

TISSUE FORUM @ PAPERCON 2011



State of the Tissue Industry – 2011 and Onwards

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PRESENTATION STORYLINE

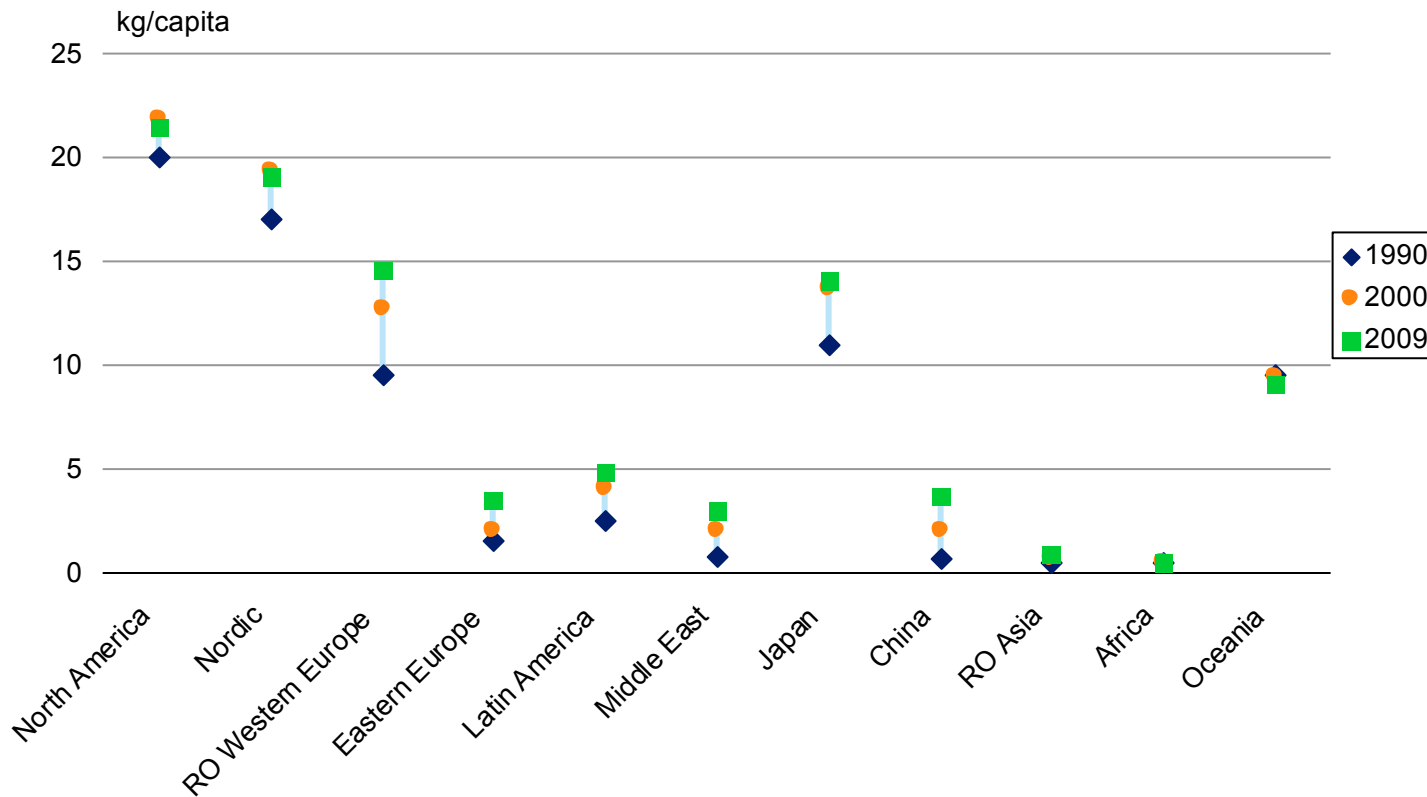
- Sizing the market
- Industry structure and fiber
- Growth and investments
- Wrap-up

STATE OF THE TISSUE INDUSTRY – 2011 AND ONWARDS

SIZING THE MARKET

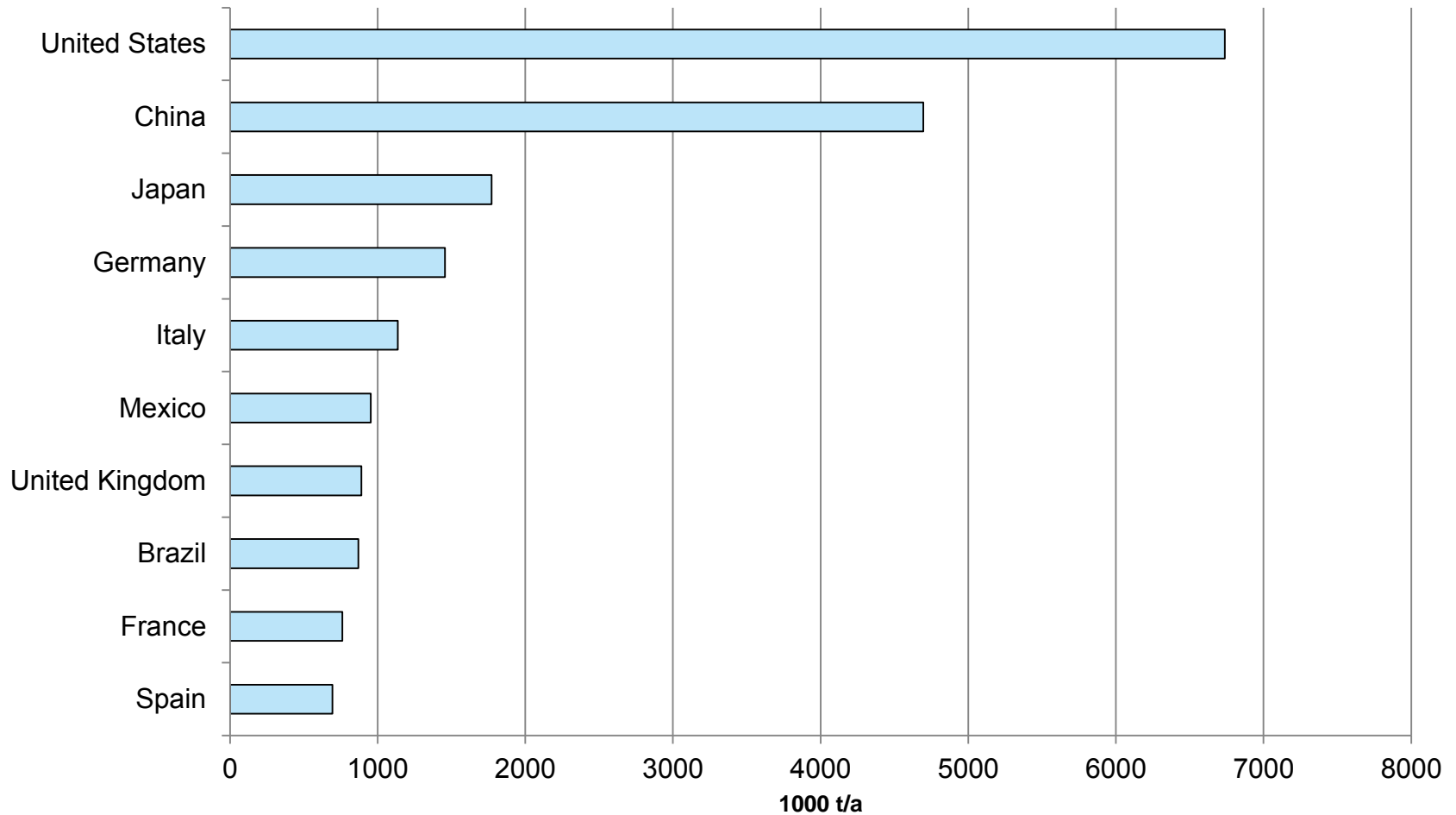
Per capita development

World regions are very different in terms of tissue per capita consumption – and highest per capita is in North America. Most opportunity for growth is in Asia, Eastern Europe, Middle East and Latin America going forward. Where will the consumption levels settle?



