

The independent news provider for the global tissue business

# TWM

TISSUE WORLD MAGAZINE

## PULP

Signs the costs crisis may be coming to an end?

### PLUS:

#### COUNTRY REPORT: CHINA

Thriving against a price war, an overcrowded market ... and tariffs

#### MARKETISSUES

Sofidel in Ohio – leading the US machinery renewal?

#### ANNUAL REVIEW

'We are at a dynamic moment in the tissue industry'  
Global supply chain leaders on key issues.

#### TW ISTANBUL

1,767 participants from 93 countries, 66 exhibiting companies

#### EXITISSUES

Haiti after earthquake tragedy – birth of a home tissue industry

#### CONSUMERSPEAK

'Give me quality any day'... The Cheeky Panda founders



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# TWM

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**Top:** Sofidel officially opens its \$400m, one-mile long tissue plant in Circleville, Ohio.

**Right:** Resolute president and CEO Yves Laflamme discusses the company's 2Q results in World News.



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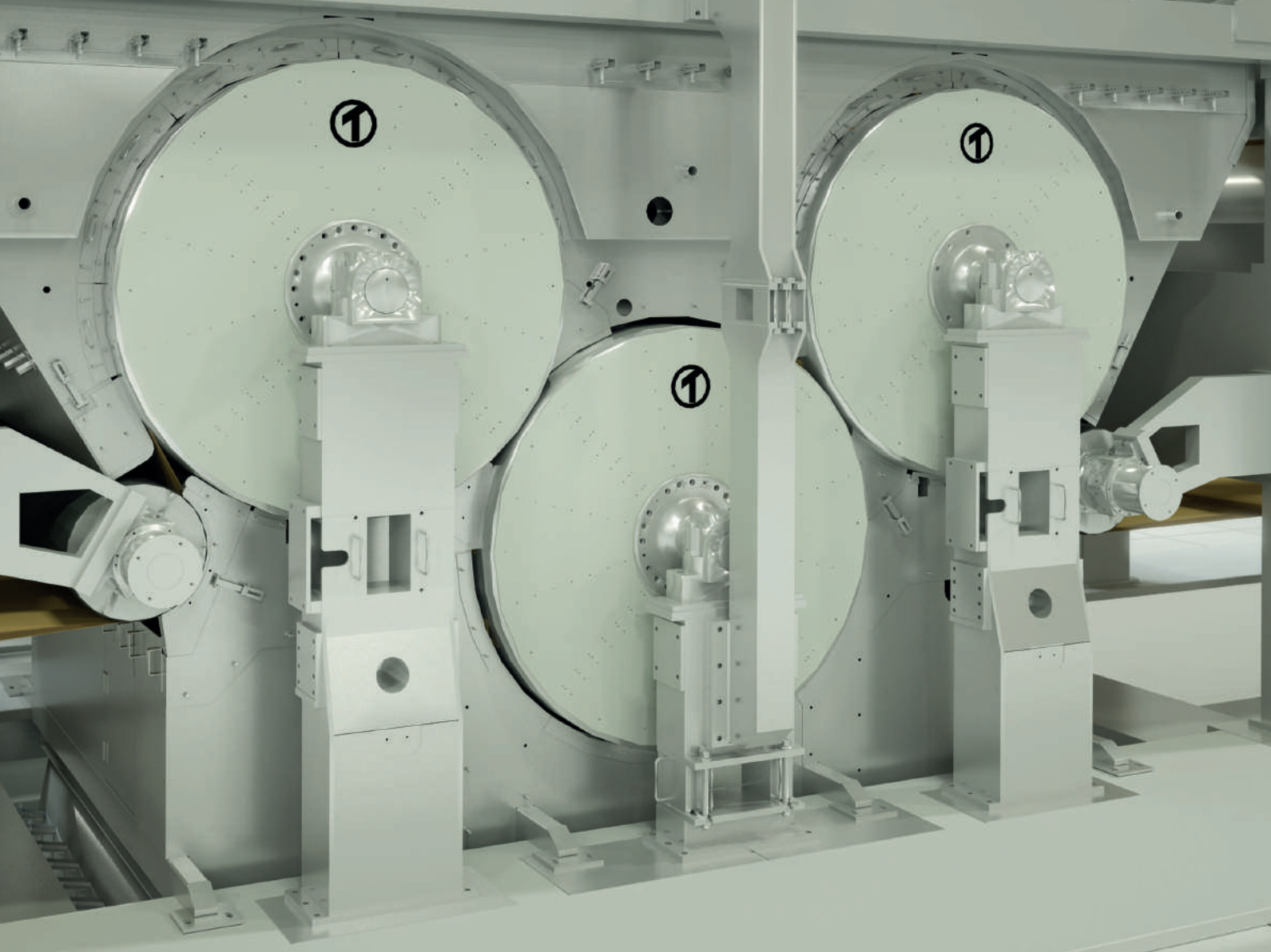
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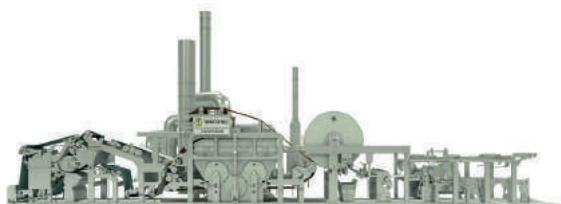
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Cover: image showing the fluctuating pulp price increases impacting the tissue industry  
By PURPLEPRINT Creative.



