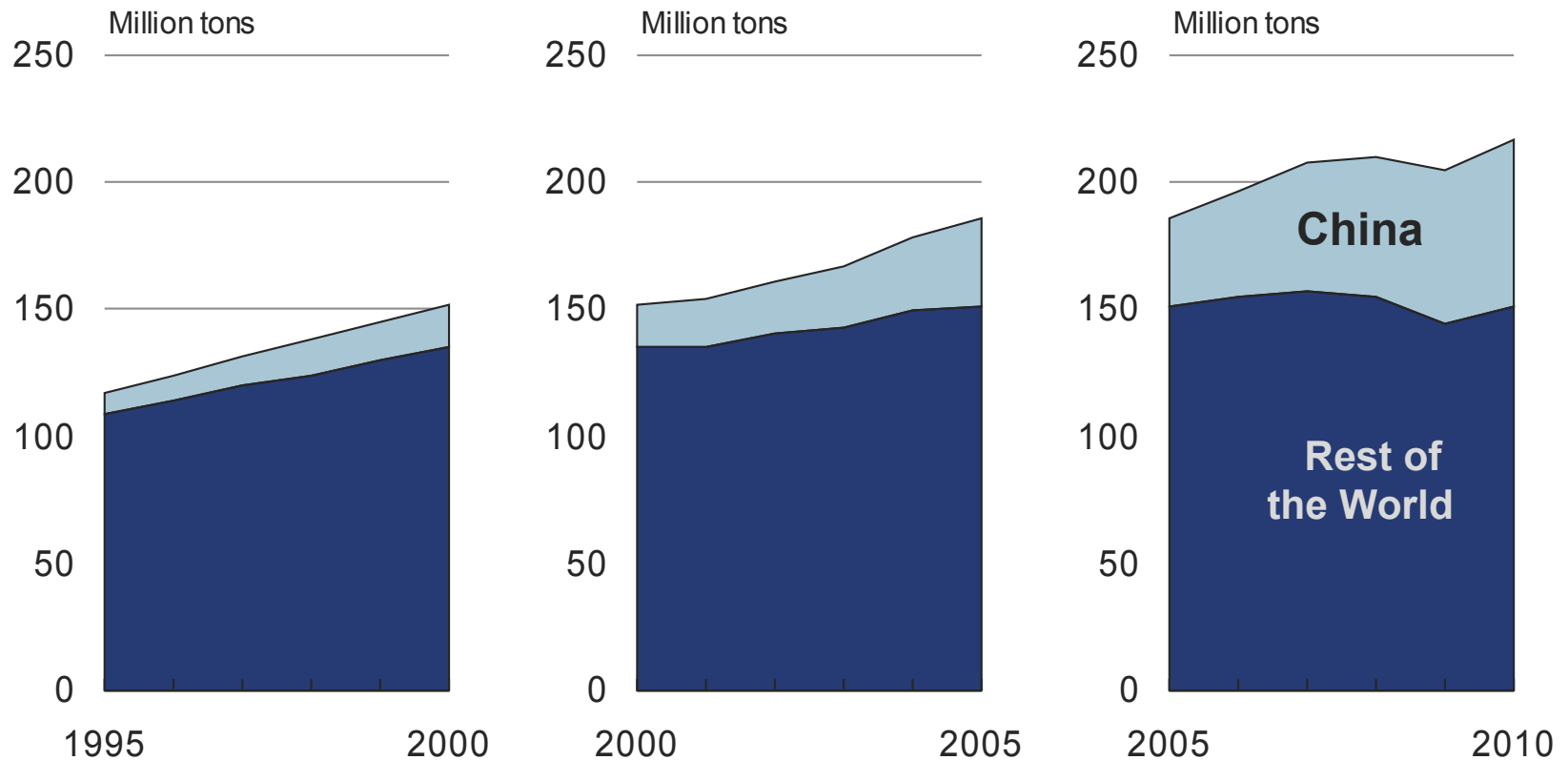


*) Mature markets: North America, Western Europe and Japan

30% OF GLOBAL RECOVERED PAPER IS CONSUMED IN CHINA

Recovered paper is particularly important to China.
One of the key engines behind the success of the Chinese paper and board industry.

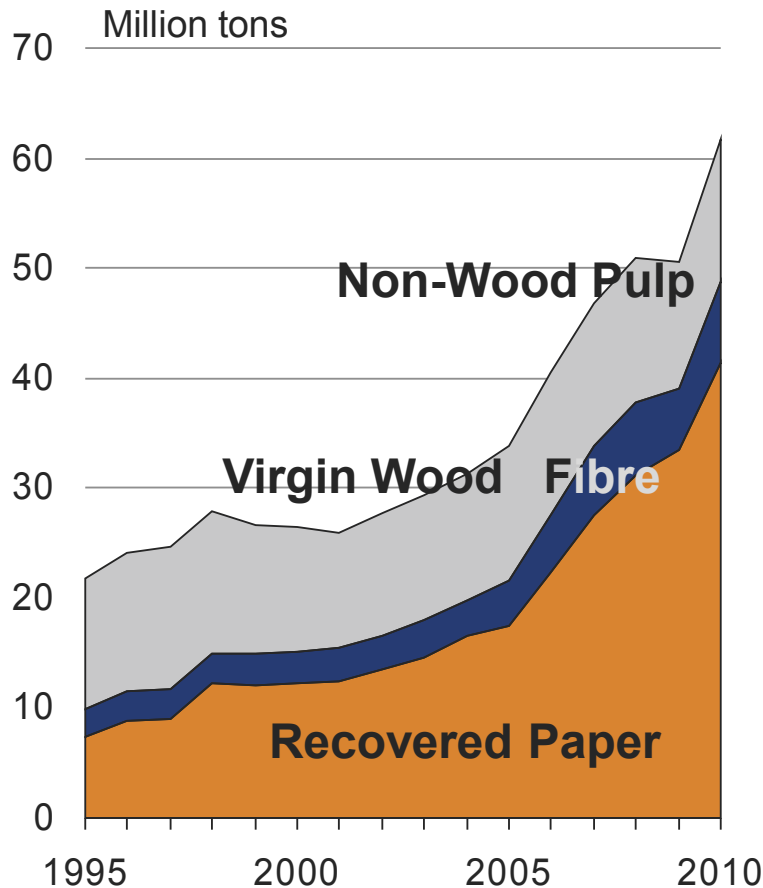
Global Demand for RCP



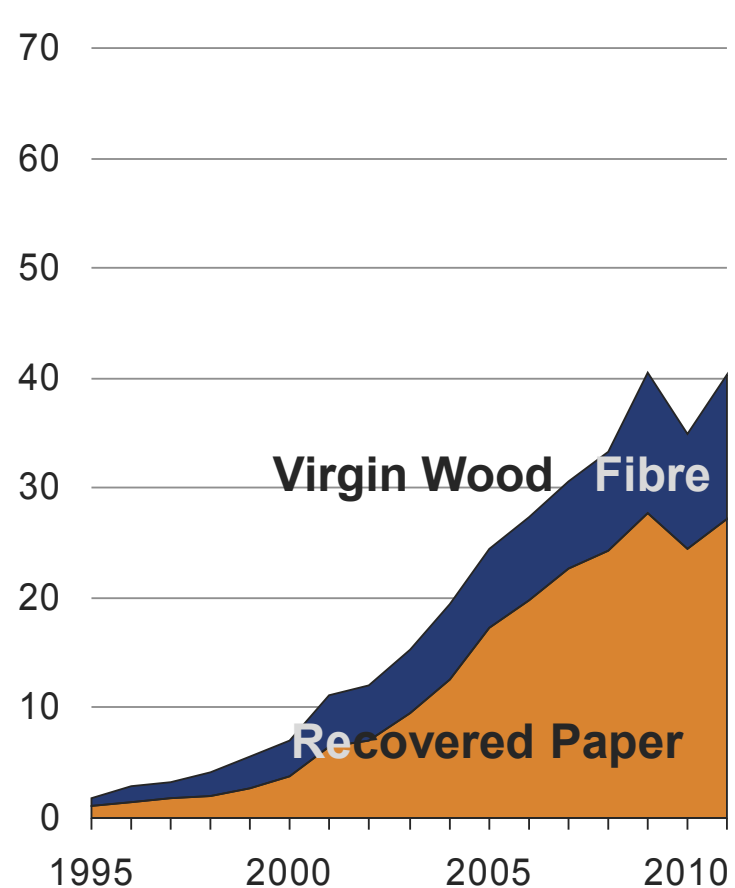
HOW IS CHINA PROCURING FIBRE ?