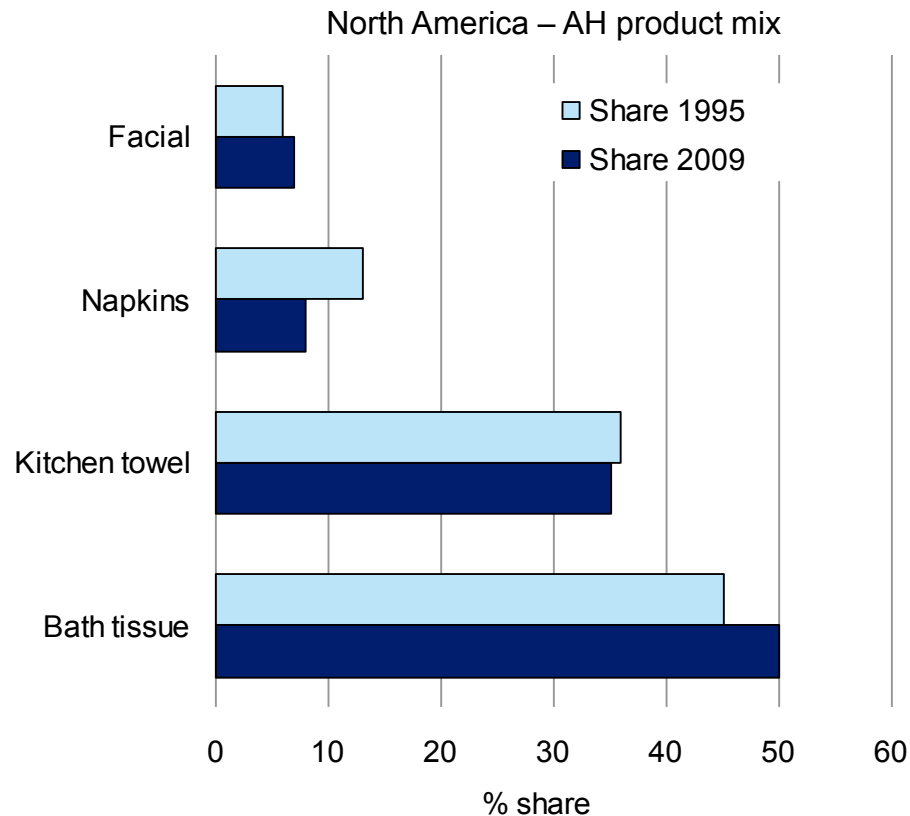
Top 10 Tissue Consuming Countries

USA is the by far the biggest tissue market today. China is expanding rapidly.



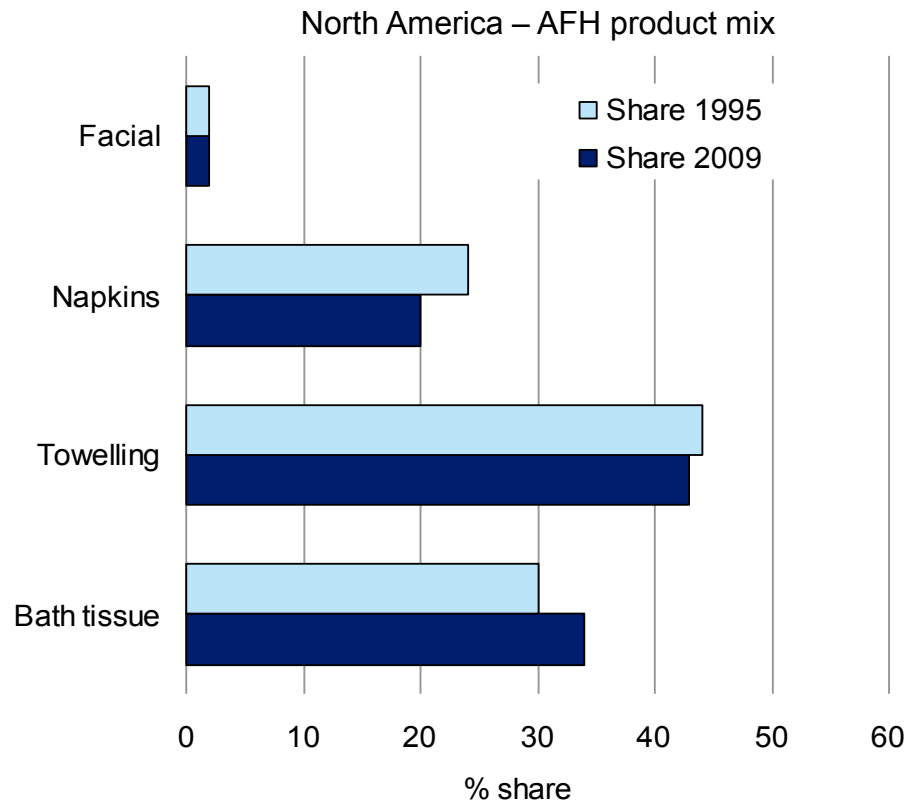
At-home; products and developments

At-home tissue market is 65-70% of total in North America. Bath tissue and kitchen towels dominate with positive future outlook. Private labels will continue to increase share. Virgin fiber accounts for about 80% , which is much higher than in AFH.



Away-from-home; products and developments

Away-from-home segment accounts for some 30% of demand in North America. Towelling products are key followed by bath tissue and napkins. Recycled fiber is the main raw material.



Segments and developments; China and Europe

China

- At-home is the main segment (90%) and majority of products are bath tissue. Towel usage is undeveloped yet.
- Large share of the market is still non-wood and recycled fiber based – quality levels are improving with new investments based on virgin fiber.
- Away-from-home segment is 9-10% of tissue demand in China. Focused in the urban markets.
- This segment is expected to develop in the long run.