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# 'We are at a dynamic moment in the tissue industry'

This edition of TWM captures the distinct sense of momentum and energy, and change, at this point in tissue's long history. These pages will give readers a comprehensive cross-analysis of those dynamics. We major on pulp – the single most important cost issue facing tissue today and the subject of much concerned speculation for some years. In our *Pulp Technical Theme*, Metsä Fibre explains its ambitious development project at its Finnish bioproduct mill, where runnability and key fibre quality softwood pulp makes for optimal production process. The right fibres, how they are treated, and the quest for the optimal fibre furnish are under the spotlight by UPM Pulp, which over the last few years has expanded its production intensively. And Södra Cell explains how it won a Best Sustainability Project award for its marketing campaign to communicate that products from sustainably-managed forests are a good thing for the consumer and for the environment.

And, crucially, management consultants Pöyry analyse the complexities which comprise the pulp price, currently at a record high, and suggest that there are indications that prices are finally levelling out.

On that issue, Sofidel's Luigi Lazzareschi thinks we have a year or two to wait yet...

## A change is going to come for the US

In a wide-ranging interview, the CEO examines the influences behind the price of pulp (see this issue's *Marketissues*). He also addresses the effects of tariffs, in general terms, but also specifically on the Pacific rim region of the American north west.

He was speaking to TWM after the Italian tissue giant's official opening of its ultra-modern mill – it's a mile long, cost \$400m on a 280-acre plant in Circleville, Ohio.

The mill is a big statement by Sofidel towards another issue facing the US ... its ageing machinery. Lazzareschi: "I believe an investment like Circleville will really change the way tissue mills are producing in the USA. The market has been very concentrated and in the hands of just a few big tissue players producing branded products, and so there hasn't been much investment in new technology... because they dominated the market.

"Now the American private label market is growing very quickly, and it is very competitive. I believe there will soon be a big push by the tissue manufacturers to renew their assets."

Elsewhere for our *Country Report: China*, one clear advantage in the Chinese market is its rapid expansion of up-to-date technology. Two companies – Hengan Group and Hebei Jinboshi Group – make clear the 'consumer battlefield' and sense of tissue's expanding reach towards that famed and as-yet unreached market.

