europeantissuesymposium
THE EUROPEAN TISSUE PAPER ASSOCIATION

ETS presentation
MIAC
Lucca, Italy

Fanis Papakostas

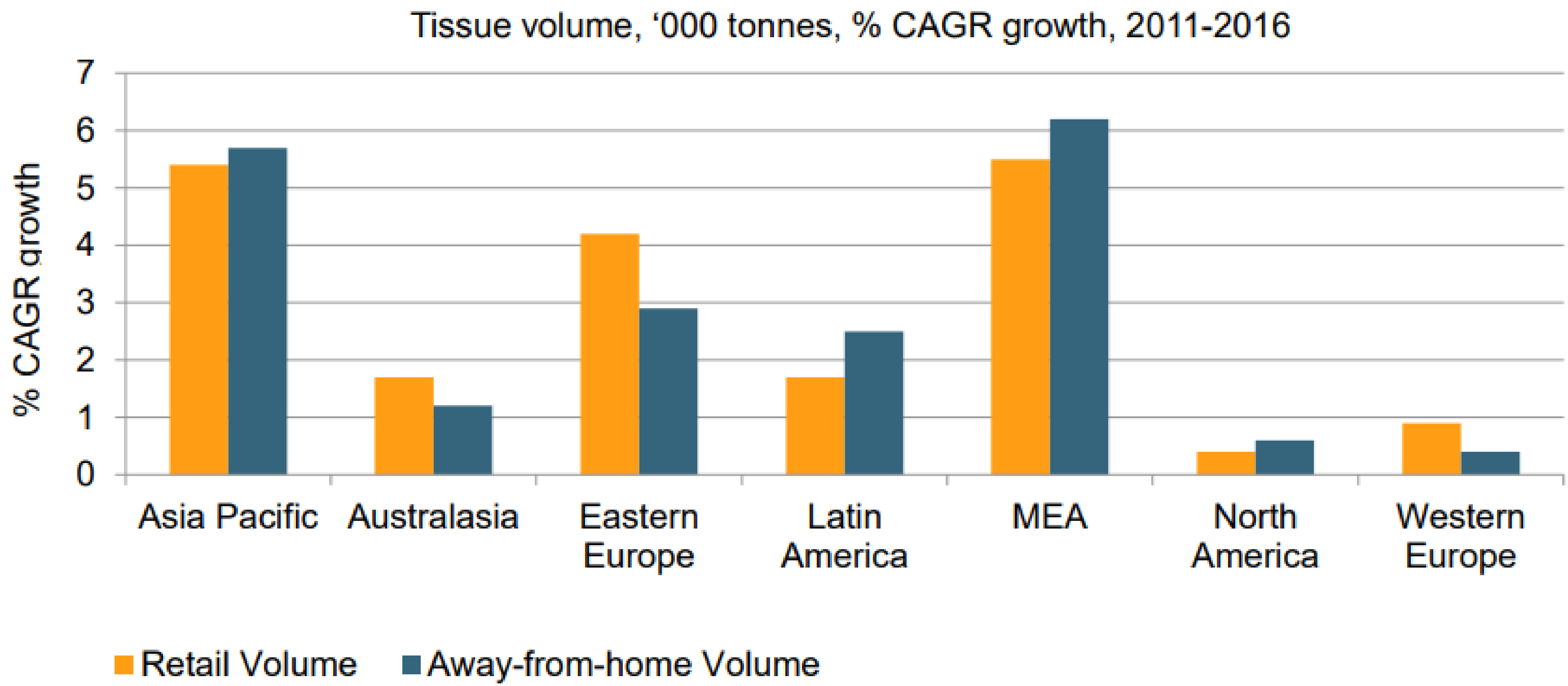
11 Oct. 2017

ETS PRESENTATION SECTIONS

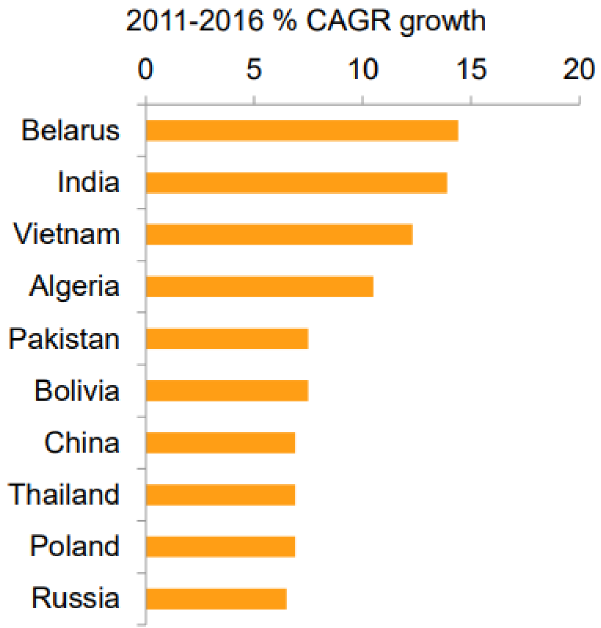
- Top global Tissue Paper Market info - **Good news**
- Challenges – opportunities – **Watch out**
- ETS
  - Who we are
  - Scope strategy and projects,
  - How can we help.
- Example of research project
- DATA Audit AFH example.
- Key **take out**
- Questions

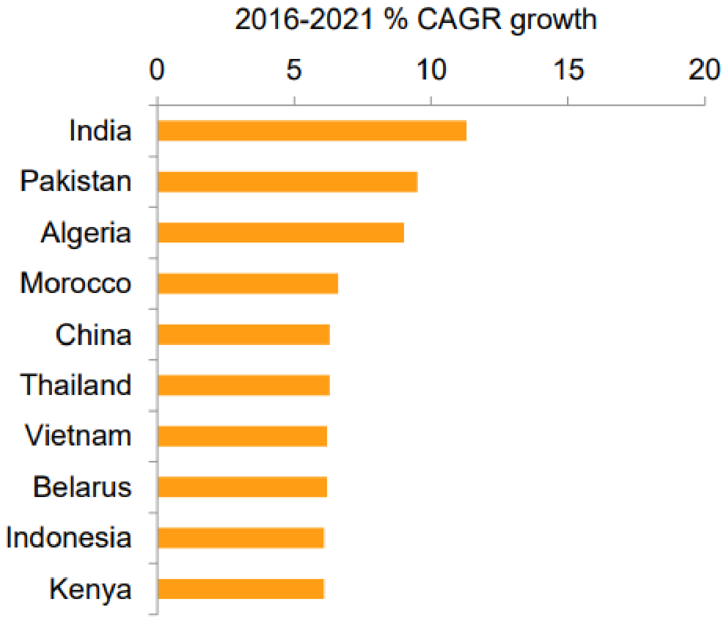
The NEWS for our Tissue Paper family are GOOD!