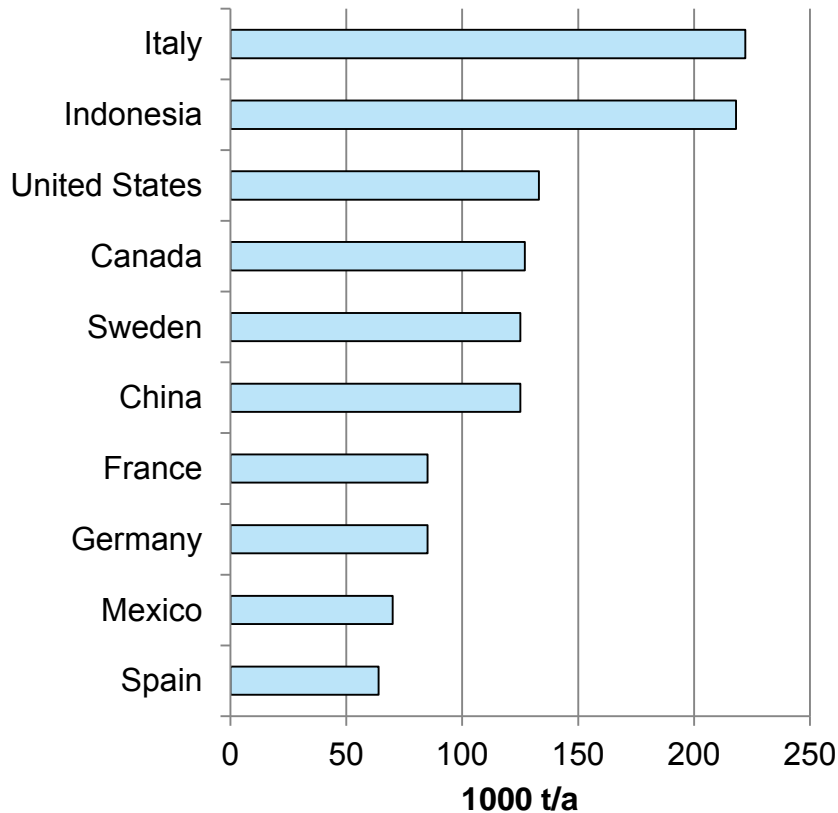
Europe

- At-home is about 75% and AFH the remaining. Bath tissue accounts for 55 % in Western Europe and 70 % in Eastern Europe. Towels are gaining ground but in volume terms bath tissue increases the most (penetration of usage in Russia and other EE)
- Quality has improved in both AH and AFH segments in all categories and steady future growth, as driven mostly by per capita consumption, where there is plenty of potential in many countries
- Private label dominates in selected countries, Germany very high 70-80%, Finland 30 %, on average 50% in Central Europe
- Recycled fiber accounts for little less than half of the raw material need and the virgin pulp is almost entirely market pulp

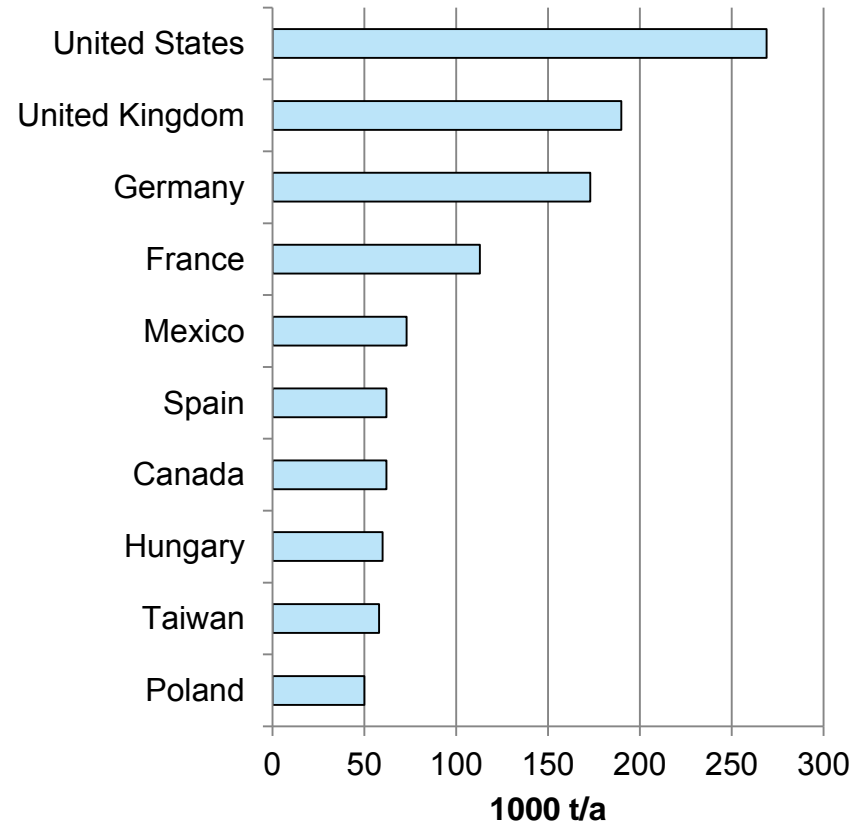
Tissue Exporters and Importers

Tissue is currently not a major globally traded commodity, but intra-regional trade exists in Europe and North America. New developments with imports from Indonesia.