They have a lot to say about integrated plants, tariffs and what they are doing about them, the price war, overcapacity, pulp ... but the over-riding impression is of consumers with more money on their credit cards demanding more quality, variety, better hygiene products, enjoying 'home tourism' and boosting AfH. Thus, medium and high-

F

Helen Morris



Senior Editor,  
Tissue World magazine

end products are now becoming successful in third- and fourth-tier cities and rural markets as urbanisation continues a pace.

In all this growth there is occasionally a surprising cultural shift... like young Chinese going off the idea of home cooking, resulting in a fall in use of the mighty kitchen towel.

## Looking back, and forward a year

We borrowed the quote at the top of this page from William A Nelson, president, Elettric80 Inc & Elettric80 S de RL, as a signal statement for the whole of this edition of TWM. Our *Annual Review* asked global supply chain company leaders from Spain, the US, the UK, India and Mexico for their retrospectives on 2018 and prospectives for 2019. They embraced the challenge, taking on issues including raw material costs, integration, overcapacity, automation, E-commerce, sustainability, technology, restructuring, protectionism, China, and 'Made in the USA.'

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UBM



# ***"I believe an investment like Circleville will really change the way tissue mills are producing in the USA."***

***Italian tissue giant Sofidel has officially opened its \$400m, 280-acre plant in Circleville, Ohio... one of the most technologically and environmentally-advanced paper plants in the world and Sofidel's largest worldwide to-date. Sofidel CEO Luigi Lazzareschi (pictured below) and Simone Capuano, project manager of Circleville, talked to TWM senior editor Helen Morris.***



**Circleville's TM1 started up in June 2018. How do you win US business with a new plant, can you explain about the pricing needed to win new business?**

Lazzareschi: "In general, our customers are buying from us because of the quality and price of our products. Today, our plants and assets in the USA are more technologically advanced than those available in the US tissue sector. All the machinery we house here at this site is newer and bigger than average."

"If you have new equipment, new assets, you have two things: state-of-the-art quality, and a lower operating cost. It affords us to be big in terms of dimension, as well as having the best technology."

**Circleville's second NTT machine (TM2) will start up here in November ... there's also plenty of space for additional machines?**

Lazzareschi: "Eventually there's space for three more machines here in Circleville. At the moment, there are other priorities ... during 2018 we have ramped-up the two TMs here, a TM in Spain, and a new TM in Poland was also started-up at the end of 2017."

"There are a couple of other areas in the USA where we have room for growth, and relatively soon the group will need to invest in a TAD machine. That may very well be here."

"We also plan to make a similar investment at our new site in Inola, Oklahoma, only the output will be a little bit lower. The total capacity here will be 140,000 tonnes and in Inola 120,000



tonnes. The layout of the buildings will be very similar, the square footage will also be 1.8 million sq ft."

**What will the split be for AfH and retail consumer products production here at Circleville in a year's time?**

Lazzareschi: "AfH will still represent the majority of our sales. It is growing, but the growth in private label retail and consumer product is growing faster, so theoretically on a long-term basis we should be more balanced and be arriving at a point where the production for AfH represents about 30-35% while the rest is for retail."

**You'll eventually have 700 staff in Circleville, how many staff had paper industry experience?**

Capuano: "Most of the people here are coming from industrial jobs. A couple of companies here closed recently, so we have been quite lucky."

"It can be difficult to train people but we have found people already within the paper industry. This is also an area that already has some paper producers, not necessarily tissue but in other paper grades."

"Also it's very important that there is a good university – Miami University – so we have hired students coming in their engineering department from there. Out of the six plants we have in the USA today, we are very satisfied with the people we've found here in Circleville. They have good potential to grow, not just here but elsewhere at our other plants."

Lazzareschi: "We were looking for a site in America that could eventually accommodate 700 people. In the USA, you have to be big, you can't have a small operation like you can in Europe. In the USA, you also have just a few – but very big – customers."

"Private label will become more and more important and you can't produce a lot of private label in a small plant."