Growth across the world's regions is here to stay



Growth champions are outside North America and W. Europe



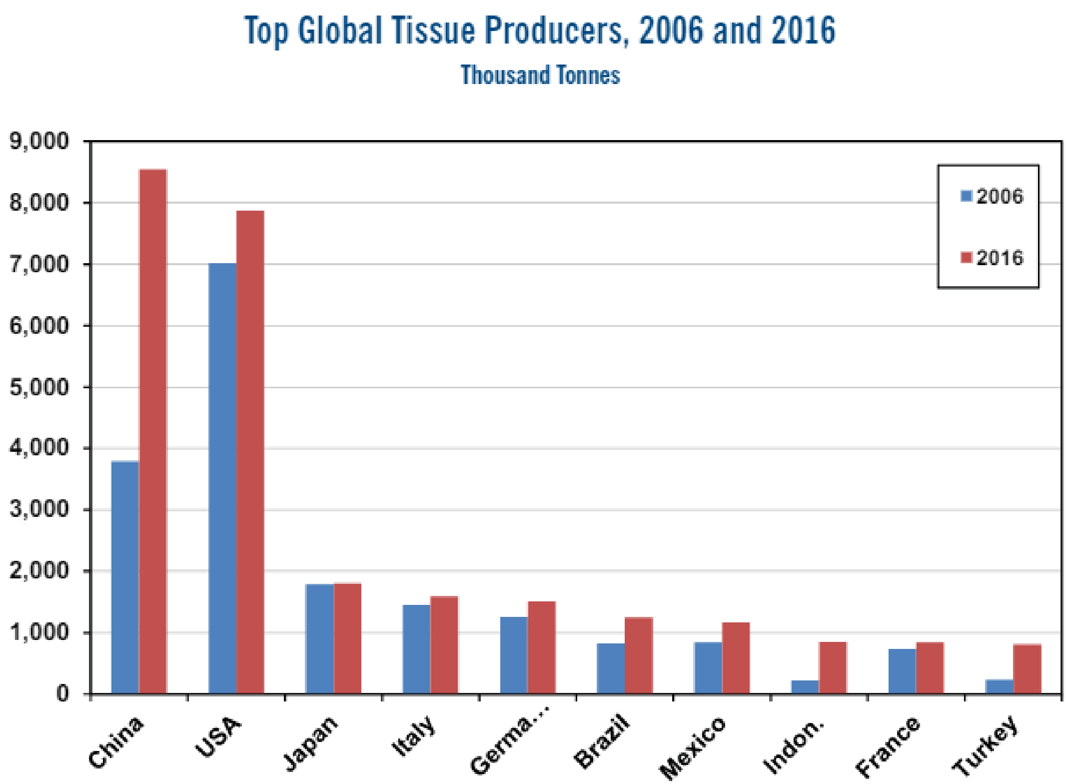


** Volume is measured in tonnes, combined retail and AFH*

EUROMONITOR INTERNATIONAL

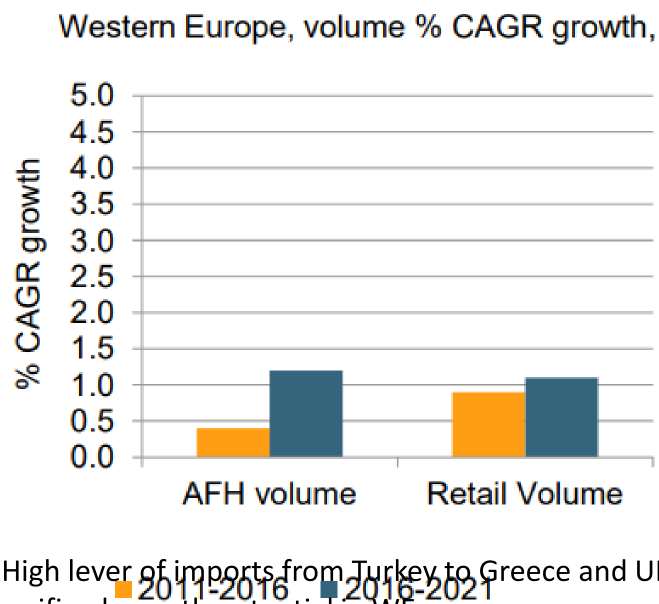
Capacity tracking

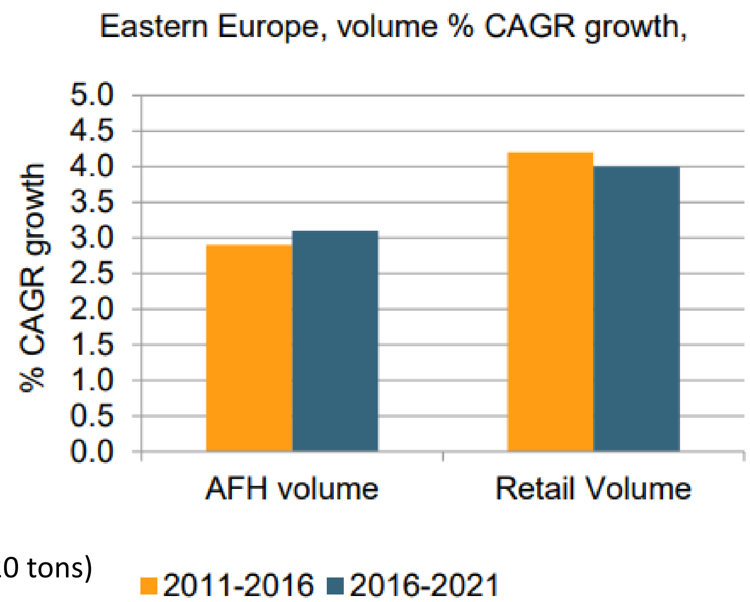
- **All top global Tissue Producers** continue to add capacity.
- **Italy remains** the **top European producer** followed by <u>Germany</u> and <u>France</u>.



Fanis Papakostas - EUROPEAN TISSUE SYMPOSIUM 2017-09-27
RISI

Growth across Europe too, but Western Europe stays in the area of 1%





*High lever of imports from Turkey to Greece and UK (320 tons) sacrificed growth potential in WE.

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Wrap up and Key Market predictions

Regions:

•**Developed markets** (W. Europe and N. America) will continue to grow although quite modestly (1-2% pa)

•**China** will keep **growing steadily** while remaining the biggest and **India** is the one with the highest growth potential.

Consumer:

•GDP, population, habits formation, product features awareness, and innovation will continue to be key growth drivers.

•Private label will further improve the quality / price balance and will keep growing in the developing markets also helped by the concentration of the organized trade.

AFH

•The growth will continue especially in the developing markets driven by product innovation, awareness of Tissue products advantages and customer service solutions especially in the developed markets.

Yes, overall News are Good, BUT…

1) **Pressure on profit margins** will continue (trade, competition – key drivers)
2) **External competition** coming from other industries (electric dryers, wipes, cloth…).
3) Continuous **need for Optimization** of our already good **Environmental footprint.**
4) **Need for innovation along the business circle** will be higher than ever.

Questions to ask ourselves:

"What is our understanding of our **customers, shoppers** and **product users perception** about Tissue paper?"

"What do **they** know about our **hygiene** advantages and our **sustainability** levels?

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Challenges / opportunities

Here are some watch outs…

…which require common effort to be handled properly.

About ETS:

•The **European Tissue Symposium (ETS) - founded in 1971 is a trade association**, organized as a non-profit association under the Belgian law and established in the International and European Union environment of Brussels, Belgium.

•The members of ETS represent the **majority of tissue paper producers** throughout Europe. and **about 90% of the total European tissue production**.

Who we are :

Est. 1873 CartiereCarrara

MP hygiene
Fabricant français et responsable
Hygiene products manufacturer

essity

EUROPEAN TISSUE SYMPOSIUM ETS SINCE 1971

MetsäTissue

Kimberly-Clark

SOFIDEL
ENDLESS CARE, INNOVATIVE LIFE

LUCART GROUP

COVINGTON

wepa

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The scope of ETS is changing

Up to recently, the ETS's **scope** was to:

•**Monitor events and developments** affecting the Tissue sector in Europe and ensure that Member Companies are informed about it.

• deal with relevant **environmental** and **technical** aspects, European norms, etc. that have an impact on the Tissue paper industry

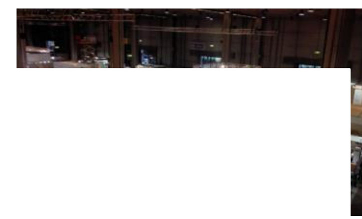
•Working with other Associations like **Assocarta** and **EU** Institutions.

ETS presentation MIAC 12 Oct. 2017

In the last years, the **scope of ETS** has been **enlarged** to **<u>promote the use of tissue products</u>** by:

•Deepening scientific knowledge on the use of tissue products, by carrying out **advanced studies** with the most authoritative institutions, on Hygiene, LCA / Carbon Footprint / Food contact, but also consumer preferences vs. alternative usage, etc.

•Communicate Industry Position Papers on Relevant Topics like **Hygiene** and **Sustainability**.



•Use **conferences, trade fairs, press releases** and **especially Internet** to spread the world with the right messages.

•**Collect data** and **organize Audits** which after certain processing can be published to all the contributing members helping them to improve level of understanding. e.g. AFH Sales data, or Mill environmental information.

•In **Italy** , on top of our **excellent** collaboration with **Assocarta**, we are starting a new one with "**iT's tissue**" – the Tissue Machines producers from which we may enjoy the outcome of some very useful projects.

Need to keep making the world go around
We'll deal more and more with:

Sustainable production

Sustainable distr/tion and customer service

Sustainable resourcing

Sustainable management of waste after use

Interesting Research study
<u>example</u>
on
User's behaviour and perception

Thanks to our investment on research, the ETS members now have access to information like:

the different **preference rates** of the users for **each hand drying system** per **country** and by **age group** for:

Italy, UK , Germany, France, Sweden Finland

as well as…
the key reason of their preference!

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Representative example on AFH European Sales Data Collection project while maintaining confidentiality

ETS relevant projects
AFH European Collection project

CONFIDENTIAL

Finished products for the institutional sector (Away from Home)

DEMO
indicative numbers

PERIOD	201X, Q4

Region	Product (tons)							
	Towels		Total Towels	Total facial / kitchen rolls	Total cleaning cloths	Total toilet paper	All other tissue (*e.g.* , napkins, bedsheets, medical rolls)	Total all products
	Roll towels (all materials)	Folded towels (excluding folded toilet paper)						
Total Southern Europe	100	100	200	100	100	100	100	600
% vs. pp	5%	5%	5%	5%	5%	5%	5%	5%
% vs. py	4%	4%	4%	4%	4%	4%	4%	4%
Benelux + France	100	100	200	100	100	100	100	600
% vs. pp	5%	5%	5%	5%	5%	5%	5%	5%
% vs. py	4%	4%	4%	4%	4%	4%	4%	4%
Total Central Europe	100	100	200	n/a	100	100	n/a	600
% vs. pp	5%	5%	5%	n/a	5%	5%	n/a	5%
% vs. py	4%	4%	4%	n/a	4%	4%	n/a	4%
Total Northern Europe	100	100	200	n/a	100	100	n/a	600
% vs. pp	5%	5%	5%	n/a	5%	5%	n/a	5%
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% vs. pp	5%	5%	5%	5%	5%	5%	5%	5%
% vs. py	4%	4%	4%	4%	4%	4%	4%	4%
Total Europe	500	500	1,000	2,000	500	500	2,000	6,000
% vs. pp	5%	5%	5%	5%	5%	5%	5%	5%
% vs. py	4%	4%	4%	4%	4%	4%	4%	4%

AFH European Collection project

CONFIDENTIAL

DEMO
indicative numbers

Finished products for the institutional sector (Away from Home)

PERIOD	201X, Q1+Q2+Q3

Region	Product (tons)							
	Towels							
	Roll towels (all materials)	Folded towels (excluding folded toilet paper)	Total Towels	Total facial / kitchen rolls	Total cleaning cloths	Total toilet paper	All other tissue (*e.g.*, napkins, bedsheets, medical rolls)	Total all products
Total Southern Europe	300	300	600	300	300	300	300	1,800
% vs. py	5%	5%	5%	5%	5%	5%	5%	5%
Benelux + France	300	300	600	300	300	300	300	1,800
% vs. py	5%	5%	5%	5%	5%	5%	5%	5%
Total Central Europe	300	300	600	n/a	300	300	n/a	1,800
% vs. py	5%	5%	5%	n/a	5%	5%	n/a	5%
Total Northern Europe	300	300	600	n/a	300	300	n/a	1,800
% vs. py	5%	5%	5%	n/a	5%	5%	n/a	5%
Total Eastern Europe	300	300	600	300	300	300	300	1,800
% vs. py	5%	5%	5%	5%	5%	5%	5%	5%
Total Europe	1,500	1,500	3,000	1,500	1,500	1,500	1,500	9,000
% vs. py	5%	5%	5%	5%	5%	5%	5%	5%

Key take out

The **more** the World knows that Tissue producers provide:

Convenient Hygienic Drying - Sustainably,

the **better** will be!