Exporters



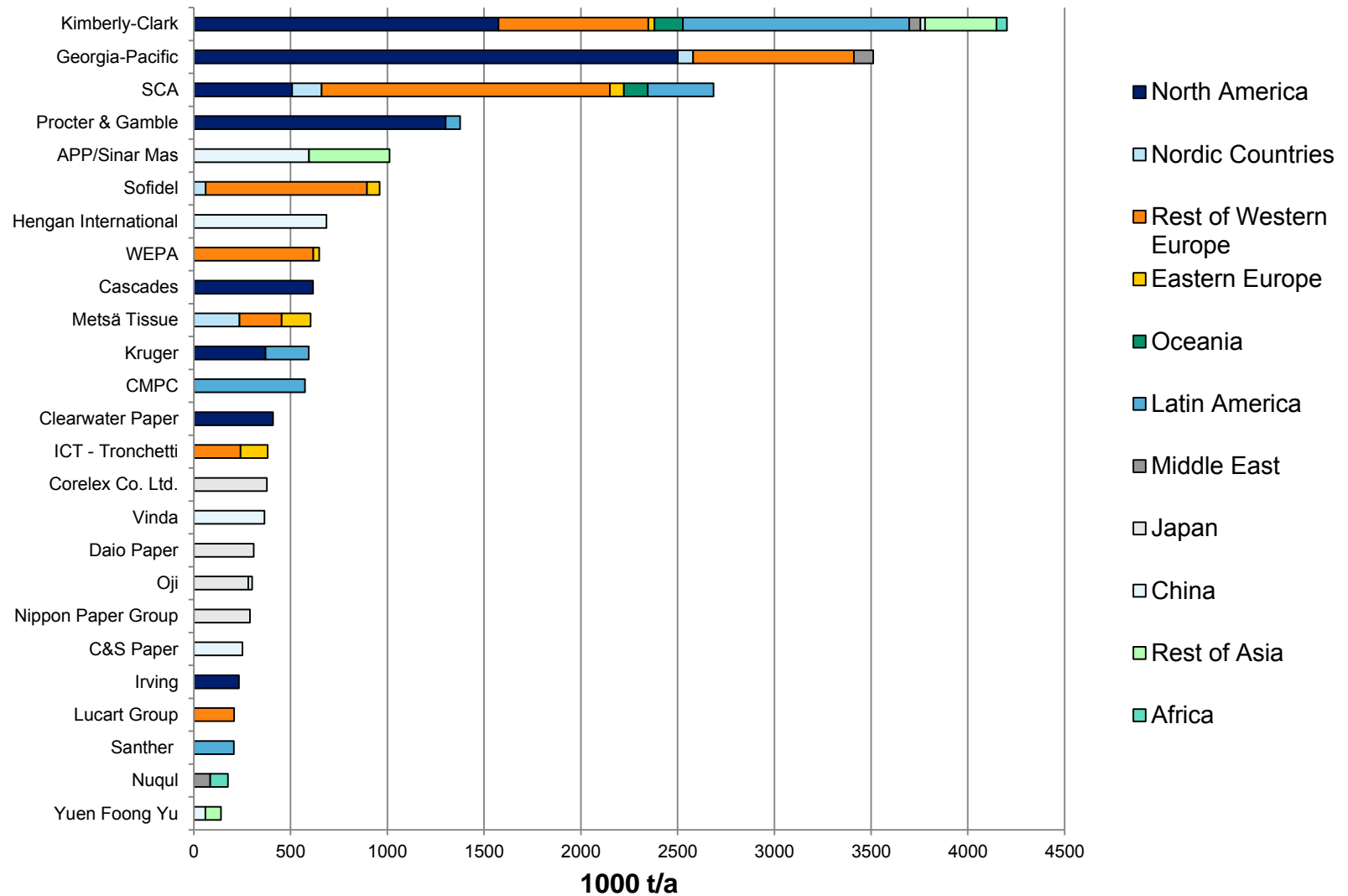
Importers



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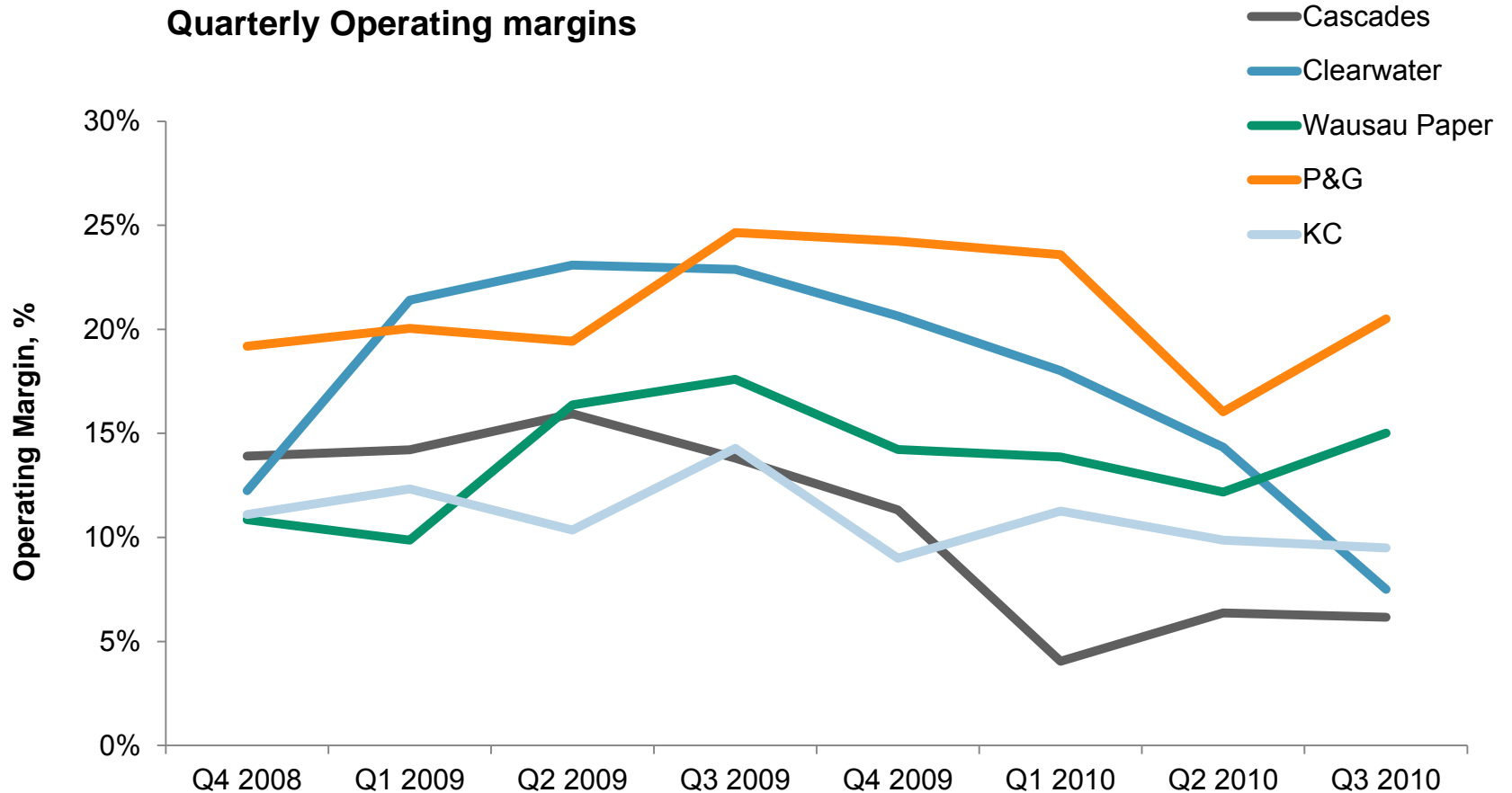
INDUSTRY STRUCTURE AND FIBER

Top 25 Tissue Producers by Capacity 2011



Profit margins

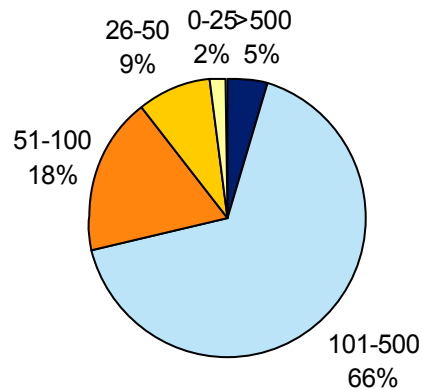
Average profit margins at 10-15% with a downward pressure during 2010, driven by higher fiber costs. Overall North American suppliers are more profitable than Europeans – more brands in NA? Higher quality?



Tissue industry structure 2011

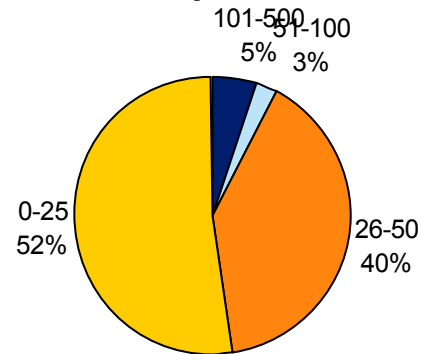
North America has the large scale mill infrastructure (70% of mills over 100,000 t/a). Mill sizes are creeping up in Europe and China? Small scale mills most typical in Japan.