By 2010 China demand for papermaking fibre was close to 100 million tons – about 40% of that was imported.

Chinese Domestic Supply







Imports into China



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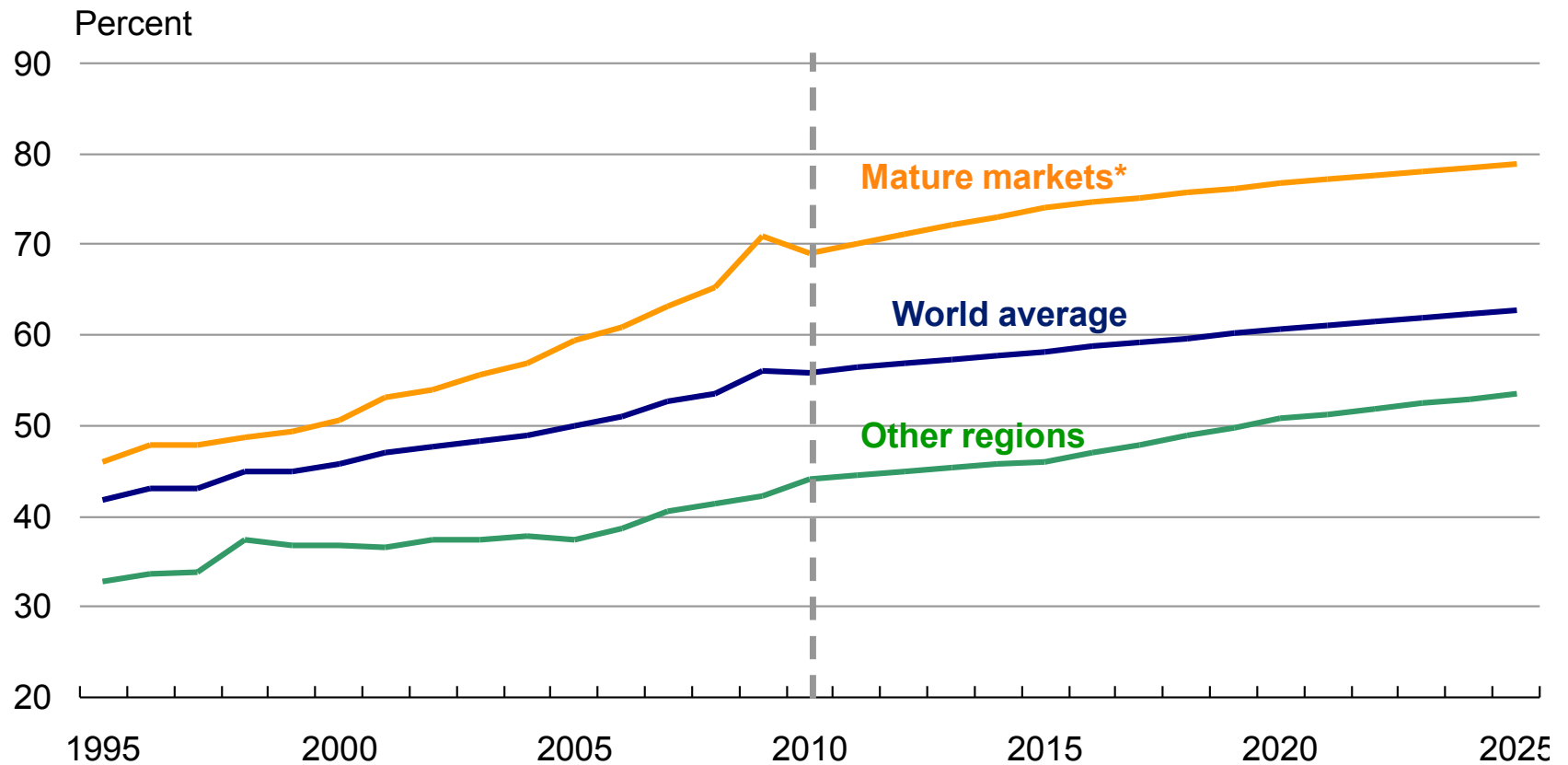
WHAT IS THE ROLE OF RCP ?

LOOKING AT RECOVERED PAPER

Main Grades	Grade Classification (ERPA*)	Share of Global Consumption
	High grades and pulp substitutes (HG/PS)	10%
	Old news and magazines (de-inking grades)	21%
	Old corrugated containers (OCC)	51%
	Mixed grades	18%

COLLECTION RATES APPROACHING THEORETICAL LIMITS

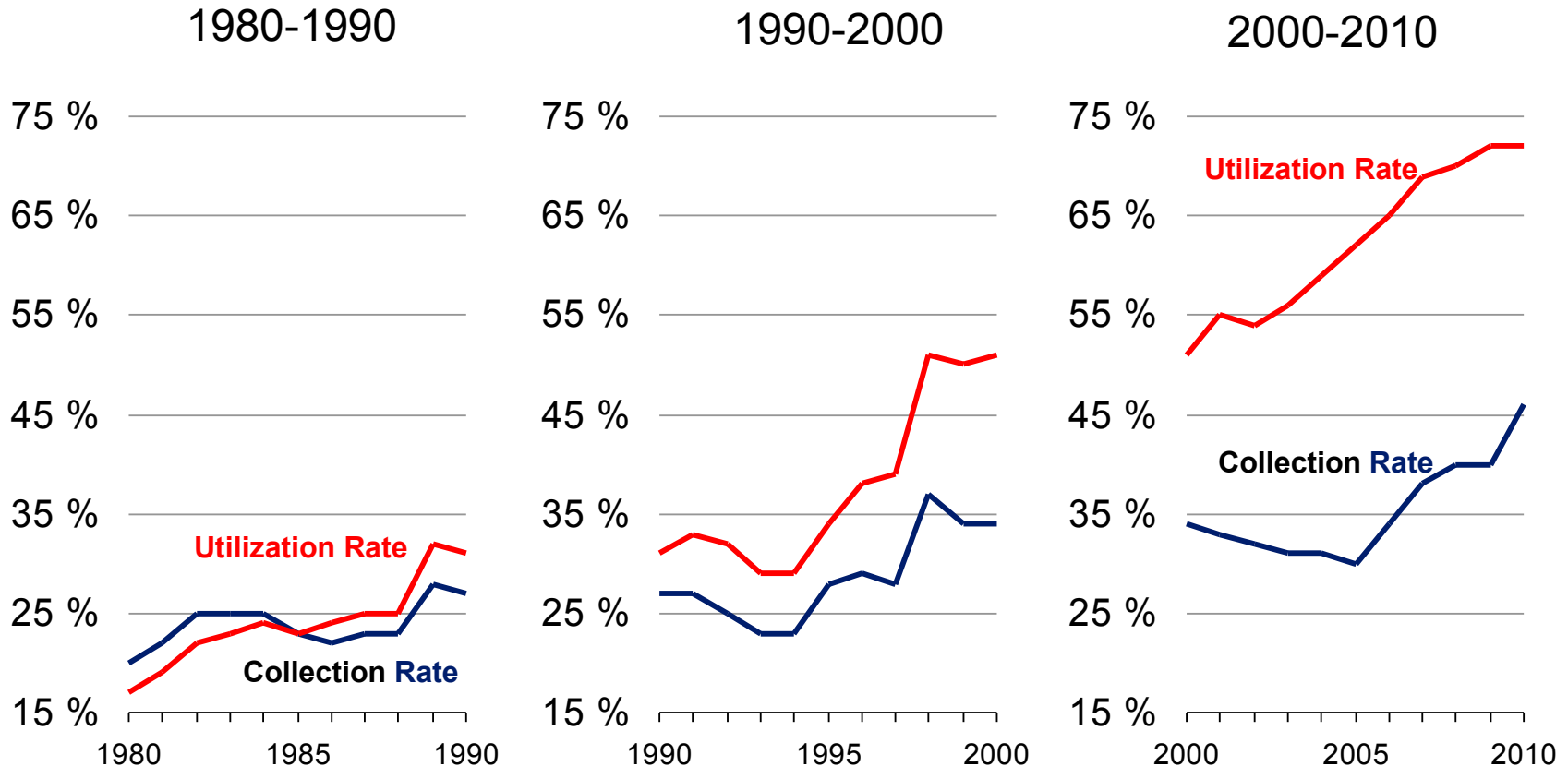
Stronger than expected decline in graphic paper consumption would tighten the recovered paper market balance considerably.