"If you want to produce private label and serve all of the country's customer with their private label needs, you would be better to have just one plant with many machines. That way you can

**Most of the people here are coming from industrial jobs. A couple of companies here closed recently, so we have been quite lucky. It can be difficult to train people but we have found people already within the paper industry.**

be very efficient because you can have a dedicated machine for each customer."

"So it's a compromise: operational cost and logistics. We believe at least today that between eight and 10 large operations in the USA would be sufficient, while in Europe we have 27. In Europe, each country has a different customer structure, different products."

**Will this plant ship products anywhere in the USA, or are you focused locally?**

Lazzareschi: "Among our competitors, we are currently one of only a few who can cover almost all of the USA's private label market needs. The only area in which we are having some logistical problems is the North West. That area has seen some tissue mill closures, three or so large plants there which have closed down."

"That area was almost empty, and now it's emptier, so a lot of products will be coming from east of The Rockies to that part of the USA."

"At the same time, an important aspect is that that part of the USA was served by China and Asia, so I imagine some of the closures there in the recent past have been due to imports from that region."

"Now with the import tax duties, I imagine that some who have made closures may think of remaining there because with an import tax duty of 25%, I doubt a lot of Chinese will come to the West and face that."

"And that's in addition to the depreciation in the Chinese currency, which has significantly devalued. The Chinese players still have to buy pulp, and pulp is bought in dollars. So while they may have some advantages in the cost of their labour or in their energy, and probably in transportation, the main cost – pulp – is still nominated in dollars. So I don't believe we will see much paper in the USA coming from China."

"This will help investments like Circleville. I believe 300,000 tonnes of tissue paper is coming into the USA from China today. That's five/six machines, so three plants like this Circleville one. I believe this will help the American tissue industry's economical situation."

"Pulp prices have increases of up to 60%. The industry has not been able to recover that sort of price increase, so I imagine if there is going to be a bit of shortage, or a decrease in the supply of tissue products on the market, it will be easier for the sector and the industry to succeed in their request for price rises."

**Will pulp prices start to drop in 2019?**

Lazzareschi: "I have the impression that pulp prices will stay high the next couple of years. Even though I imagine most of the pulp producers understand that they have already pushed a lot, even too much ... so at the same time they are afraid that the price may drop. This high price of pulp is pushing pulp producers to increase production, so the bottlenecking ... if they can do it, they are going to do it."

"There are so many projects today for pulp production, but there is going to be newer huge pulp capacity that will come in the market, but probably not for three years yet. We will see the larger volumes of new pulp capacity come on stream in 2021, 2020."

**Are European producers shipping into the USA, driven by these high pulp prices?**

Lazzareschi: "Anything can happen, even in a short period of time. For example, China forbids imports of recycled paper. That has been a very strong change. And it affects pulp prices too because those there that were producing with very bad quality in China they are producing with better recycled paper, and those who were producing better recycled paper are now producing with pulp."



"So the demand of pulp in China has also increased because of that ban. Recycled paper prices generally have also dropped. But what if China decides to start importing recycled paper again?"

"We're going to see a big increase in the price of recycled paper, and maybe that will affect the price of pulp. Probably it won't decrease, but it might be difficult if China is going to start to buy recycled paper, pulp prices could continue to increase again. Anything could happen."

#### Is TM1 at capacity?

Lazzareschi: "The ramp up has been very good."

#### In Europe, tissue mills such as P&G and GP have left the market in the past few years. What does the future hold for Sofidel in terms of your growth in America and Europe?

Lazzareschi: "P&G didn't have much success in Europe, they didn't succeed with TAD products. In Europe TAD isn't appreciated as much as it is here. For GP, I wouldn't want to speculate on their reasons for leaving."

"For Sofidel, here in the USA it will be double digit growth whilst in Europe it will be single digit. In general, still in the USA we have to look for new sites for the medium to long-term... it's not about making it happen tomorrow morning. We need to look for new sites and eventually an acquisition. In Europe, no more. We are already covering Europe well, so the strategy there is just to increase capacity where we already have a presence. So no new greenfield plants or acquisition in Europe. Although – never say never."