North America



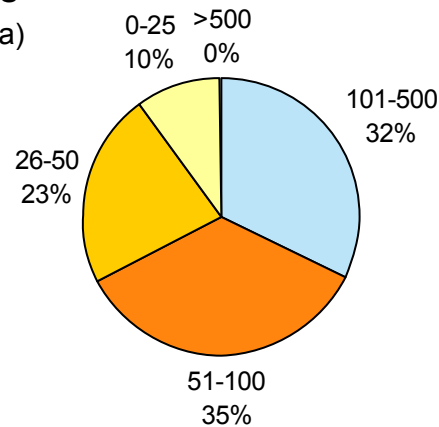
Total capacity 8.6 MM tons
(Mill scale in pie chart – 1000t/a)

Japan



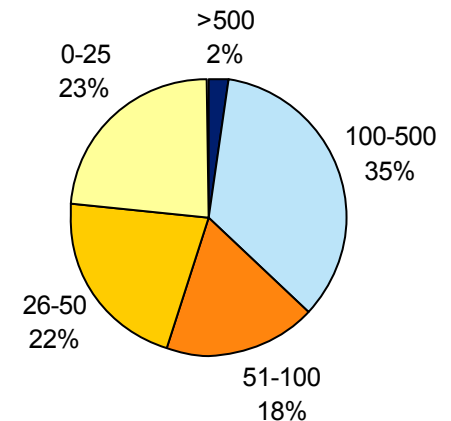
Total capacity 2.2 MM tons

Europe



Total capacity 7.5 MM tons

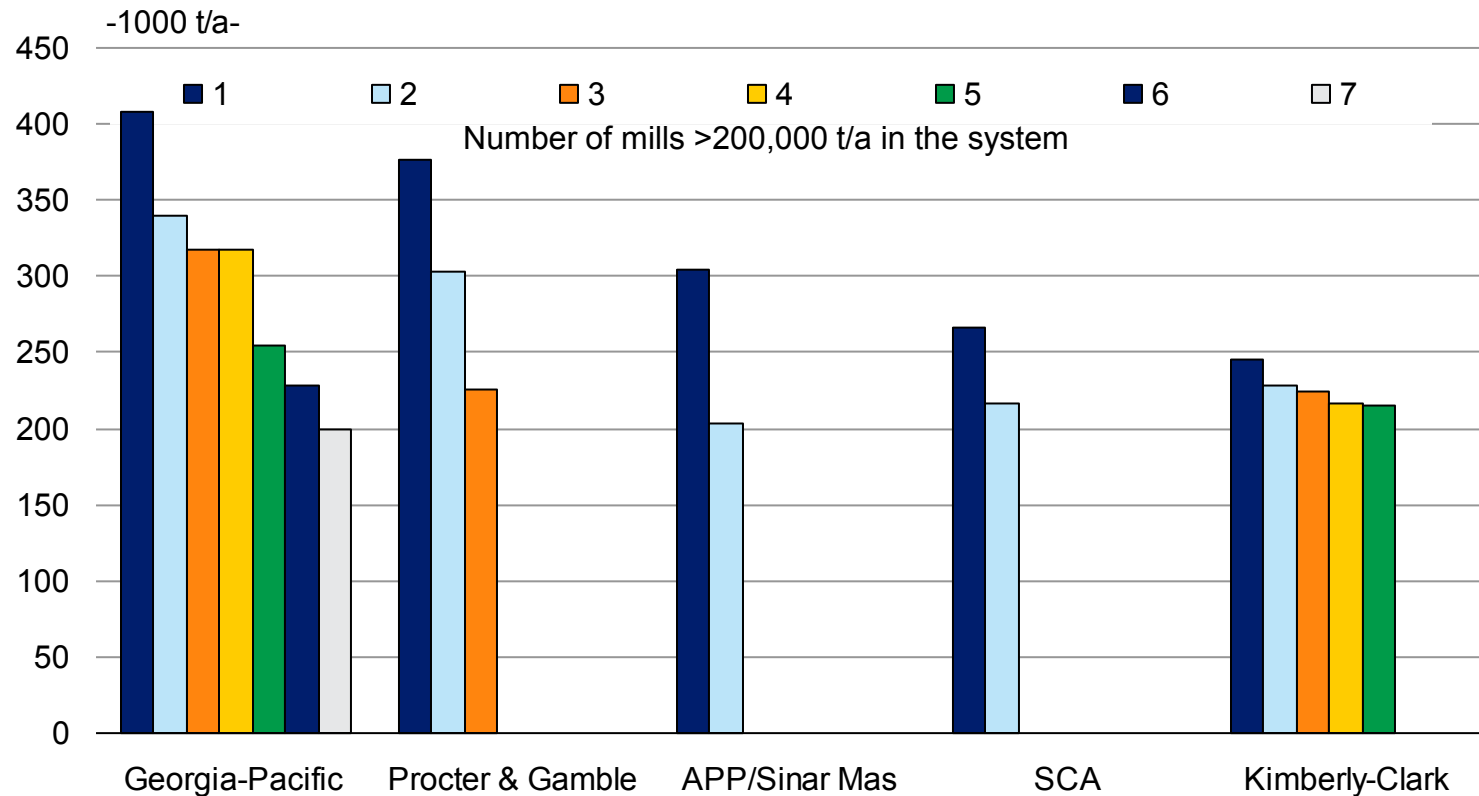
China



Total capacity 5.6 MM tons

Tissue mill scale – # of large scale >200K t/a mills

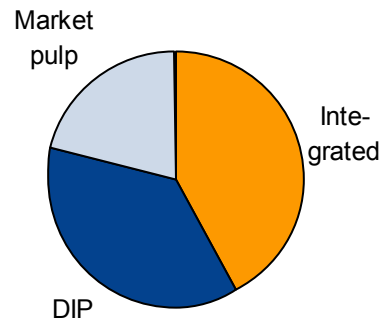
... North American mills are larger scale; and new investments in mills in Asia will increase the size of the mills (e.g. APP/SinarMas)



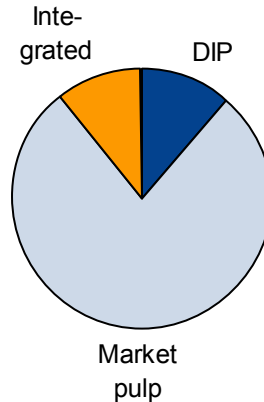
Fiber for Tissue Manufacture – North America

Top producers are different in terms of overall fiber strategy, and larger scale mills correlate with an integrated mill concept for AH and AFH. When producing at-home products focus is on virgin fiber, and typically market pulp.