*) Mature markets: North America, Western Europe and Japan

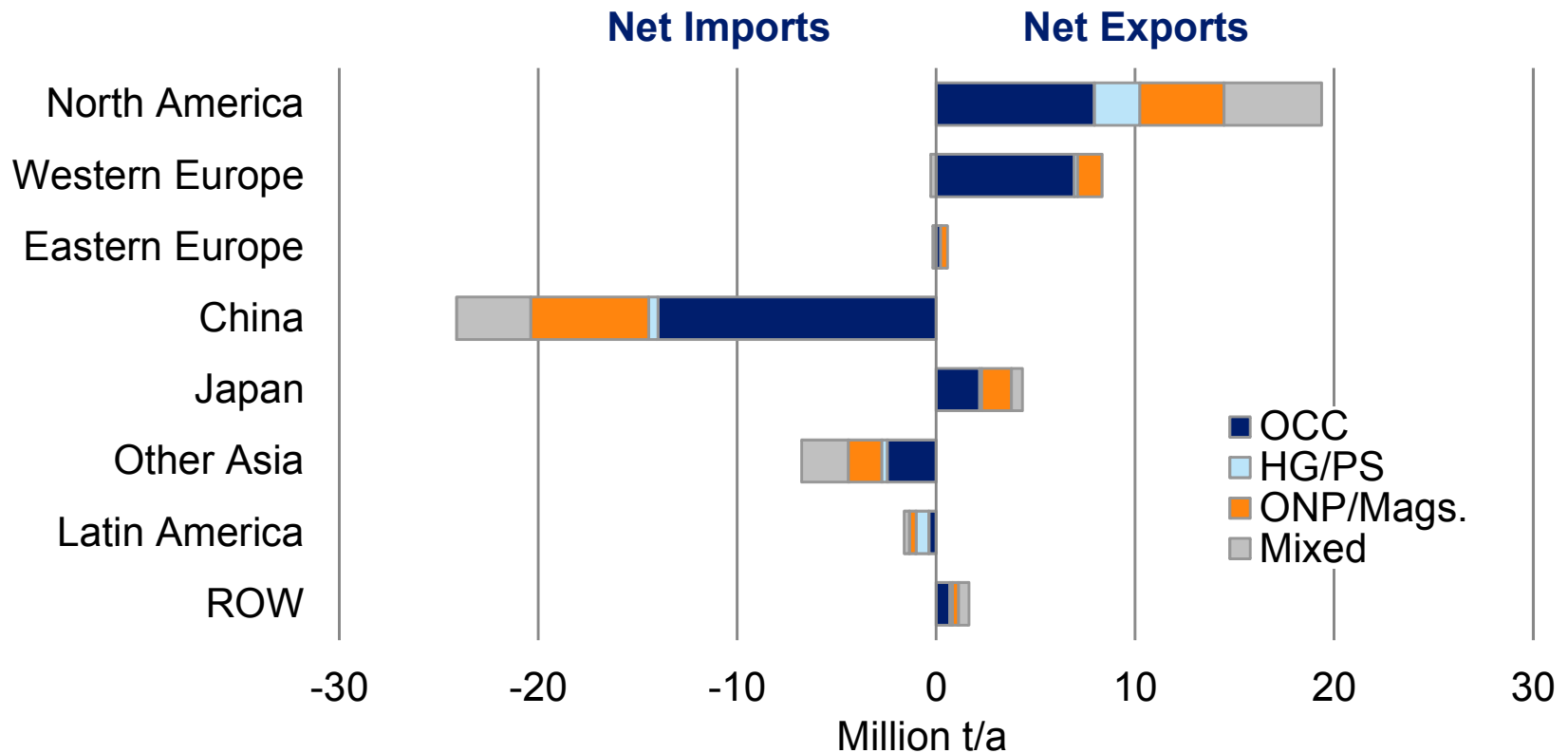
UTILIZATION AND COLLECTION OF RCP IN CHINA

The utilization rate of RCP is high in China – there is a need to collect more domestically, but how much more is possible ?



RECOVERED PAPER NET TRADE BY REGION IN 2010

The main sources recovered paper - USA, Western Europe and Japan - are also the markets showing declining demand for paper; So where will all this fibre come from in the future ?