#### Would any potential acquisition by Sofidel in America be private label?

Lazzareschi: "Yes. The group is quite large, but we are not large enough to launch our own brand, or even to make an acquisition of a brand. There are some brands for sale but the brands

#### P&G didn't have much success in Europe, they didn't succeed with TAD products. In Europe TAD isn't appreciated as much as it is here. For GP, I wouldn't want to speculate on their reasons for leaving.

here for sale are very big so you can't consider a potential acquisition of a good brand."

"So the strategy for Sofidel is to remain in the PL sector for many years here before developing a brand. We have to have much better coverage of the USA before that. If you launch a brand in Florida, you have to be able to cover the whole nation. And today we still have some empty spots."

#### Is purchasing Orchids a possibility?

Lazzareschi: "No, because we already have a site located close to there. So today it wouldn't make sense to acquire in Oklahoma."

#### With the NTT machines you have here, how do they compared with the TAD lines run by other tissue manufacturers in America?

Lazzareschi: "With the NTT technology we are producing products that are something in-between conventional tissue and TAD. The big difference is the energy cost is much closer to conventional tissue than to TAD."

"In theory, you have a similar product, but produced at a much lower cost and with greater energy efficiencies than with TAD."

#### And less material costs?

Lazzareschi: "It's a possibility. Structured paper can eventually save fibres. Chemical costs will be higher in NTT than a conventional paper machine."

#### For converting, you currently have 10 converting lines planned for this site?

Lazzareschi: "They're for rolled products,

but we also have a folding machine, one for folded towel, and another line for producing facial tissue. Soon we will also have a napkin machine. We will be producing all possible quality range of tissue products."

#### Do you expect other European tissue mills to come into the USA?

Lazzareschi: "There are several medium-sized producers that are looking carefully in this market. One has already installed an office in Chicago. I believe they are looking at the opportunities here."

"It also depends which customers will grow because some European customers have big plans to grow in the USA, and the European producers often then follow them. So they may join the expansion of the customer into the USA. There are also some smaller producers looking at niche products, for example facial tissue."

"Usually our competitors – especially the European ones – closely follow what Sofidel does. So they are studying and looking ... if Sofidel did it, they are then asking why. Our competitors are speaking a lot about our investment and I believe an investment like Circleville will really change the way tissue mills are producing in the USA."

"The market has been very concentrated and in the hands of just a few big tissue players producing branded products, and so there hasn't been much investment in new technology in the USA because they dominated the market."

"However, now the American private label market is growing very, very quickly, and it is very competitive. I believe there will soon be a big push by the tissue manufacturers to renew their assets. So our investment here has made a fortune for the machinery producers... probably not for us, but for them at least!"

**With the NTT technology we are producing products that are something in-between conventional tissue and TAD. The big difference is the energy cost is much closer to conventional tissue than to TAD.**



# TISSUE WORLD ISTANBUL 2018

An impressive 66 exhibiting companies and a total of 1,767 participants have attended the second Tissue World Istanbul exhibition and conference. Held in Istanbul between 4-6 September, exhibitors from 14 countries included tissue mills and a range of suppliers including chemicals, wrapping/packaging equipment, converting machinery, packaging equipment and non-woven machinery. The Istanbul exhibition also differentiated itself from other Tissue World events by bringing leading finished product manufacturers together on the show floor. Companies such as Aktül Kağıt, Eczacıbaşı Tüketim Ürünleri, Hayat Kimya, and Lila Group served as the main attraction for tissue trading companies and distributors.

Holding 300,000 – 350,000 tonnes of the regional tissue import and export business, these companies account for over 40% of the regional tissue business. This was a first to feature non-woven machinery suppliers.