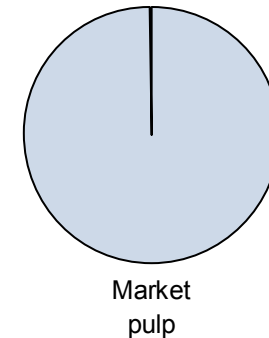
Georgia-Pacific



Kimberly-Clark

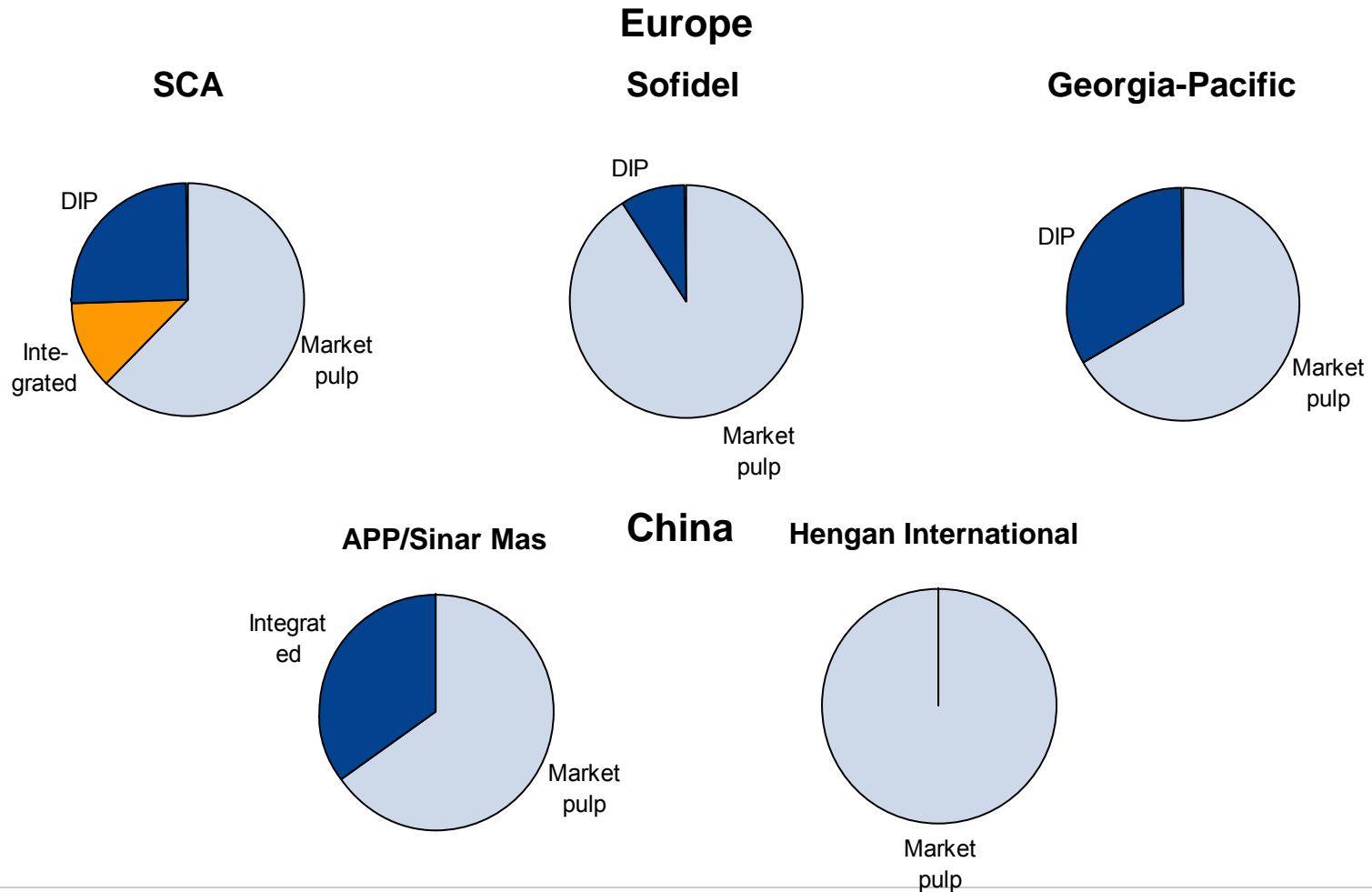


Procter & Gamble



Fiber for Tissue Manufacture – Europe and China

Market pulp is core in Europe and China (with major producers especially/new investments).