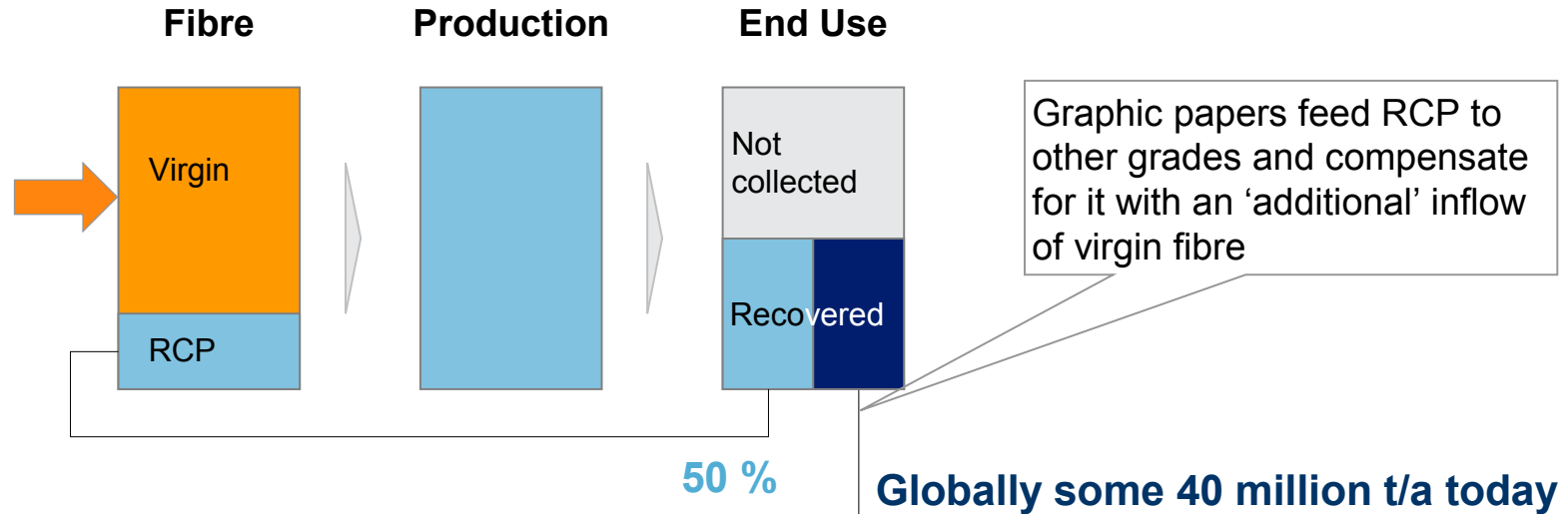
Source: National Trade Statistics

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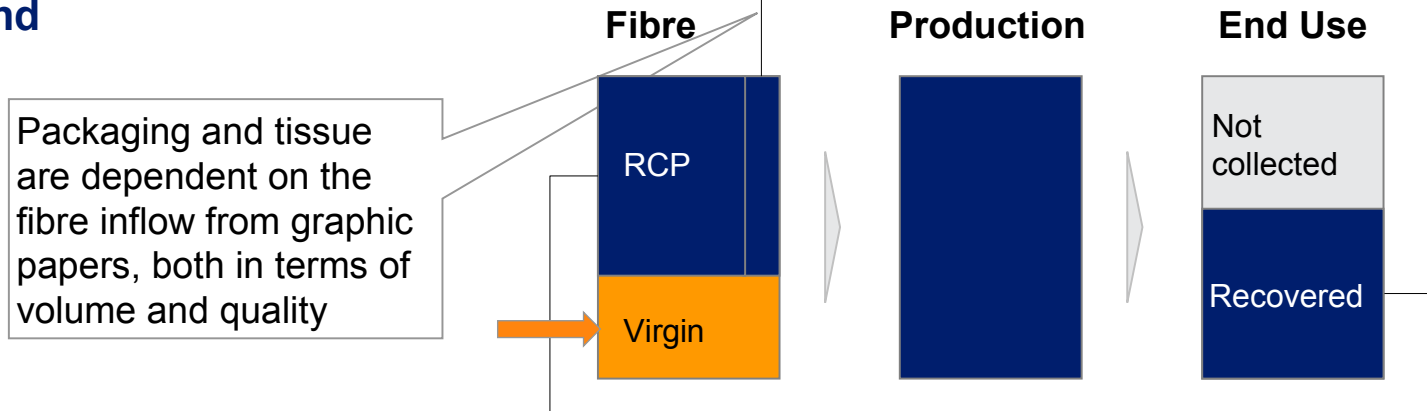
**ARE THE CURRENT RCP SOURCES
GETTING TOO SMALL ?**

GRAPHIC PAPERS PROVIDE FIBRE TO PACKAGING AND TISSUE

Graphic Papers

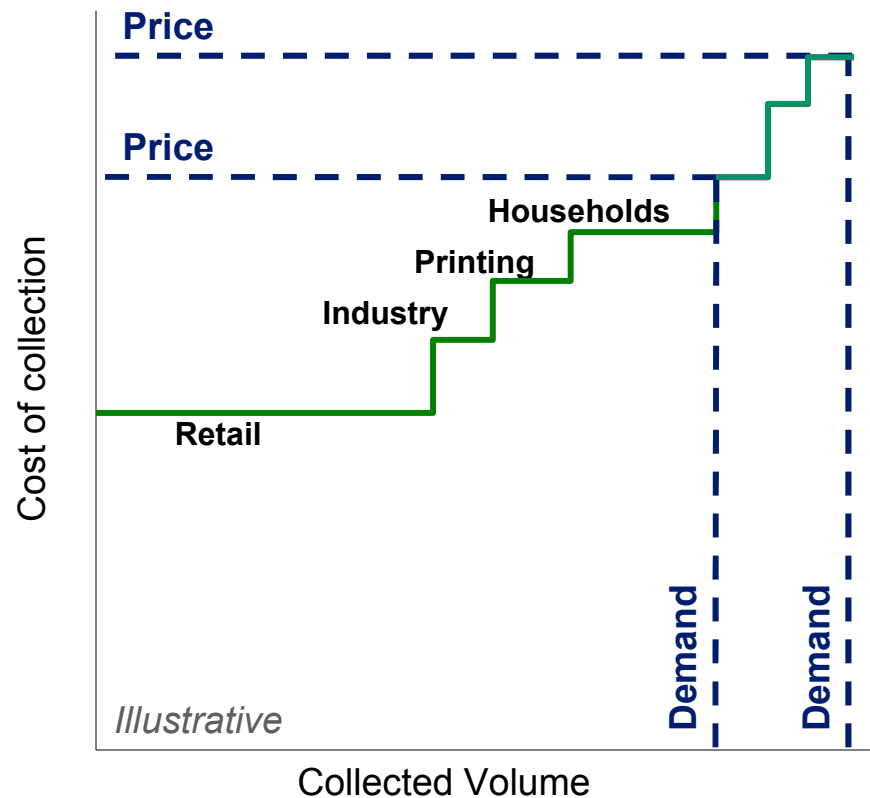


Packaging and Tissue



INCREASING COLLECTION RATES WILL LIKELY LEAD TO HIGHER COLLECTION COSTS AND PRICES

Since low-cost sources are already largely utilised, it is likely that the marginal cost of collection will go up in the future. This will drive prices higher.



RCP PRICES ARE RISING FASTER THAN KRAFT PULP

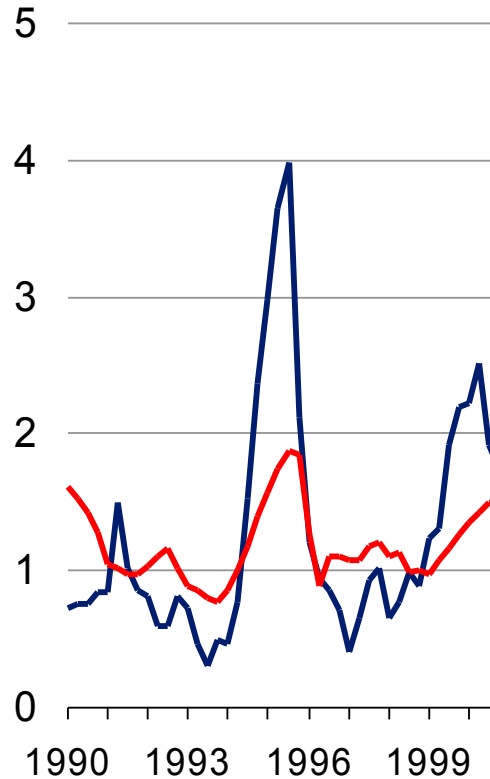
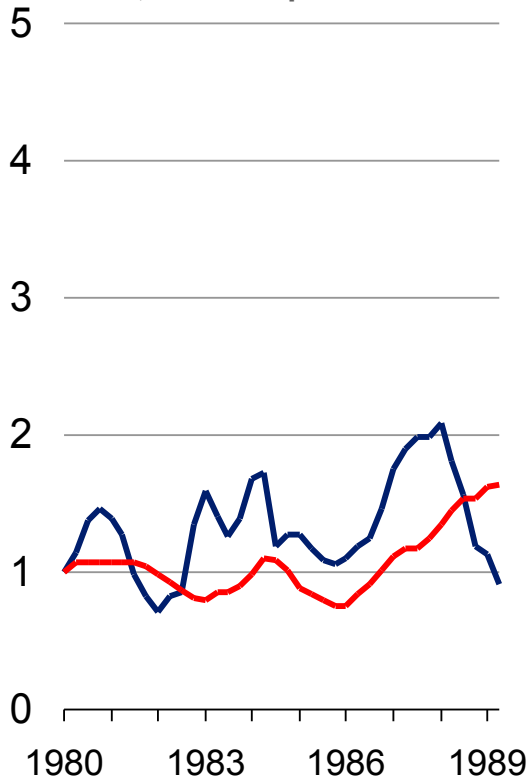
Price index for ONP and BHKP in the USA 1980-2011