Overall, exhibitors came from Bangladesh, China, Germany, India, Italy, Korea, Netherlands, Pakistan, Serbia, Slovakia, Switzerland, Turkey, UAE and the USA. Some 143 delegates also attended the conference, which had the theme: "Turkey: tissue dynamics navigating towards new markets – increase profitability, export sales and growth."

The first day's Senior Management Symposium discussed the geopolitical and economic overview of the tissue market and its dynamics. This was also the basis for the subsequent Executive Panel Discussion which gathered distinguished representatives from major players in the tissue industry, including Lütfi Aydın, global tissue director of Hayat Kimya; Erdem Ülkümen, plants director of Eczacıbaşı Tüketim Ürünleri; İbrahim Gökce, production director from Aktül Kağıt; and Alp Öğücü, general manager of Lila Group. It was the second full Tissue World Istanbul exhibition and conference, while a conference-only event took place in 2014.

## Day 1 – Senior Management Symposium

### Turkey: economic outlook and balance of risks

*Seda Guler Mert, deputy chief economist, Garanti Bank, Turkey*

#### KEY MESSAGES

- The global expansion remains at a steady pace, but less synchronised. Risks related to political uncertainty, vulnerabilities in emerging economies and trade protectionism.
- Recent data pose downside risks on the degree of expected cool-down in the Turkish economy; though a

comprehensive policy mix could serve as a balancing factor.

- Inflation reached worrying levels with continued deterioration in pricing behaviour and exceptionally high food inflation. Given the depreciation pressure over Turkish Lira (TL), risks on inflation are clearly on the upside.
- Anti-inflation strategy should be urgently followed (including all policies and accepting lower but healthier economic growth). Monetary transmission mechanism should be enhanced by prudent fiscal policies.
- Higher oil prices will weigh on current account balance this year, though the adjustment will be much clearer starting from 2019.

## Global environment: global growth continues, but risks are intensifying

- 1 The pace of global expansion is being maintained, but is less synchronised. Growth is robust in the US due to the fiscal stimulus and stable in China, but it has declined in Europe
- 2 Increased protectionism. At the moment, its impact on growth is limited, but it could be greater if the measures under discussion were to be implemented.
- 3 Higher inflation and drag on growth in oil-importing countries.
- 4 Different pace of monetary normalisation in Europe and the United States. Strengthening of the dollar and tightening of global



financial conditions.

- 5 More volatility in emerging markets. Increased financial tensions due to increased financing costs and protectionist threats.
- 6 Global risks are intensifying. The possibility of a trade war comes together with greater risks in emerging economies and in Europe. Robust global economy despite growing uncertainty.

Global growth continues, supported by private consumption and investment, but with growing differences by region. Confidence indicators show some moderation, but remain at high levels. Limited effect of approved tariff increases, but significant if those being discussed are implemented. The tariff increases approved by the US would have a limited direct impact. With a protectionist escalation, the negative effect on growth would also be significant in the US.

The effect, smaller in Europe, would differ by country and would, above all, affect Germany and the countries in Eastern Europe.

The growth of global GDP could be reduced by around 0.2% just due to the trade channel.

The strength of the US dollar and higher interest rates are causing an adjustment in emerging markets.

Stable growth in the US, but a slowdown in other areas; Challenging times ahead to be tackled with policy determination; Emerging markets woes, macroeconomic imbalances and uncertainty about policies lead to sharp reaction of Turkish financial assets.

Global risks: the main one is a trade war, but those associated with emerging economies and Europe are increasing.

### Tissue market dynamics with focus on the MENA region including Turkey

*Bodo Kottwitz, principal, Bkay Tissue, Germany*

Total population in the MENA Region, 2016: 513m people. The three largest countries, Egypt, Iran and Turkey, account for half of the total population. As a comparison: Western Europe has a population of 422m people ... with nearly four times the tissue consumption as the MENA region.