- This work is **HUGE** and can **NOT** just be an **individual effort**.
- In **ETS** we work hard, using any resources available, to support our members in this direction.
- Thanks to the team, so far a lot has been achieved until now.
- We are happy to **welcome new members** on board and amplify the benefits of our achievements for the Tissue family.

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THANK YOU ALL

Vi auguro di godere di una conferenza costruttiva

Questions ?

NEW TISSUE CAPACITY WITH SIGNIFICANT COMPETITIVE EDGE

MIAC Tissue Conference, October 11, 2017

Pirkko Petäjä and Mikko Helin

NEW TISSUE CAPACITY WITH SIGNIFICANT COMPETITIVE EDGE

- Continuing market growth allows for new projects to emerge, but the capacity additions tend to focus on certain regions tightening the local competition
- Many new investments have a competitive edge based on economies of scale, premium technology and/or an advanced energy concept
- Integration of tissue production with hardwood pulp is increasing, especially among new entrants that base the entry on low manufacturing costs
- Competitive edge based on technology advantage or pulp integration can be significant
- Cost optimization is a continuous process – digitalization can be the next major step

NEW TISSUE CAPACITY WITH SIGNIFICANT COMPETITIVE EDGE

- Continuing market growth allows for new projects to emerge, but the capacity additions tend to focus on certain regions tightening the local competition
  - The tissue demand is growing all over the world, the global growth rate being some 3%/a. Asia, especially China, is driving the growth
  - Market growth drives investment pace, but for instance China is adding significant volumes, surpassing market demand
  - Also in mature markets the investments tend to concentrate on certain hot spots. The tightening competition is urging the producers to search for new competitive advantages and cost savings
- Many new investments have a competitive edge based on economies of scale, premium technology and/or an advanced energy concept
- Integration of tissue production with hardwood pulp is increasing, especially among new entrants that base the entry on low manufacturing costs
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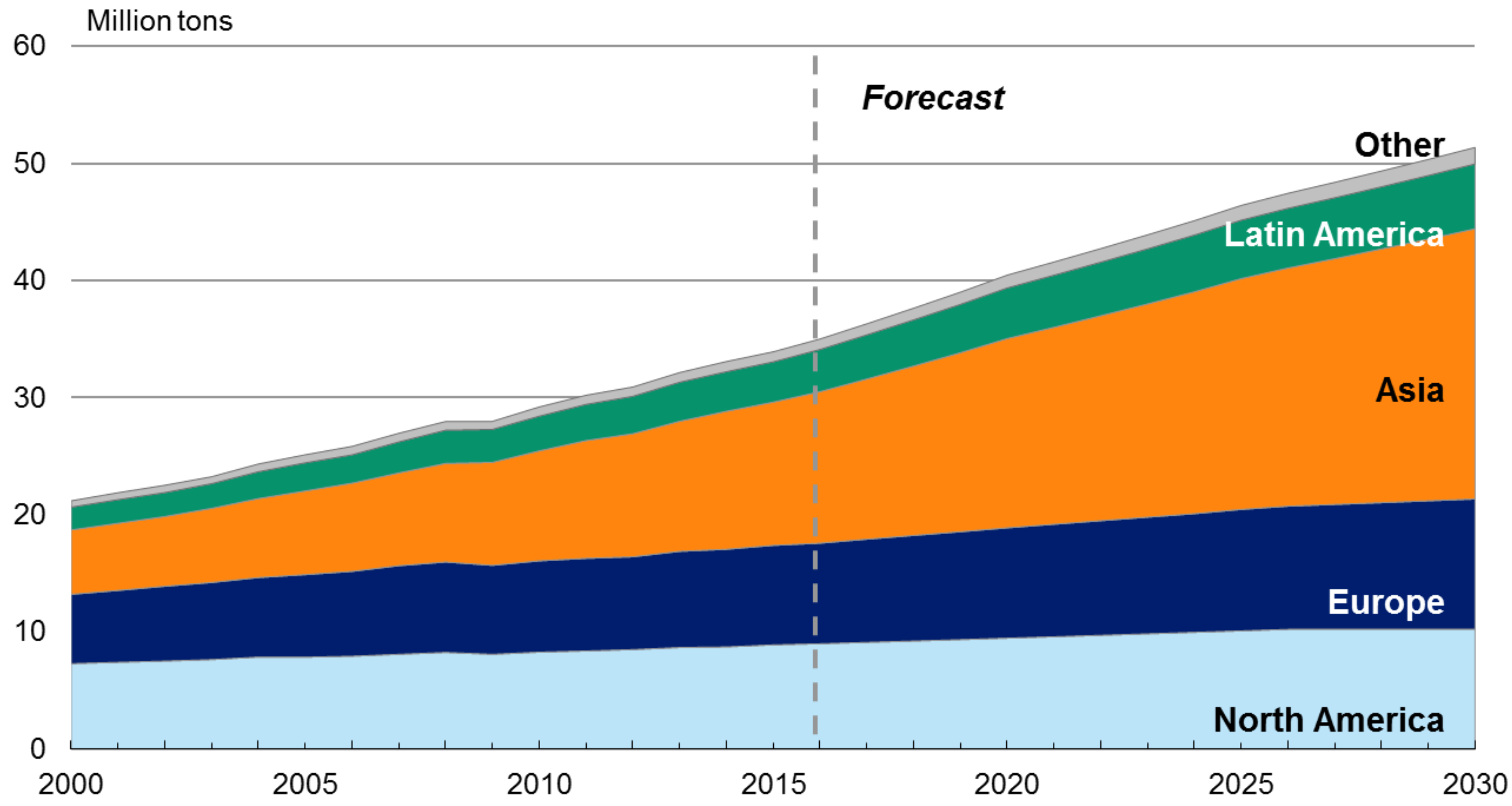
GLOBAL TISSUE DEMAND

Demand is forecast to grow by some 3%/a from 2015 to 2030. North America and Europe account today for 50% of the demand whereas Asia's share is forecast to increase from 37% in 2016 to 45% in 2030

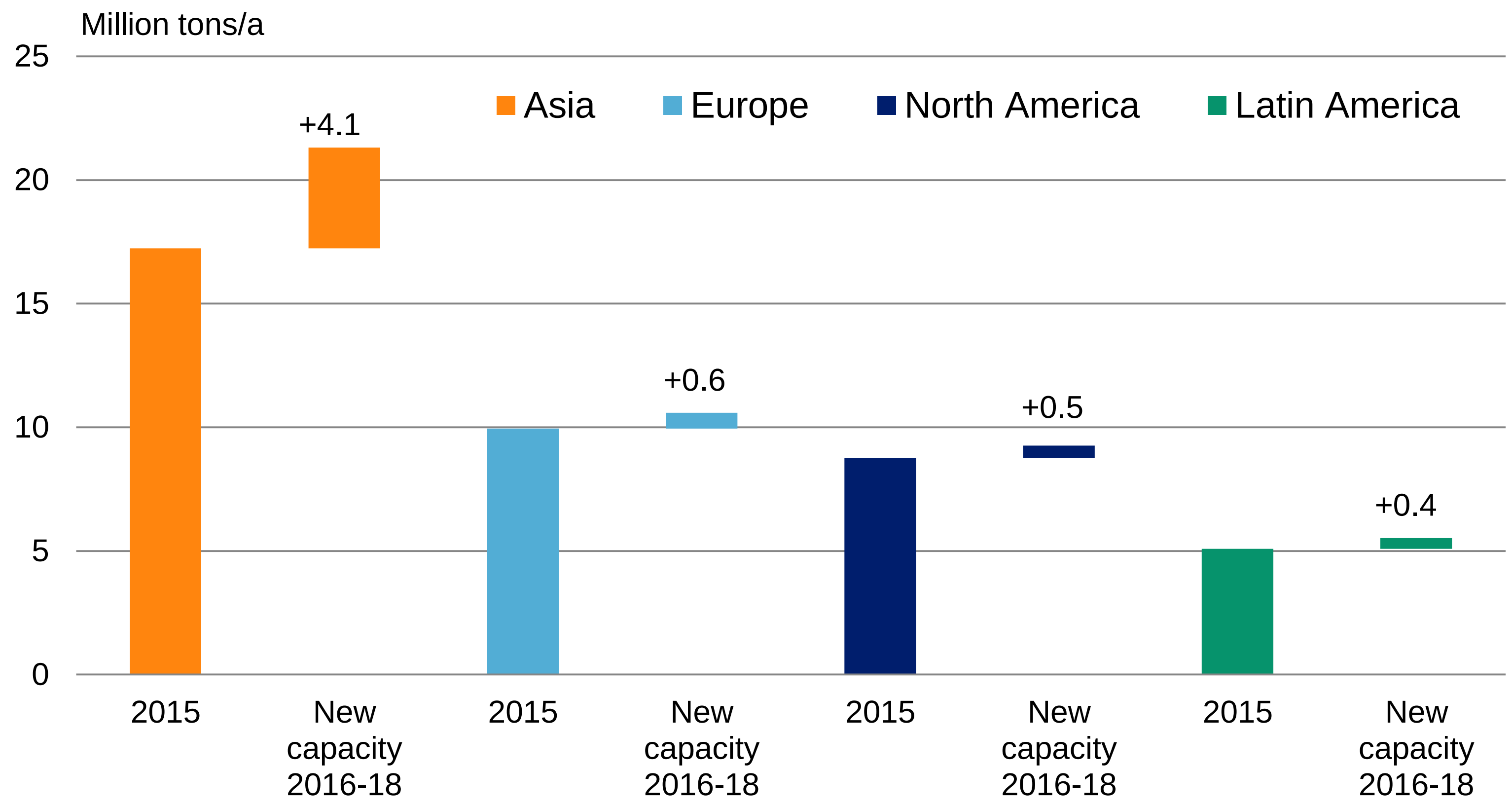


Note: Middle East included in Asia. Other category comprises Oceania and Africa.