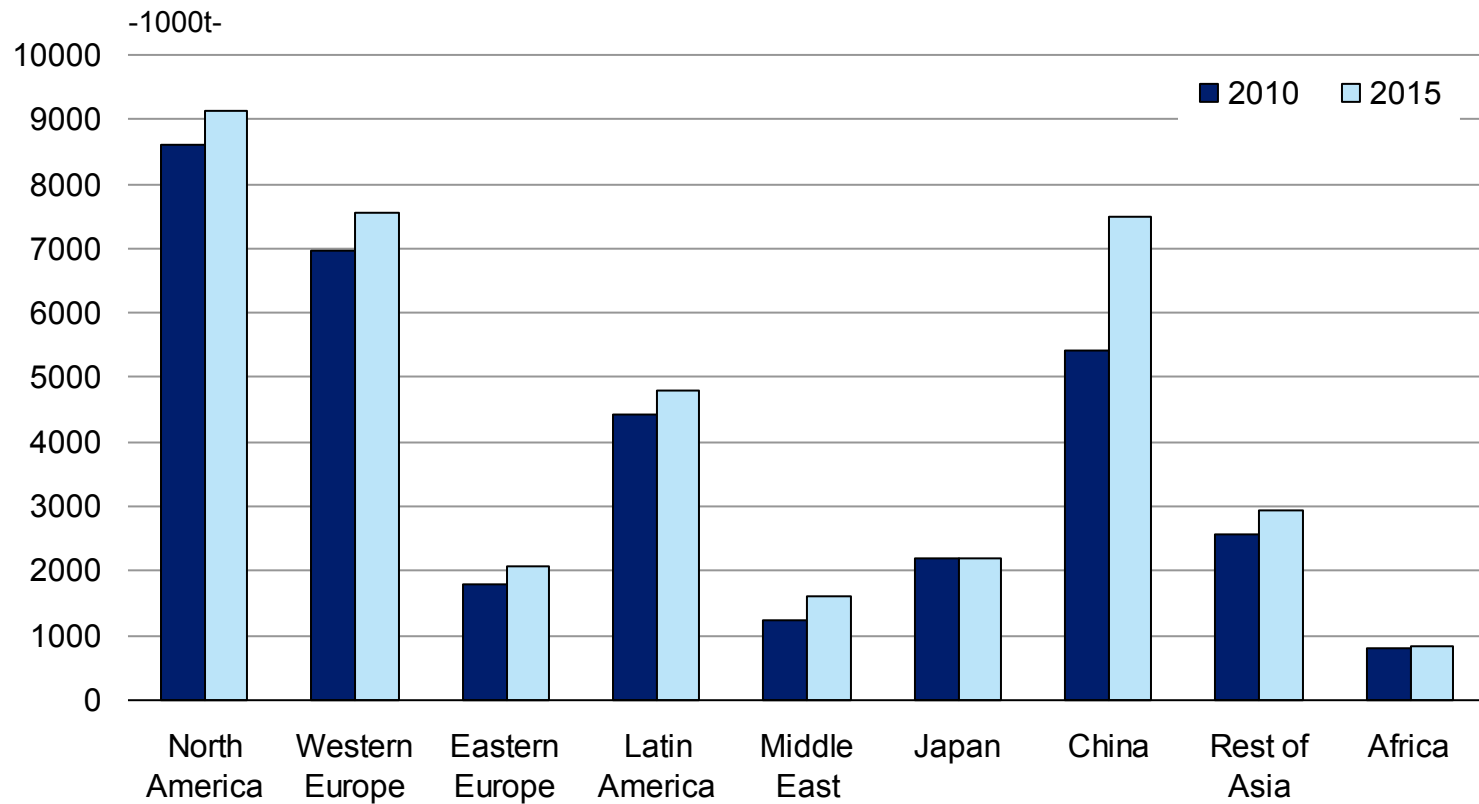


STATE OF THE TISSUE INDUSTRY – 2011 AND ONWARDS

GROWTH AND INVESTMENTS

Capacity changes 2010-2015

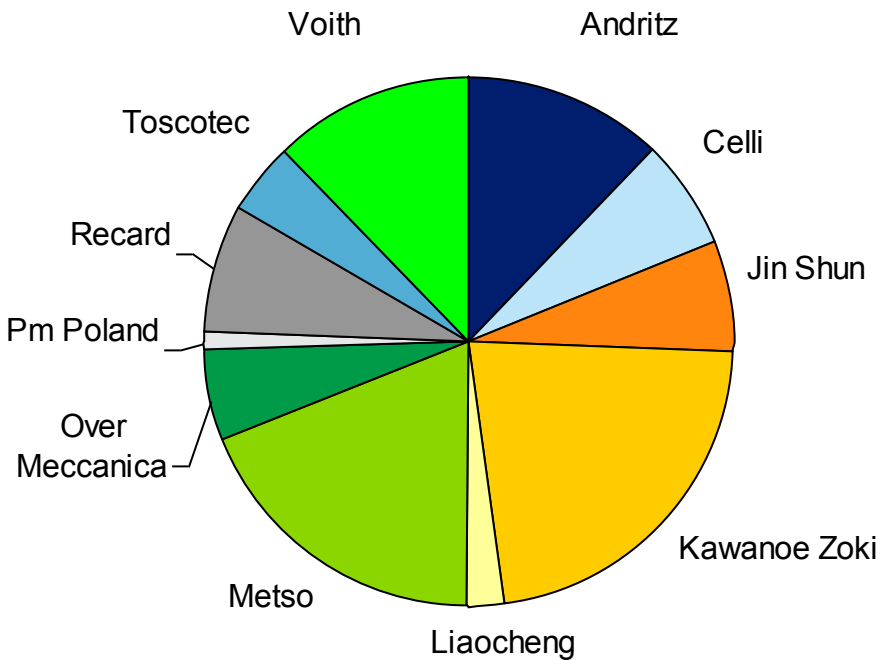
North American and Western European capacity additions (decided and planned) aligned with demand growth. Major investment activity in China – as new capacity adds 35-40% to the supply base.



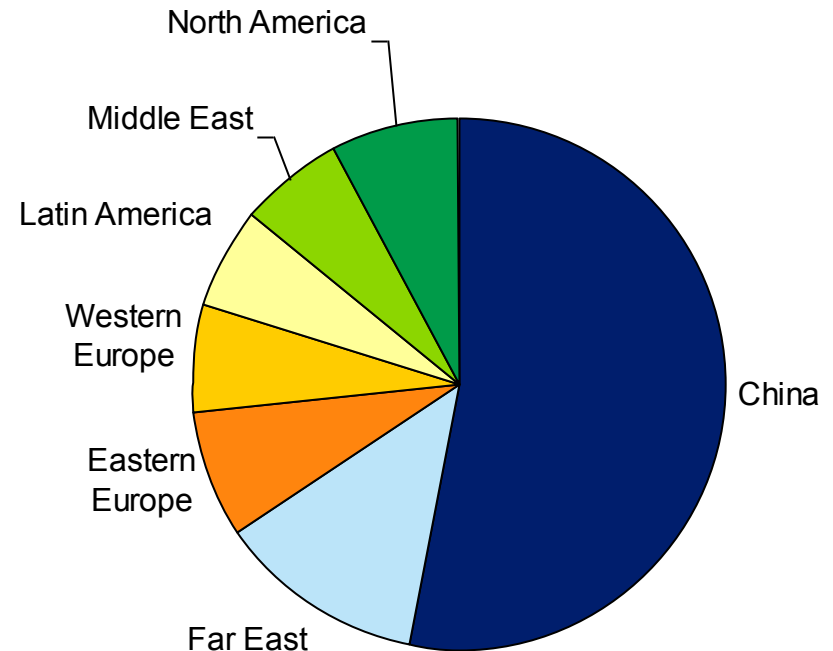
Tissue machine investments 2010 onwards

Equipment suppliers tissue machine orders (# of new PMs) boosted by China and other Asia. North American plans focus on TAD – premium quality tissue manufacture. European OEMs lead the pack followed by Japanese and Chinese.