1980-1989

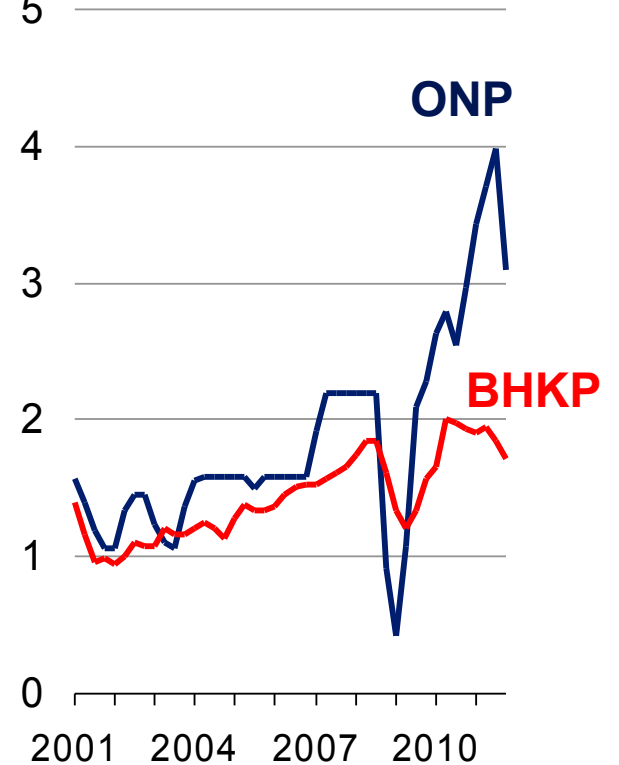
1990-1999

2000-2011

1980 = 1, nominal price index

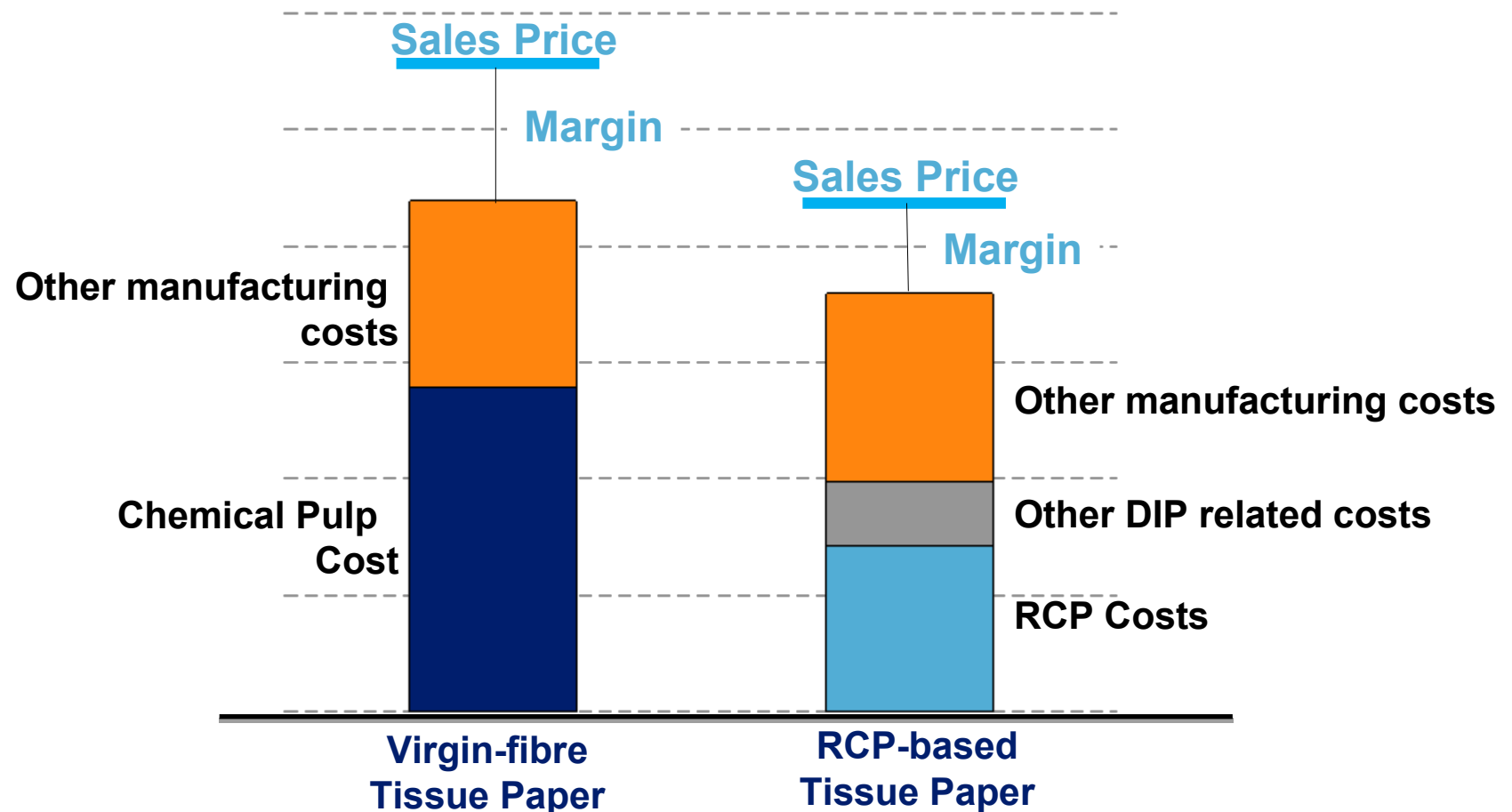


1980 = 1



SWITCHING TO CHEMICAL PULP....A VALUE CREATION ROUTE

There is an incentive, in e.g. many tissue products, to upgrade to market pulp as the cost of recycled fibre rises above the paying capability of the product.