WHERE ARE THE INVESTMENTS

Market growth drives investment pace, but for instance China is adding significant volume, surpassing market demand

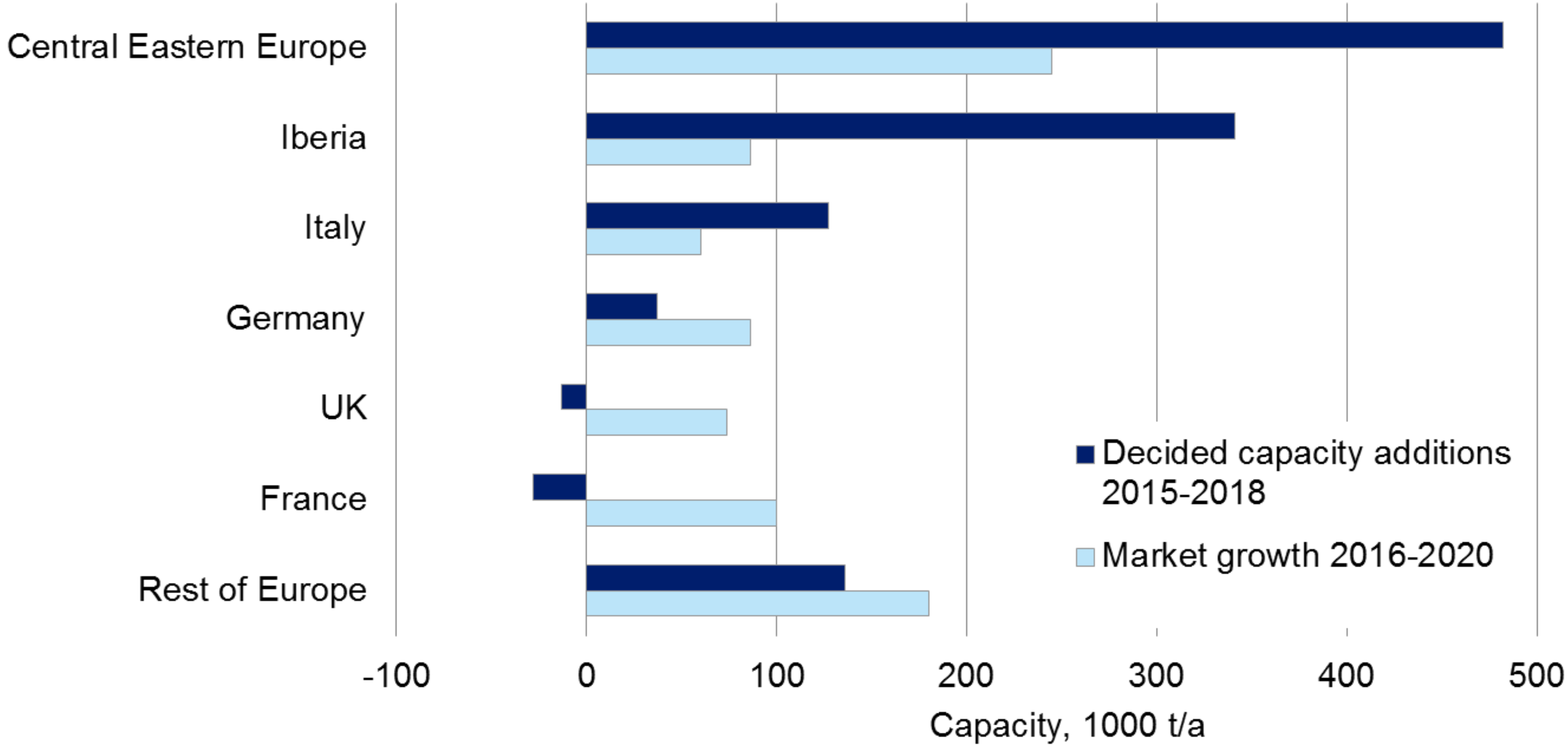
Base Capacity and Additions : 2016-2018



Note: Middle East included in Asia. Other category comprises Oceania and Africa. Capacity closures have been taken into account.

INVESTMENT HOT SPOTS IN EUROPE

In CEE and Iberia the competition tightens urging the producers to search for new competitive edge and cost savings



Central Eastern Europe: Poland, Czech, Slovakia, Croatia, Ukraine, Hungary, Belarus, Moldova, Bulgaria, Albania, Macedonia, Bosnia-Herzegovina, Slovenia, Serbia, Baltics and Romania.
Rest of Europe: Austria, Belgium, Denmark, Greece, Ireland, Netherlands, Switzerland, Nordics, Russia, Other CIS

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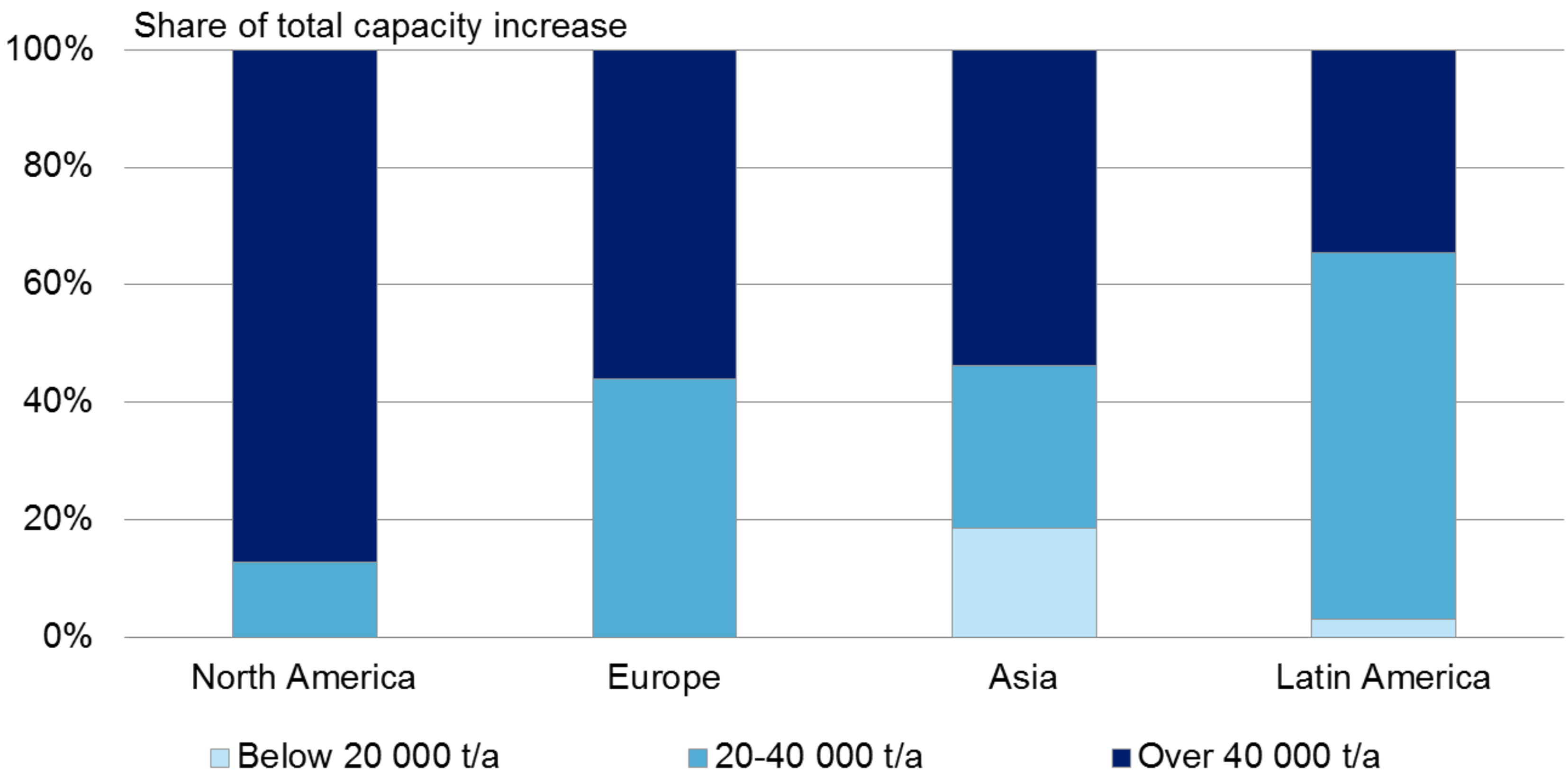
- Continuing market growth allows for new projects to emerge, but the capacity additions tend to focus on certain regions tightening the local competition
- Many new investments have a competitive edge based on economies of scale, premium technology and/or an advanced energy concept
  - Large machines account for most of the new capacity in the NA markets while many small PMs are still installed in Europe. Even very small machines are common in the emerging markets
  - In the mature markets the technology concepts are more varied, while conventional technology is still predominant in the emerging markets
  - The new textured tissue is entering the market both in North America and Europe. There is also a new TAD boom in NA. Premium quality demand is growing both in NA and Europe, and expanding also to the private label segment
  - The largest market share and installed capacity of structured tissue is still in North America
  - Investment in an energy efficient technology can provide a competitive edge
- Integration of tissue production with hardwood pulp is increasing, especially among new entrants that base the entry on low manufacturing costs
- Competitive edge based on technology advantage or pulp integration can be significant
- Cost optimization is a continuous process – digitalization can be the next major step

SCALE OF NEW CAPACITY

Large machines dominate in NA while in Europe there are still many small new machines. Even very small machines are common in the emerging markets