By PM supplier



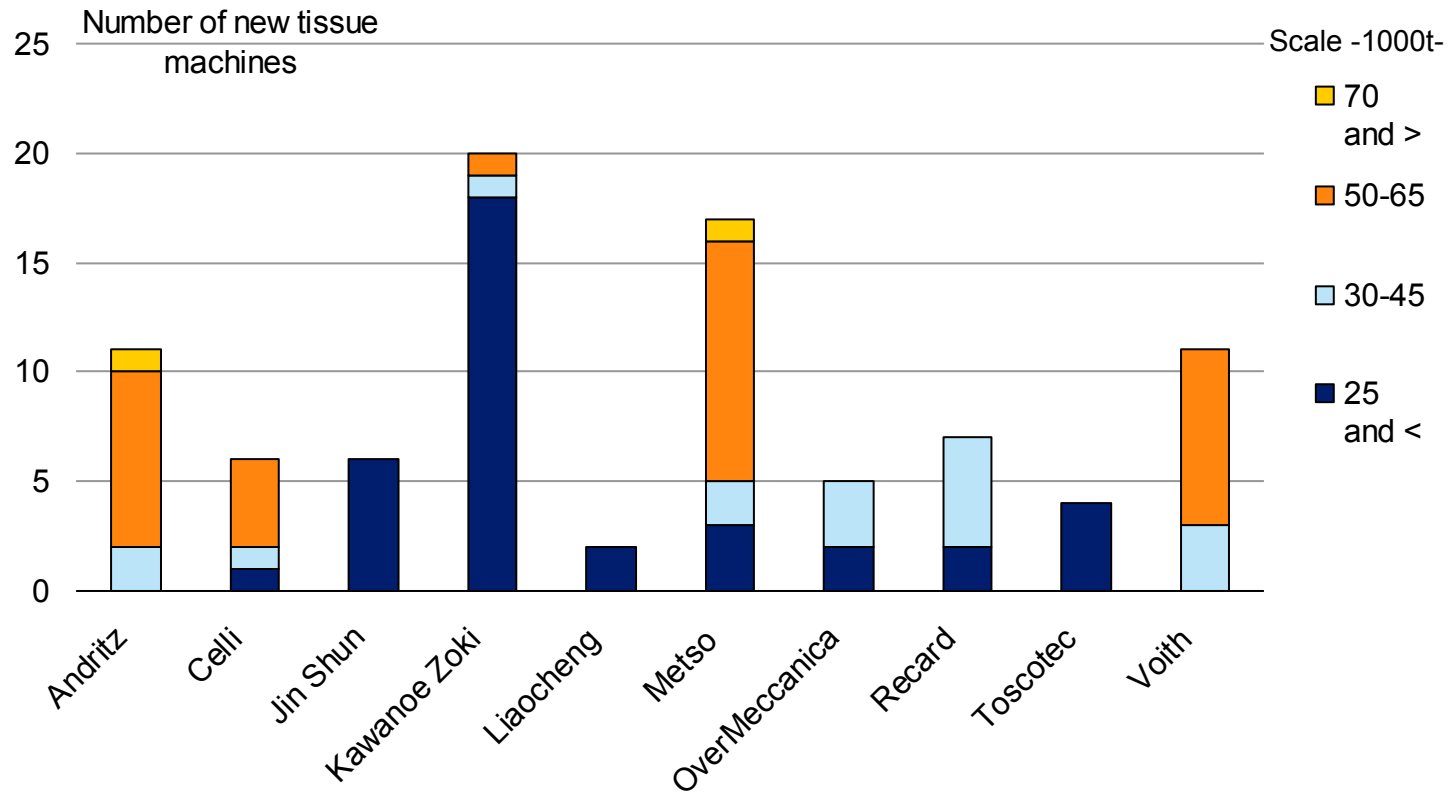
By Country/region



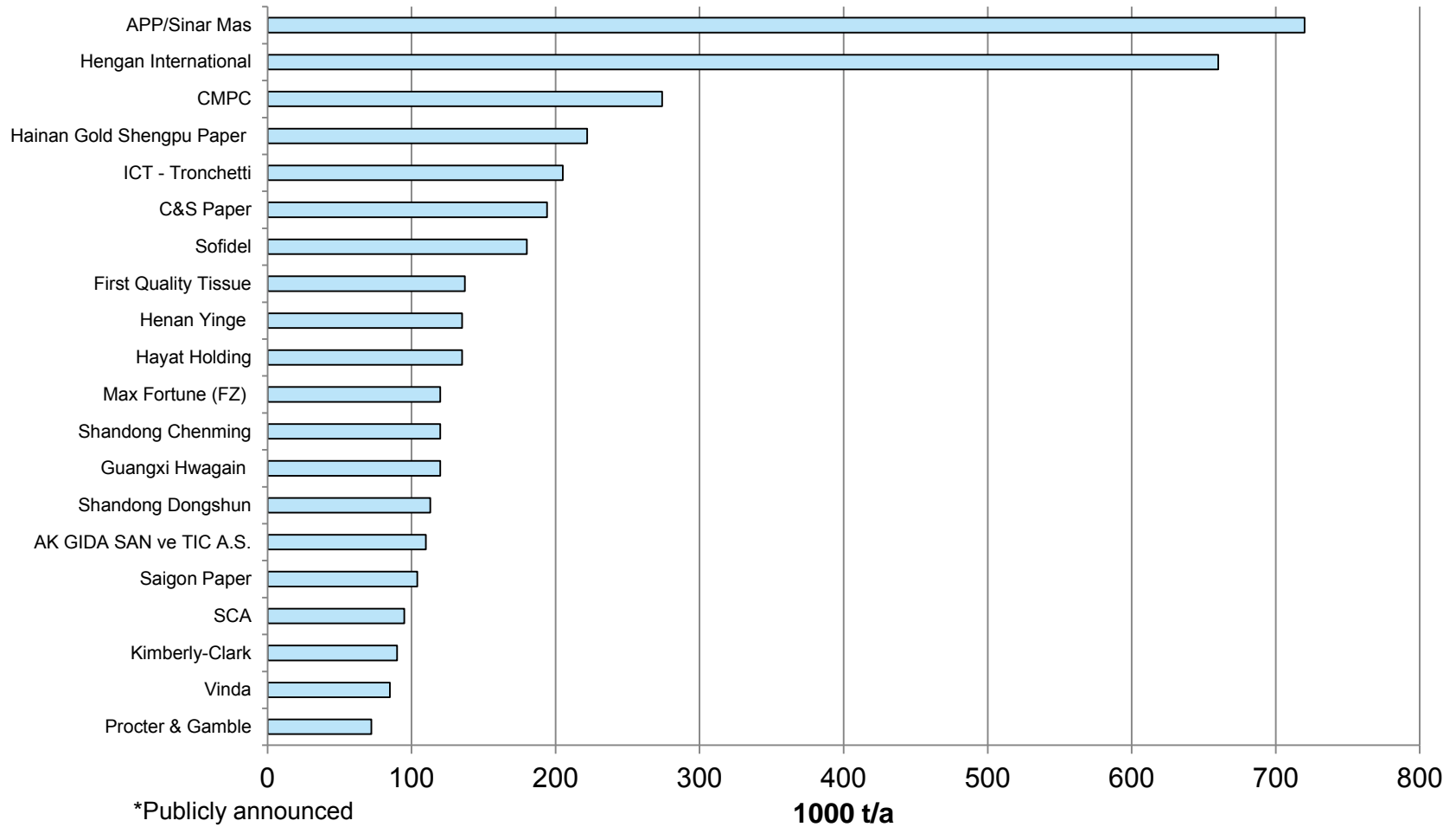
Based on publicly available information

Suppliers for new tissue machine 2010-

European OEMs focus on mid/large scale machines and Asians are strong in small scale for the emerging markets.



Decided and planned investments* into new tissue machines by Company 2010-



Hainan; part of APP

Wrap-up / Themes

- **Markets – need for market specific approach; no one-size fits all!**
 - Per capita differences continue to be large globally – USA, Japan and Nordics have plateaued.
 - USA and China (low per capita) are the leading consumers of tissue – but very different
 - Usage of full range of tissue products and well established AH and AFH segments in USA – China focus on AH tissue, but long term expansion in towels and AFH
 - Private labels strong in Europe – what will be development in USA? Impact?
- **Industry structure – home base is important; gradual expansion abroad?**
 - Top 3 producers with global manufacturing platform – but domestic markets still core
 - Regional differences are vast in terms of mill scale and technology – e.g. USA is large scale mills and more TAD
 - Market pulp will gain ground and boost quality upgrades in many markets
- **Investments and plans – enhance strategy and build on opportunities. Where next?**
 - Top 5 solidifying desired positions; K-C in Latin America and MiddleEast, G-P and P&G in the USA and SCA in Latin America and Russia
 - Mid/smaller producers in the US planning investments in TAD for private label
 - Intensive investment activity by APP/SinarMas/Hainan in China and Indonesia, Hengan in China
 - CMPC is growing in Latin America and Tronchetti and Sofidel in Europe

A globe made of puzzle pieces on a blue background. The puzzle pieces are dark grey and form a map of the world. The globe is centered in the upper half of the image. The background is a gradient of blue, from light blue at the top to a darker blue at the bottom. At the bottom of the image, the word 'POYRY' is written in large, light blue, stylized letters.

Thank you!

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