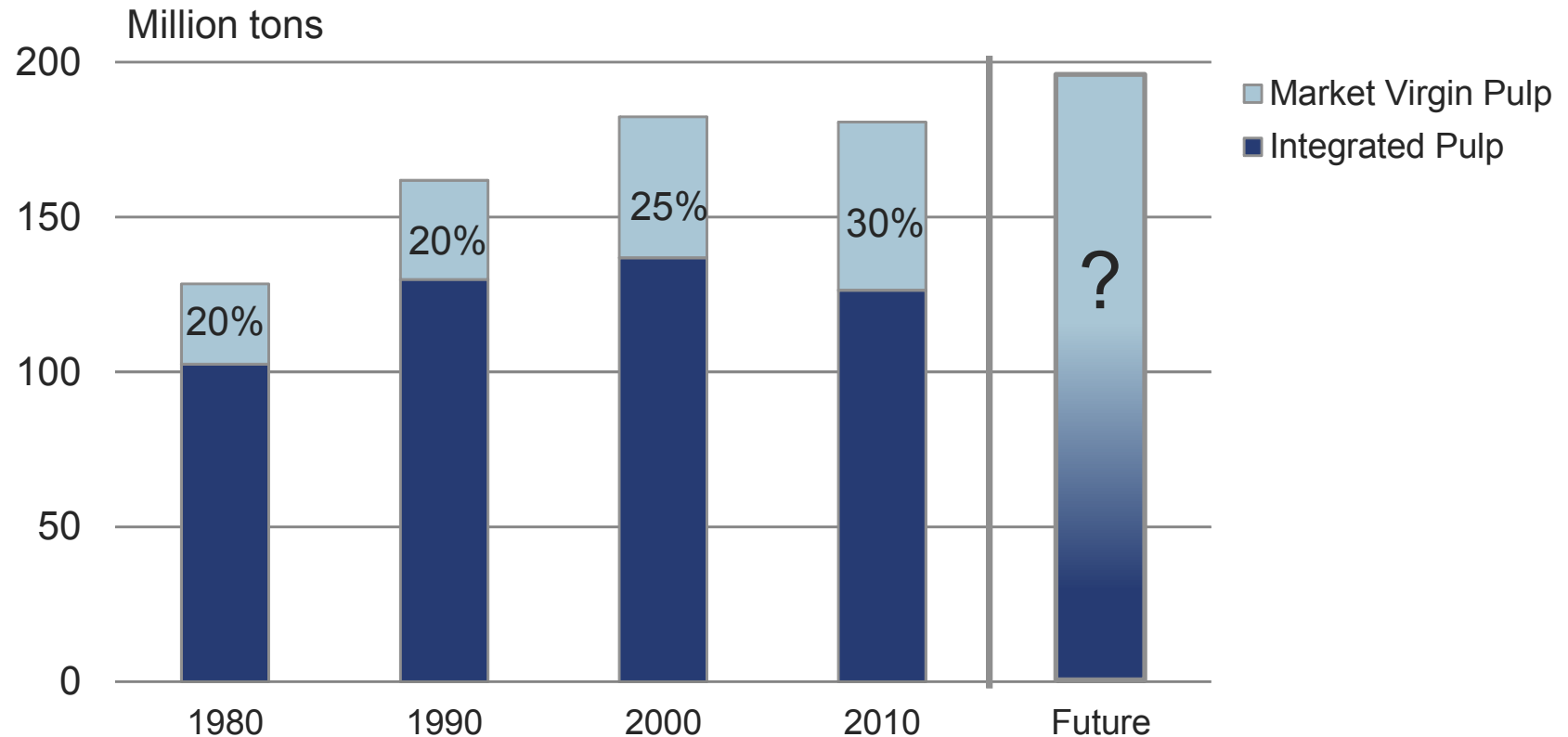


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**HOW WILL NEW ROLE OF VIRGIN MARKET PULP BE
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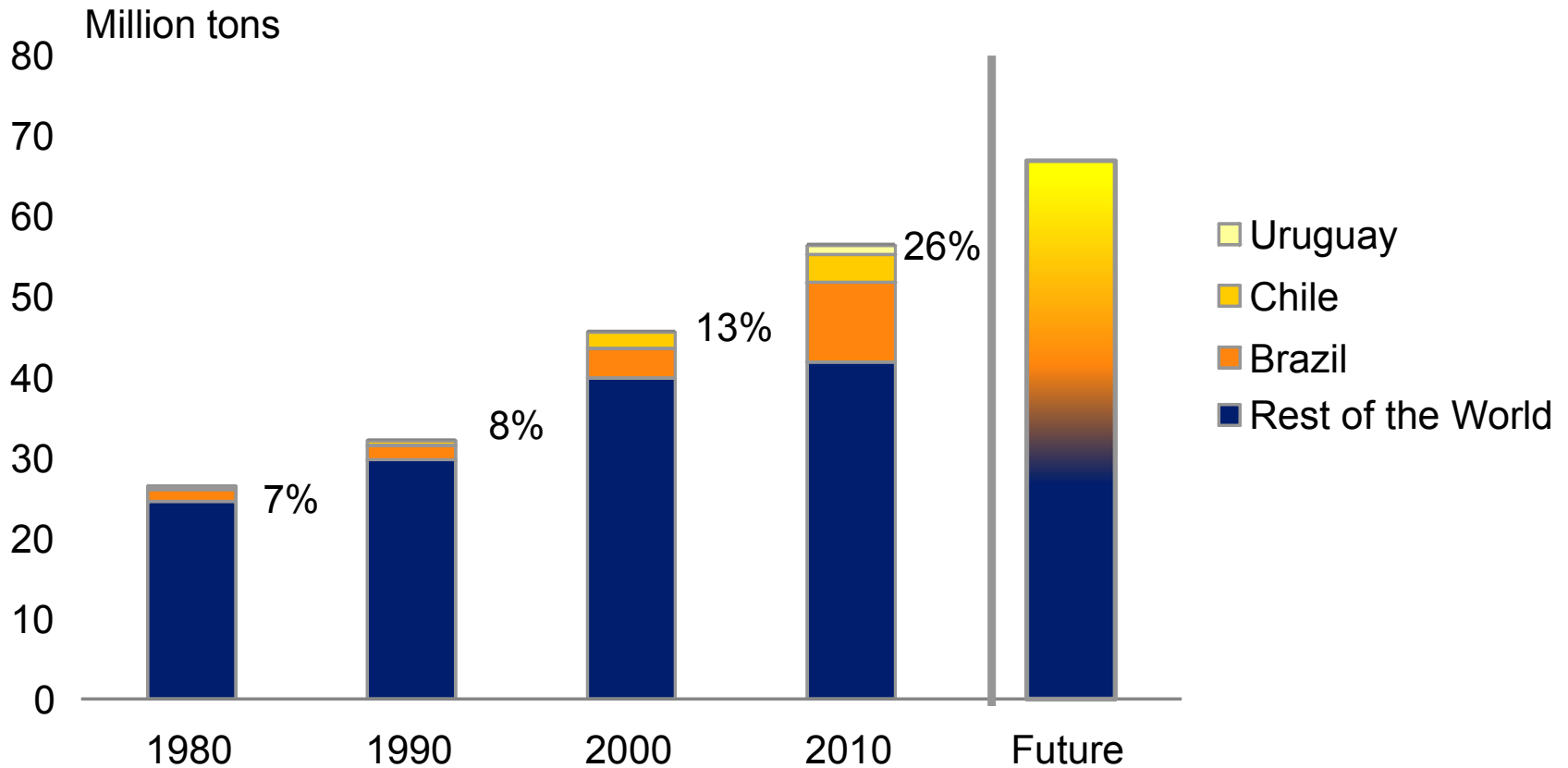
WORLD VIRGIN PAPERMAKING FIBRE DEMAND

What is the future role of market pulp ?



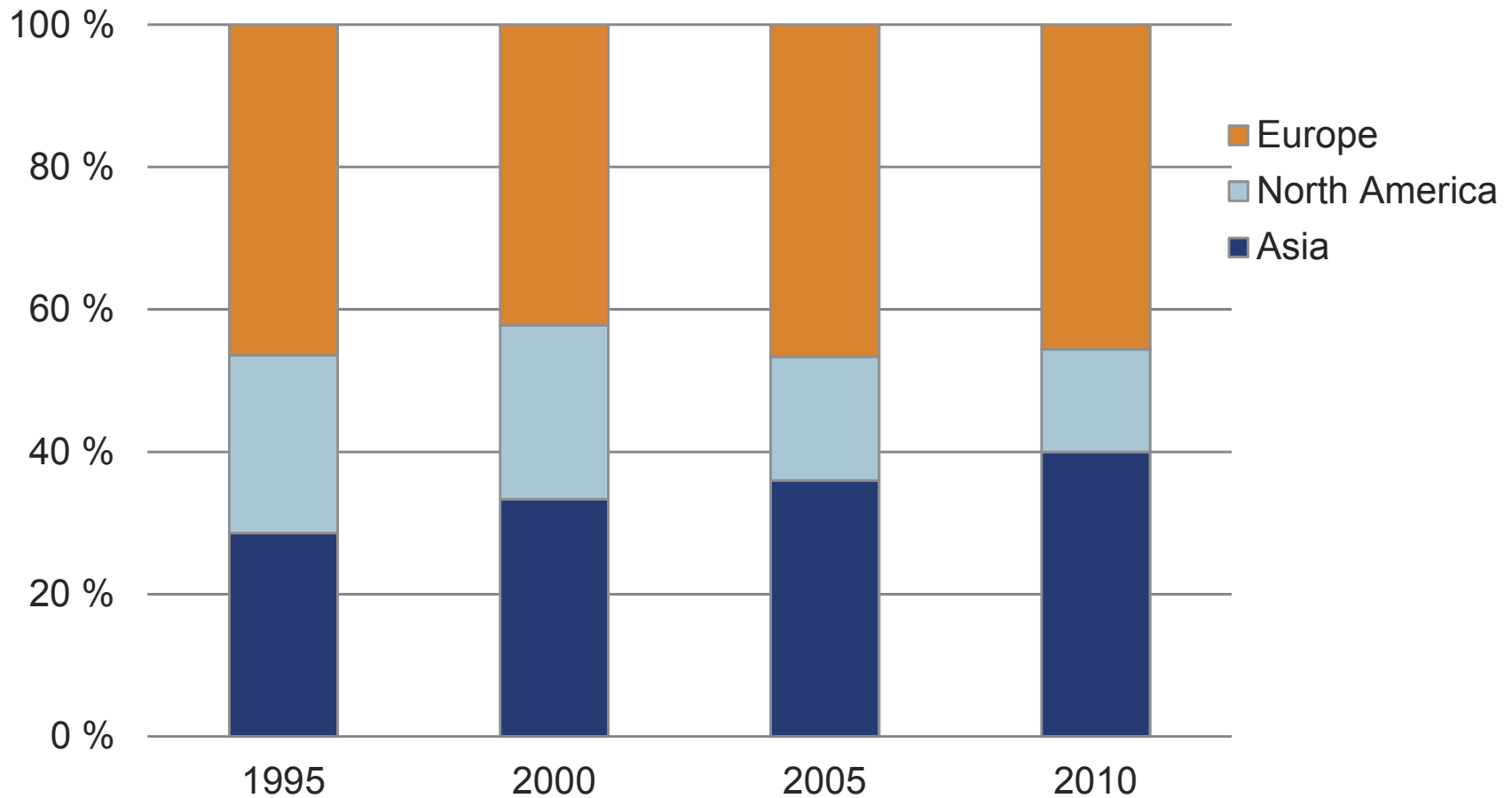
THE ROLE OF SOUTH AMERICA IN MARKET PULP BUSINESS

South America has become a key player in the global market pulp business. This role will increase substantially in the next decade.