New Capacity by PM Size: 2016-2018

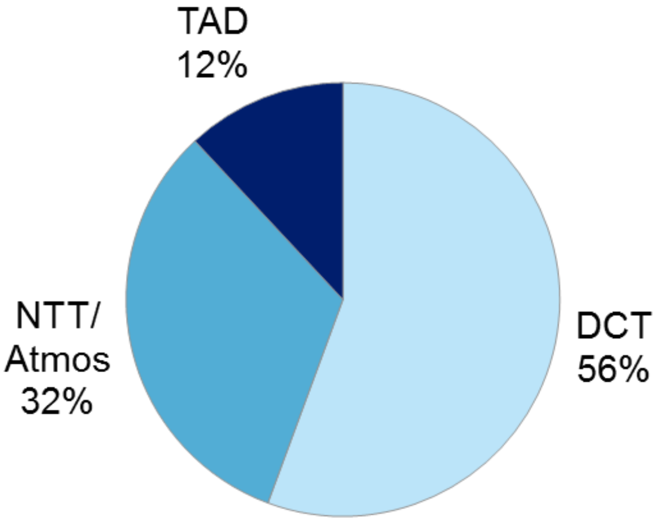


TECHNOLOGY CONCEPTS 2016-2018

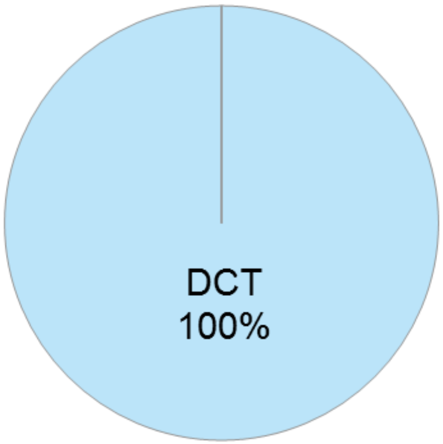
Technology choices are more varied in the mature markets, while in the emerging markets conventional technologies are predominant

Mature markets – NA, Europe	Emerging markets – Asia, LA

Total 1.3 million t/a

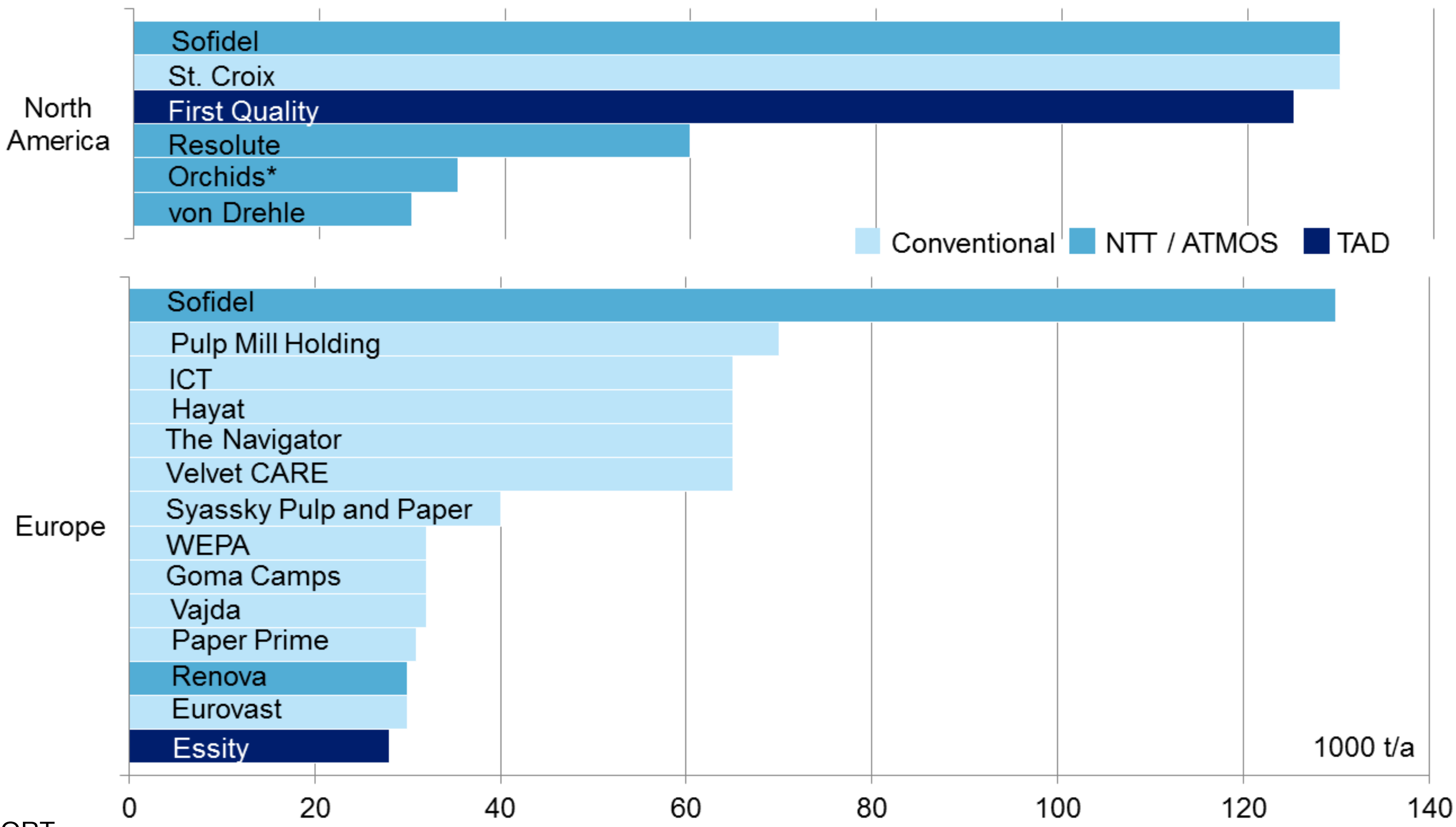


Total 4.6 million t/a



CONCEPTS BY PRODUCER IN MATURE MARKETS 2016-2018

Investments in TAD continue in the US (First Quality). New textured tissue is entering the markets (Resolute, Orchids, von Drehle, Sofidel and Renova)

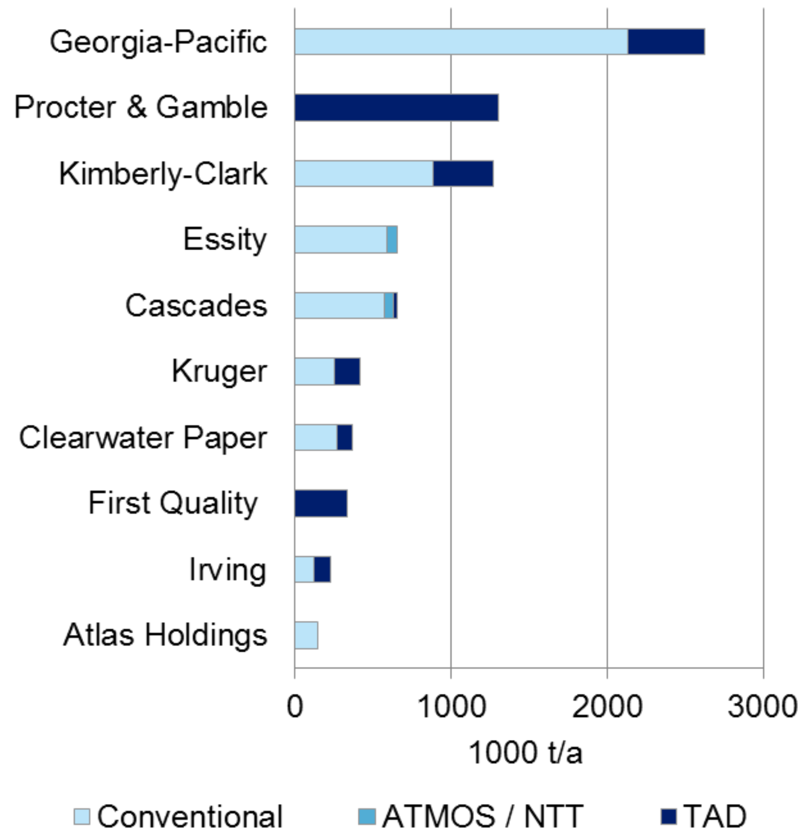


*QRT

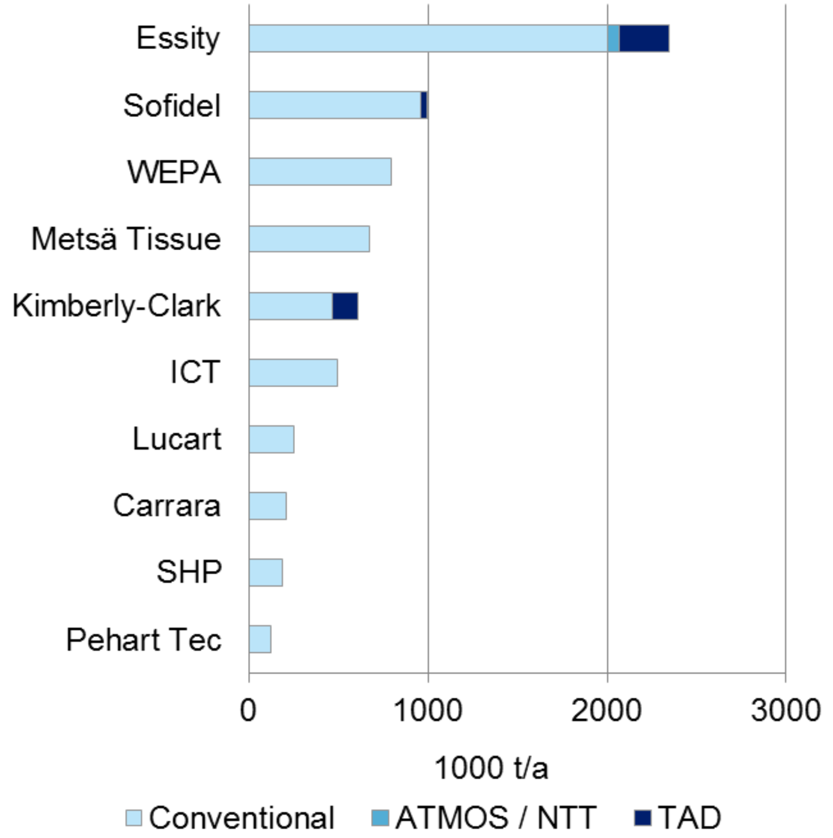
CURRENT TECHNOLOGY IN MATURE MARKETS

North America has a broader range of technologies installed, and more structured tissue capacity

Top North American Producers



Top European Producers



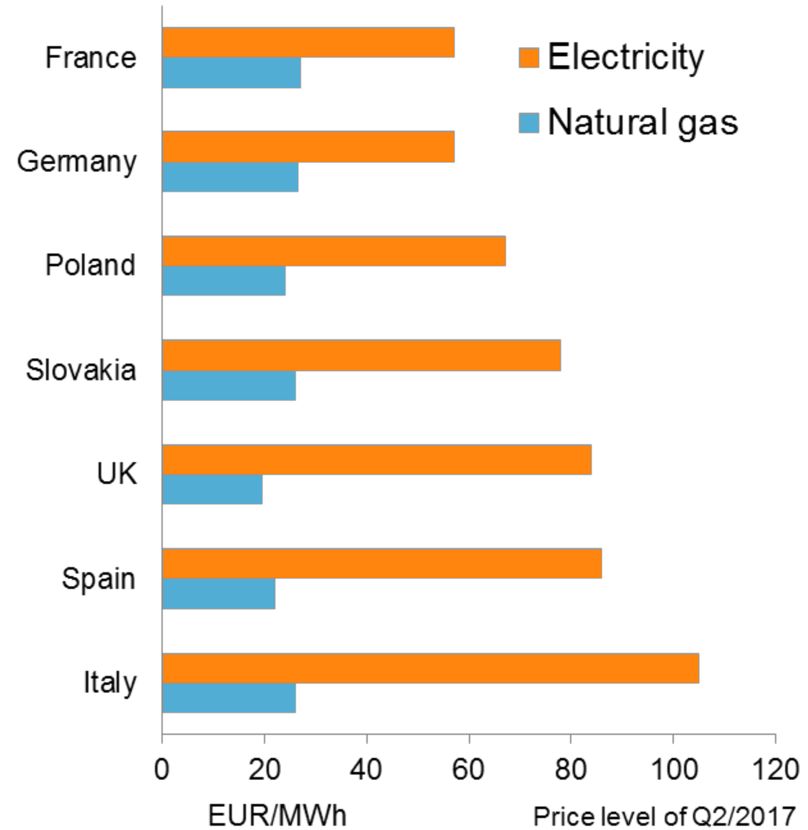
ENERGY CONCEPTS

New innovations often lower the energy consumption and depending on prevailing price relations co-generation may reduce the energy costs significantly

Modern technology offers energy efficiency

- Many modern technical solutions offer lower energy consumption in tissue production.
  - These are often related to higher dryness after press, Yankee conductivity, lower water consumption etc.
- A co-generation system can also provide substantial savings, especially in countries of high electricity and reasonable natural gas prices.
  - There are various systems available with differing levels of efficiency; a system where the exhaust gases from the turbine are used in the hood represents the high end technology.
  - Examples of European countries where the co-generation systems have been installed include Italy, Spain and the UK.

Energy prices



NEW TISSUE CAPACITY WITH SIGNIFICANT COMPETITIVE EDGE

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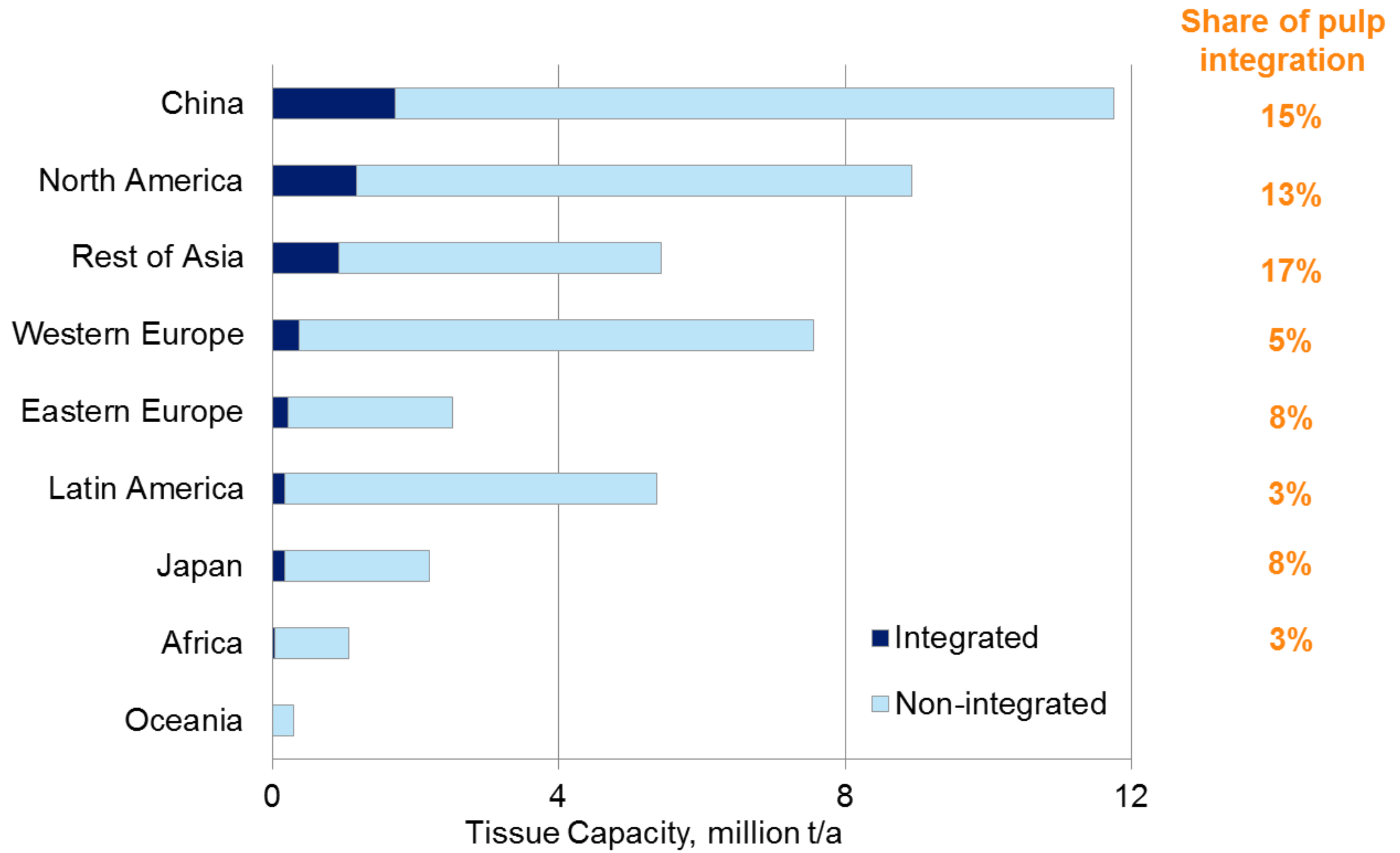
- Integration of tissue production with hardwood pulp is increasing, especially among new entrants that base the entry on low manufacturing costs
  - Integration with chemical pulp is currently rather rare, limiting mainly to APP in Asia and Georgia Pacific in North America
  - Quite a lot of the new capacity is integrated to pulp. Most of the producers that integrate are new entrants to tissue market; e.g. less competitive market pulp mills, large pulp & paper sites diversifying to tissue or bamboo pulp mills in China
- Competitive edge based on technology advantage or pulp integration can be significant
- Cost optimization is a continuous process – digitalization can be the next major step

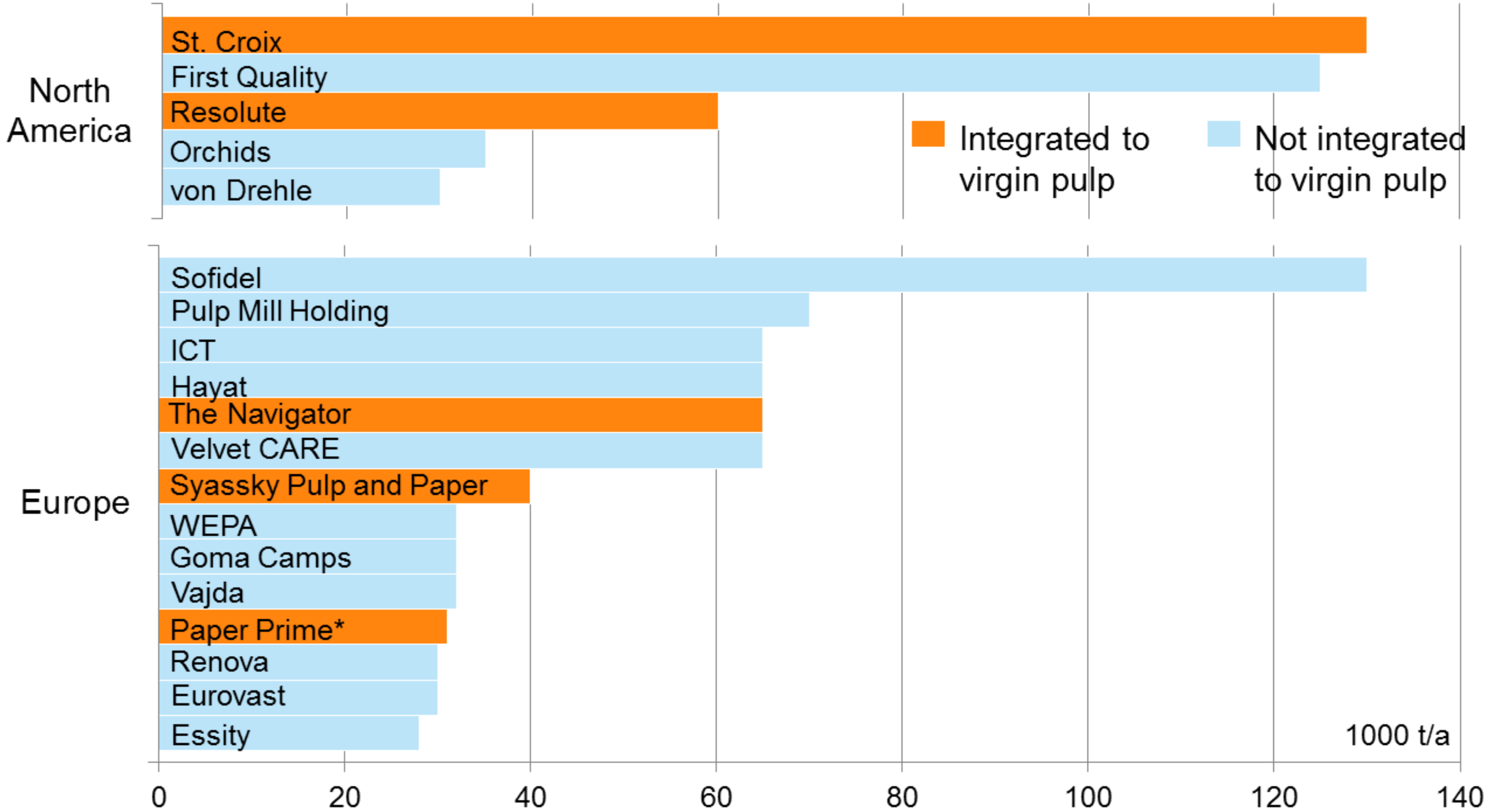
VIRGIN PULP INTEGRATION IN TISSUE

Physical integration of chemical pulp and tissue is currently relatively rare, globally only some 11 % of tissue capacity is integrated with a chemical pulp mill