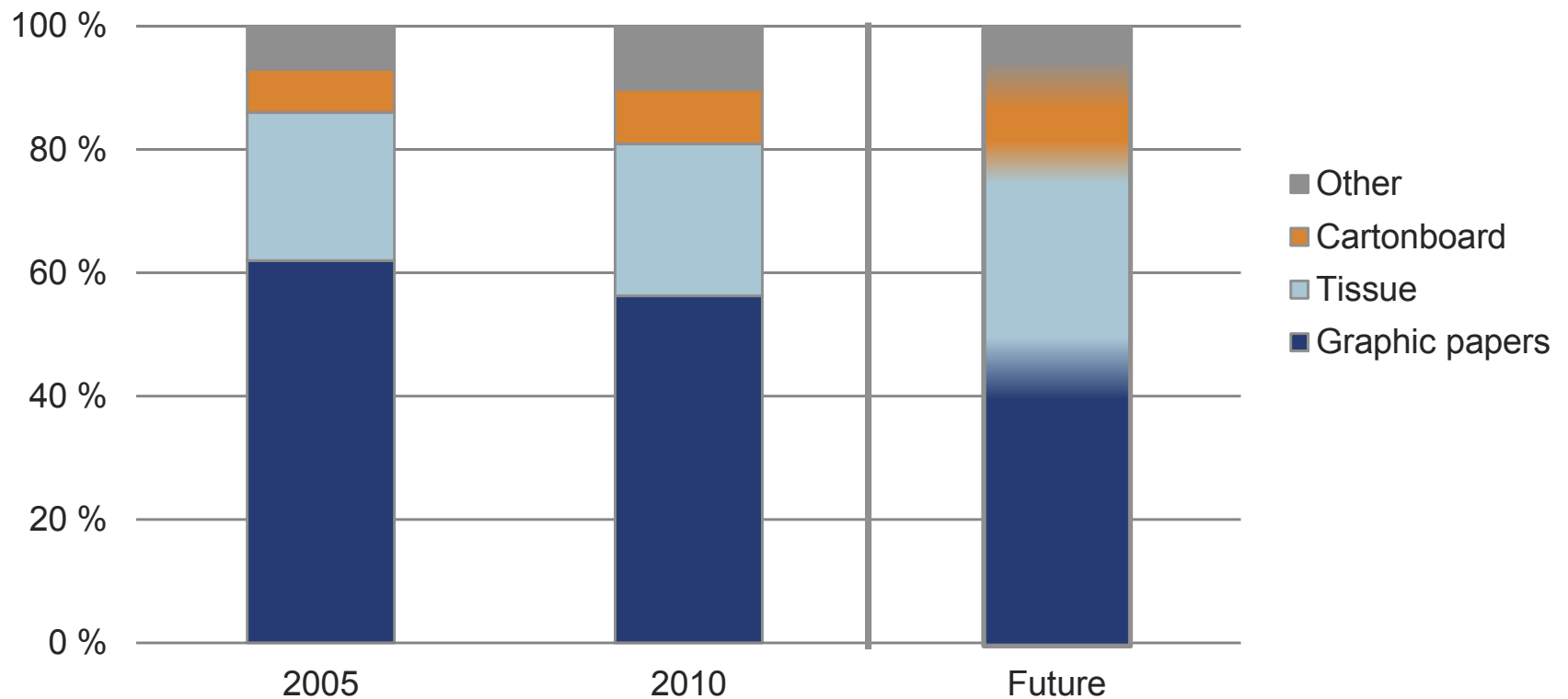
THE ROLE OF MATURE MARKETS – CHANGING ?