PULP INTEGRATION OF NEW CAPACITY 2016-2018 ($^1/_2$)

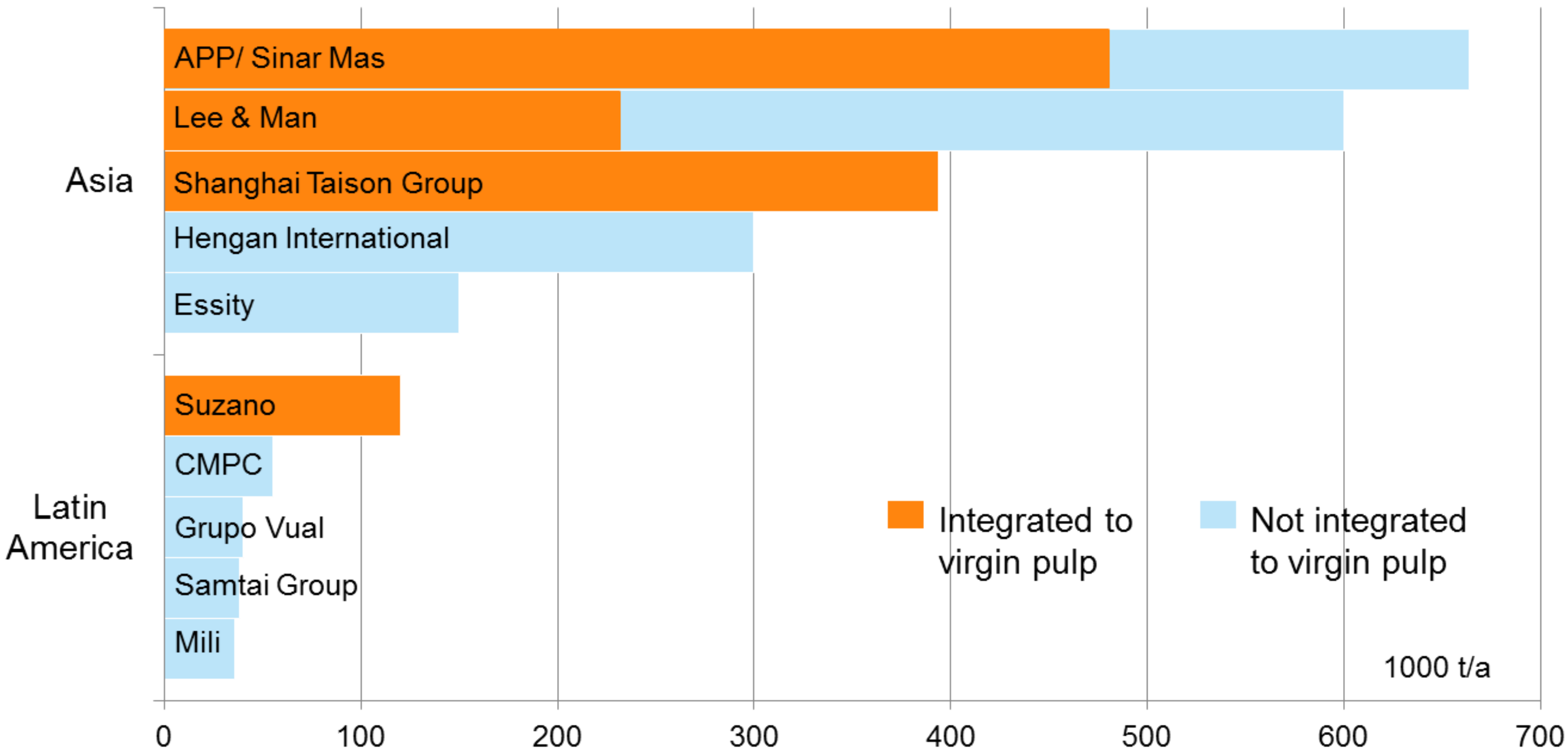
Market pulp is key, but pulp integration is becoming more common in mature markets. Market pulp mills (St.Croix, Altri, Navigator Cacia) and larger sites (Resolute, Calhoun) are diversifying into tissue



*Paper Prime will be sourcing slush pulp from the Altri mill in Celtejo, Portugal

PULP INTEGRATION OF NEW CAPACITY 2016-2018 ($^2/_2$)

Most of the new capacity in Asia is pulp integrated. APP is planning a massive tissue capacity increase in its pulp mills in Indonesia. Bamboo based integration is emerging especially in China with the brown tissue boom. Suzano is the first LA market pulp producer physically integrating with tissue



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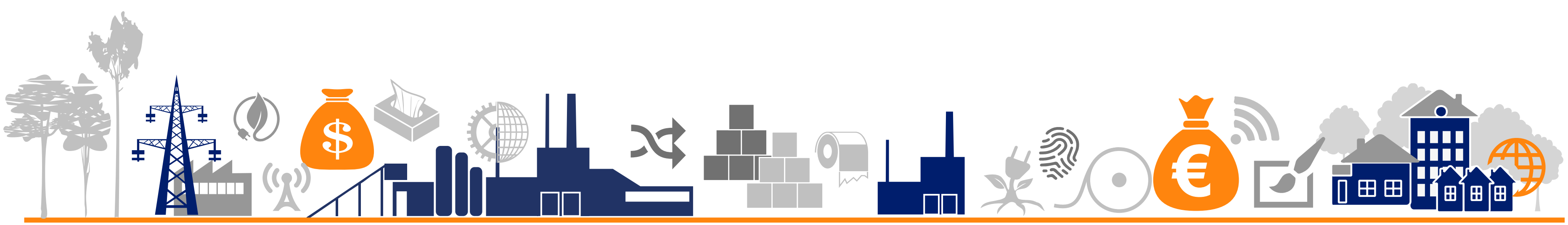
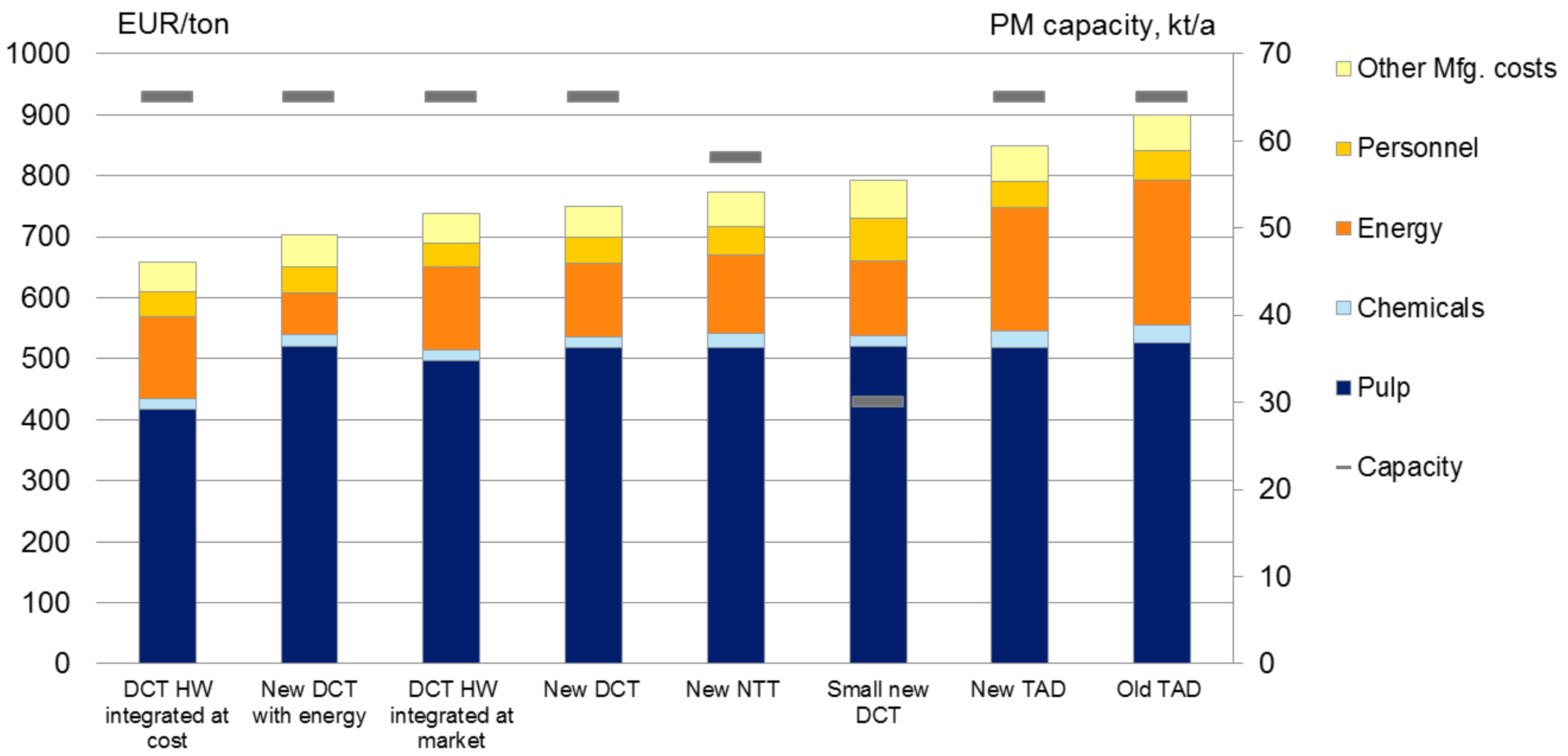
- Integration of tissue production with hardwood pulp is increasing, especially among new entrants that base the entry on low manufacturing costs
- Competitive edge based on technology advantage or pulp integration can be significant
  - Fiber integration gives a significant cost advantage, considering the savings in e.g. pulp logistics and drying. If the pulp can be valued based on its manufacturing costs, the advantage is higher
  - Cost advantage from own power generation requires suitable energy price relations, which can also change over time and reduce the advantage
  - Big scale is a cost advantage, especially in large uniform markets
  - The cost benefits of premium technologies are forthcoming in the converted products
- Cost optimization is a continuous process – digitalization can be the next major step



IMPLICATIONS OF TECHNICAL CONCEPT TO OPERATING COSTS

Fiber integration, scale and energy co-generation in right conditions give a clear cost advantage in jumbo reels. Premium technologies have higher cost per ton

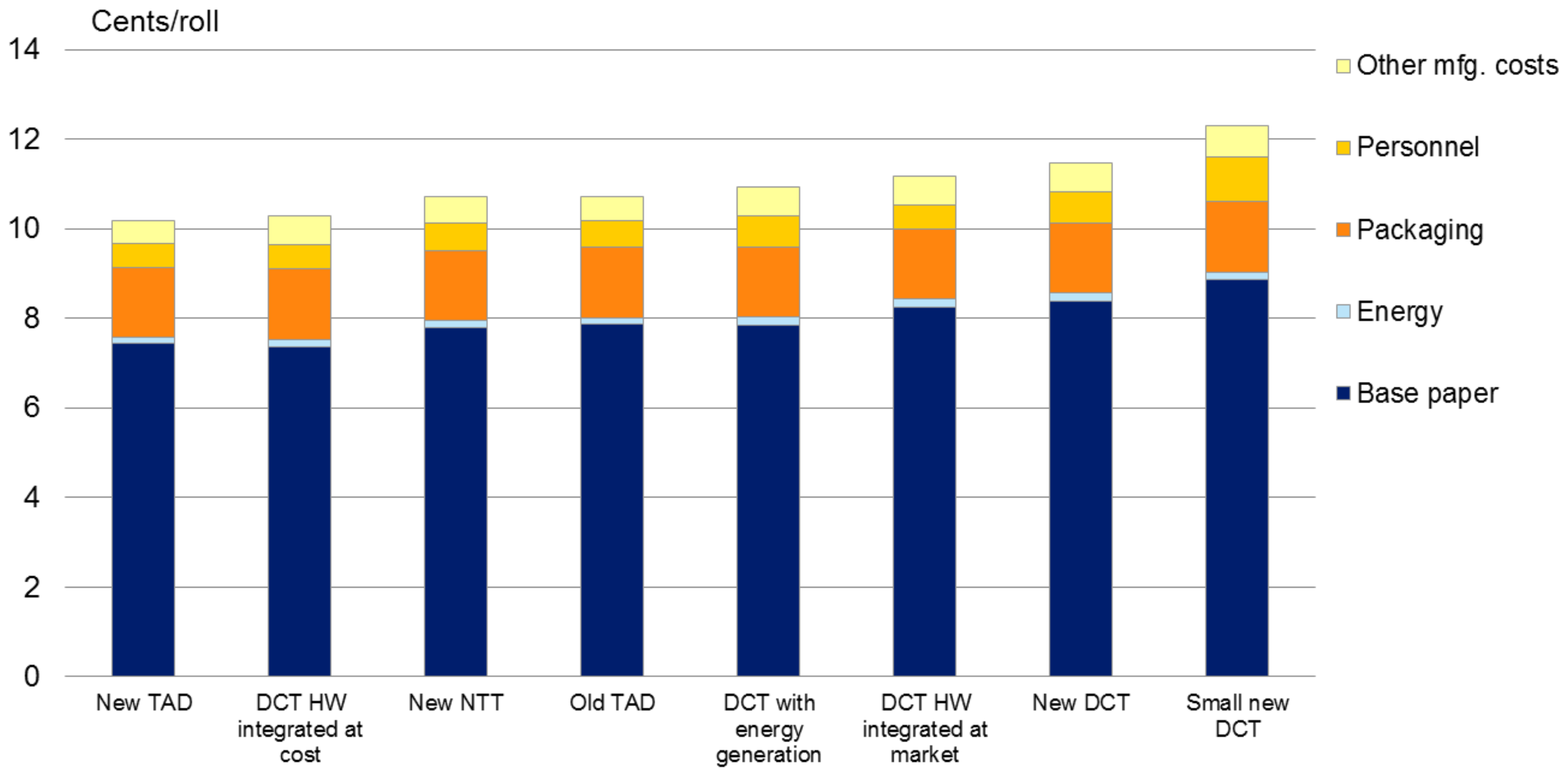
JR manufacturing costs



IMPLICATIONS OF TECHNICAL CONCEPT TO OPERATING COSTS

The cost benefits of premium technologies are forthcoming in the converted products

Toilet paper manufacturing costs with a modern converting line



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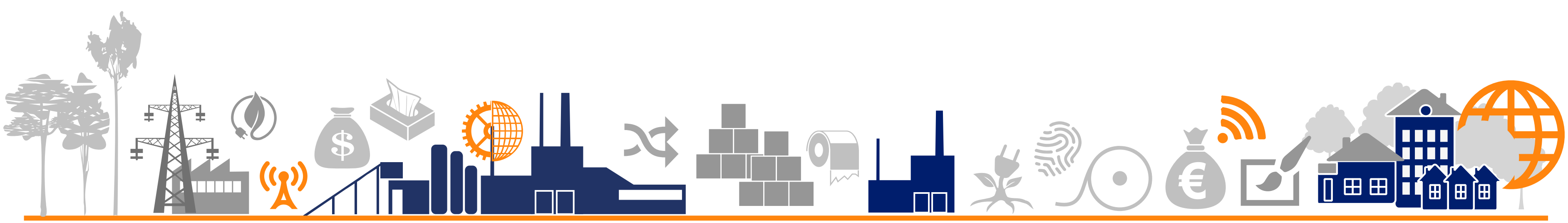
- Cost optimization is a continuous process – digitalization can be the next major step
  - Digitalization, along with new technical innovations, can be the next step to improve the production and supply chain efficiencies



DIGITALIZATION

Digitalization can be the next game changer – improved production and supply chain efficiency, sales and margin optimization…

NEW TISSUE CAPACITY WITH SIGNIFICANT COMPETITIVE EDGE

- Continuing market growth allows for new projects to emerge, but the capacity additions tend to focus on certain regions tightening the local competition
- Many new investments have a competitive edge based on economies of scale, premium technology and/or an advanced energy concept
  - **Will the new structured tissue technologies be a game changer? The new technologies can set a new quality standard especially in the markets where TAD has not succeeded and in new segments such as private label and even AfH**
- Integration of tissue production with hardwood pulp is increasing, especially among new entrants that base the entry on low manufacturing costs
  - **Despite the increasing fiber integration, market pulp will remain as the main concept. Integration creates some new players, such as Suzano and The Navigator, but overseas transports from Brazil or Asia to Europe or NA are likely to remain marginal**
- Competitive edge based on technology advantage or pulp integration can be significant
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BUON GIORNO
A TUTTI

CRESCITA COSTANTE
DEL MERCATO DEL TISSUE

MIAC International Exhibition of Paper Industry 2017

CONTENIMENTO E RIDUZIONE DEI COSTI ENERGETICI

ELEVATA CONCORRENZA

CRESCENTE NUMERO DI INVESTIMENTI

ALTA QUALITÀ

CONTENIMENTO DELL'UTILIZZO DI FIBRE

PRESSIONE SUI COSTI

PRODUZIONE EFFICIENTE

RISPARMIO ENERGETICO

INNOVAZIONI

INNOVAZIONI TECNOLOGICHE CON LO SCOPO DI UNA NOTEVOLE RIDUZIONE DEI CONSUMI DI ENERGIA E FIBRE

PRODUZIONE ECO SOSTENIBILE

RIDUZIONE DEL TIME TO MARKET

- Flessibilità
- Qualità dei prodotti ed efficienza nell'uso delle risorse
- Industria 4.0 utilizzo di macchinari e sistemi intelligenti fortemente interconnessi tra loro
- Big data..enormi volumi di dati in diversi settori
- Dare un senso a tutta questa informazione trasformandola in conoscenza applicata a beneficio degli utenti
- Tecnologia 4.0 ha come finalità principale l'ottimizzazione della produzione in ottica di efficacia ed efficienza
- Innovazione competitività
- Affidabilità
- Cambiamenti in velocità, essere flessibili è fondamentale
- L'industria 4.0 non si realizza al di là delle persone ma oggi più che mai grazie e con loro

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FARE DI PIÙ CON MENO

IMMETTERE IN ATMOSFERA MENO CO_2

QUESTO È UN MUST PER IL FUTURO

UN MERCATO GLOBALE
PIÙ FRENETICO E CONCENTRATO

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COGLIERE LE LORO NECESSITÀ

ORGANIZZAZIONE ARMONICA ED EFFICIENTE

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ACCORDI IMPORTANTI PER LA DISTRIBUZIONE

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MIGLIORARE LE LORO PERFORMANCE

CONTINUARE A INNOVARE A 360 GRADI SU TUTTA LA SUPPLY CHAIN

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RISPETTANDO UN TIME TO MARKET EFFICACE