Development of exports of Kraft pulp from South America



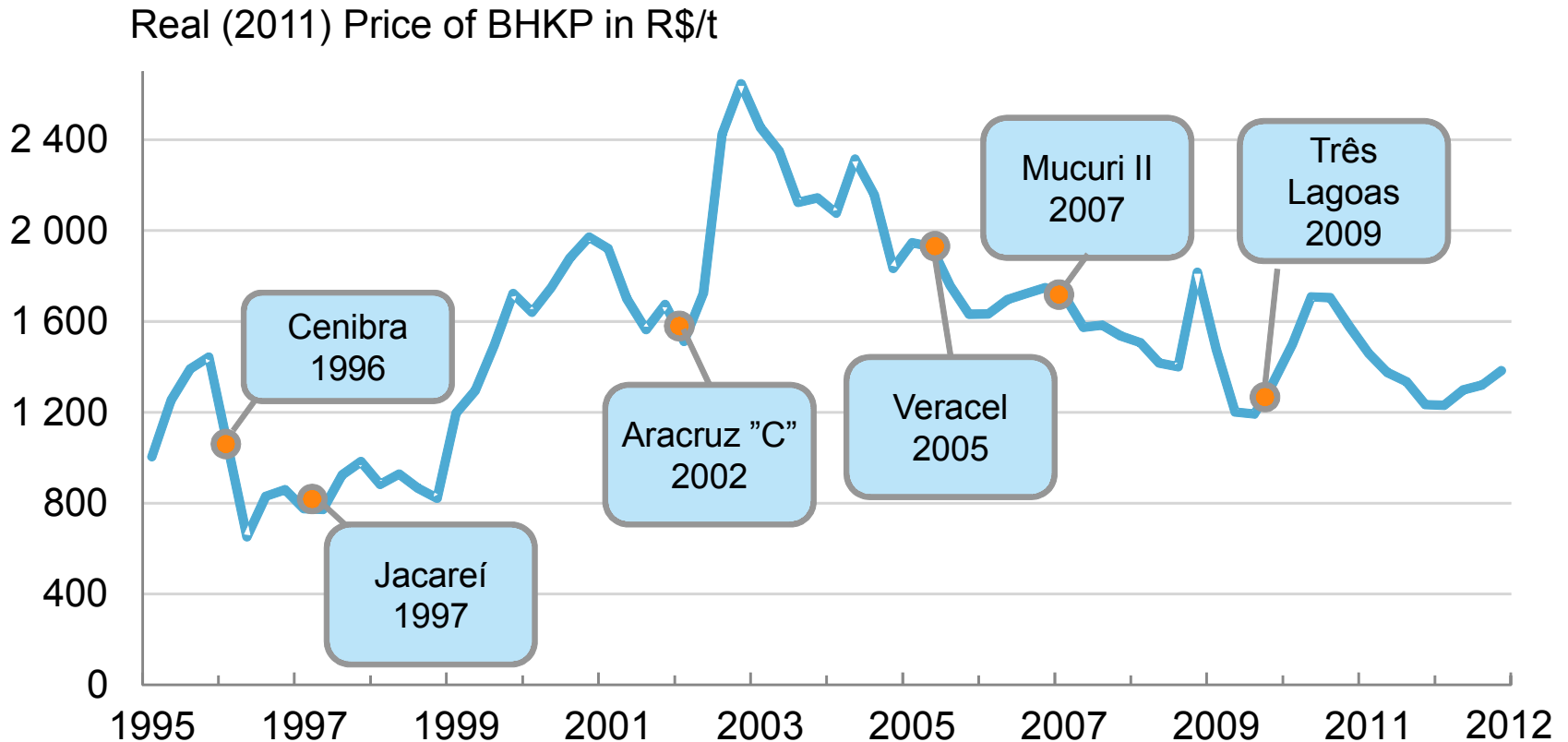
GROWTH NEEDS TO BE FOUND OUTSIDE GRAPHIC PAPERS

Development of end uses for BHKP market pulp



BHK PULP PRICE DEVELOPMENT – IN BRAZILIAN REAIS

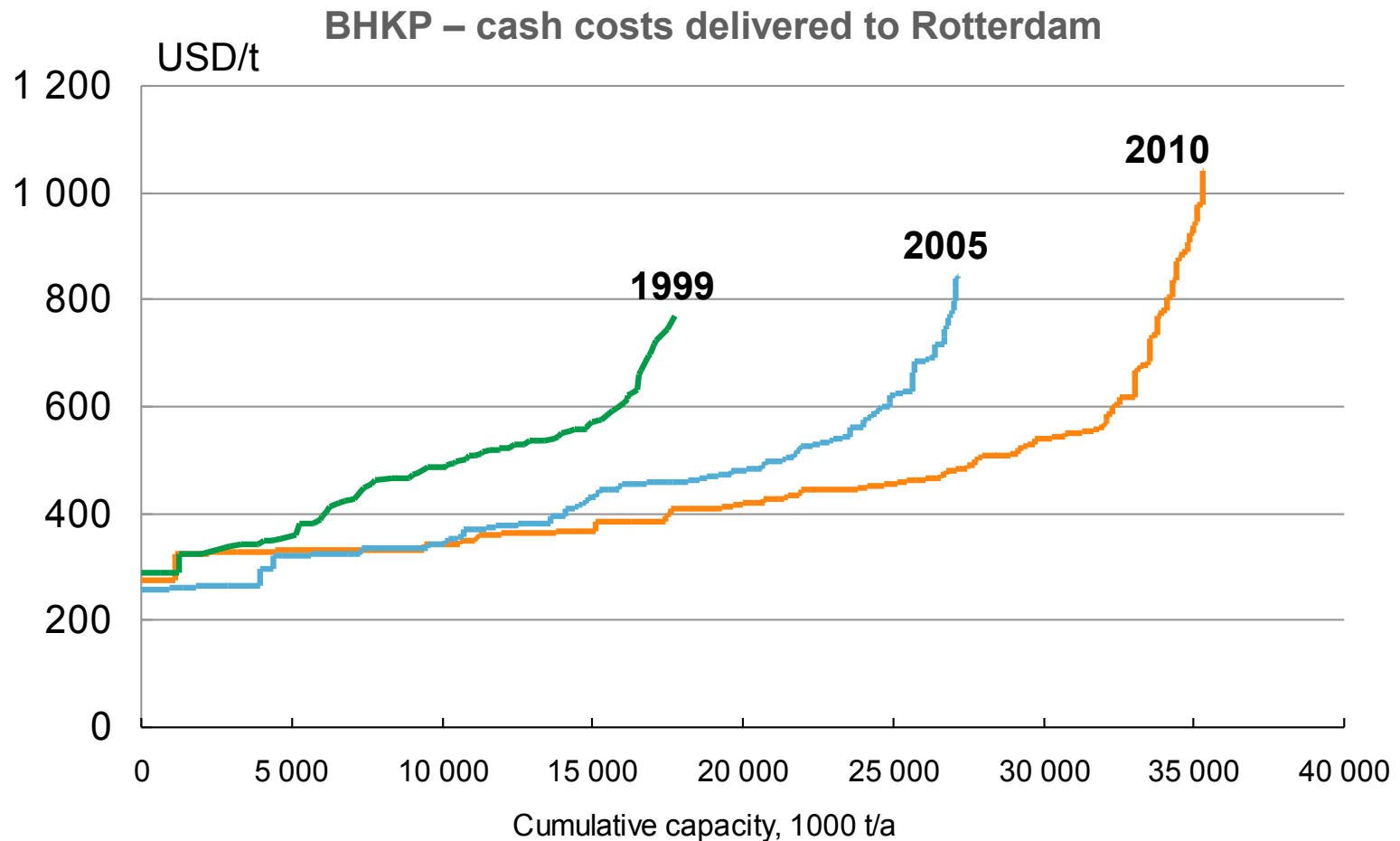
The strengthening of the Real has had a major impact on the profitability of pulp industry.



Examples of pulp mill/line start-ups

...AND AS MORE CAPACITY ENTERS THE MARKET ...

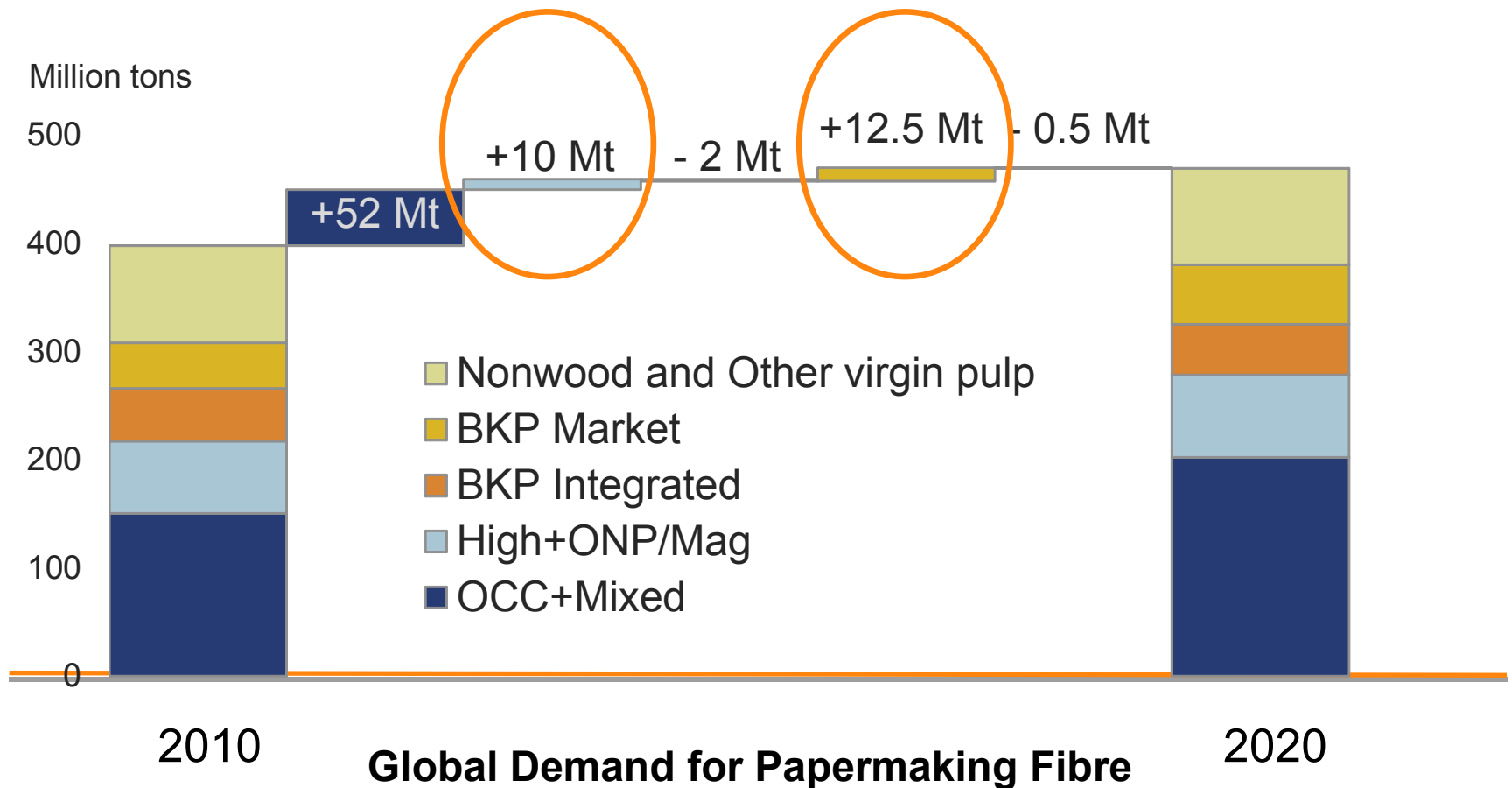
A flat and rising cost curve is changing the attractiveness of market pulp business.



WORLD OF FIBRE – ARE WE HEADING FROM ERA OF RCP TO A FUTURE OF VIRGIN PULP?

CONCLUSIONS

A GROWTH OPPORTUNITY IN THE GLOBAL PAPERMAKING FIBRE BUSINESS



THANK YOU!



PÖYRY

Engineering balanced sustainability™

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