### RECENT MARKET TRENDS

Total tissue consumption MENA region by main country 2017: 1.88m tonnes (partly preliminary data);

The five largest countries Turkey, KSA, Iran, Egypt and Israel account for some 70% of the total regional consumption. Egypt and Iran, the countries with 1/3 of

the regional population, account for less than 1/5 of tissue consumption;

Estimated structure of tissue demand in the MENA region, 2017 – not representative for the region as a whole! Facial tissue/hankies dominate in the Arab countries, toilet paper in Turkey and Israel. A slight increase towards toilet paper and towelling can be expected: facial/hankies 39%, toilet paper 35%, towelling 15%, napkins 10%, other 1%.

### Recent tissue market growth in the MENA region

Political turbulences lowered the average growth in 2010-2014, but in 2015 growth returned onto its former path while new problems lowered the growth again in 2016. 2017 was similar to the year before. Average historic growth 8.5% per annum.

Volume growth of tissue consumption in the MENA region by main country, 2006-2016

Turkey's growth has been the largest by volume in the past 10 years ... in the magnitude of one single-width tissue machine per year. But imagine the impact of a large tissue machine in the UAE...

Tissue net exporters and net importers in the MENA region, 2016 and 2017 where available Turkey (#4 net exporter



**Global presence:** exhibitors attending from 14 countries included tissue mills and a range of suppliers

worldwide and #2 for parent rolls) and Egypt the main exporters – UAE perhaps soon #3 with huge capacity increase? Saudi Arabia, Iraq and Israel the main net importers.

### Turkish tissue export growth, 2005-2017

Turkey exports tissue, mainly parent rolls, to many destinations with the UK, Greece and Israel being the largest buyers exceeding 70% in some years; major export growth jumps in 2016 and 2018 being on similar level to 2017.

### FUTURE DEMAND PROSPECTS

Tissue demand in the MENA Region until 2026: market expansion will continue and regional consumption will grow by 1.3m tonnes and exceed 3.0m tonnes by 2026. However, economical/political uncertainties also exist and this growth should not be taken for granted.

### DEMAND-SUPPLY OUTLOOK

Expected tissue net trade balance in MENA region, 2012-2020

New, partly export-oriented investments will likely increase tissue net exports further to about 140,000 tonnes by 2021 – this assumption is already considered in the supply/demand balance.

### Conclusions:

Economic and political uncertainties, weak currency, inflation, IFC/EBRD financings threat for Turkey, war, taxes/duties, sanctions, Brexit. New markets .. pulp price – way out? Tight international (Asian) competition, increased energy prices in single countries weakening regional cost benefits, industry consolidation?

### Winning in West Africa: critical success factors and insights for foreign companies

*Clarence Nartey, country director, Invest in Africa (Ghana), Ghana*

West Africa is home to three of the fastest growing economies in 2018: Ghana, Cote D'Ivoire, Senegal.

Turkey and Ghana: A thriving relationship. \$480m\* (trade volume between the two countries in 2017). Ghana is Turkey's

third largest trade partner.

Turkey and Côte d'Ivoire: A promising future \$428m\* (trade volume between the two countries in 2017).

Turkey and Senegal: A promising future \$250m\* (trade volume between the two countries in 2017).

Doing business in West Africa:

- High economic growth translates into quick return on business investment.
- Thinking of the region as a homogeneous whole.
- Lack of quality local suppliers: unable to deliver on time/to international standards.
- Most low-income consumers are not aspirational.
- Local brands unable to compete on a sustainable basis with MNC's/ foreign brands.

There is a wide spectrum of consumers across the region and they shop in a variety of channels –

Lesser: table-tops, emerging: modern trade, pharmacy, cosmetic shops, E-Commerce, social commerce.

Dominant: groceries/general stores, open markets, convenient stores.

All channels are in a different life stage.

- Dominant channels remain the key outlet for shoppers.
- Emerging channels are where we see growth.
- Channels like table-tops are declining in relevance among shoppers.
- Groceries and open markets are the most favoured shopping destinations

### A few critical success factors

Invest for the long-term but plan with short to medium term horizons.

- Focus on de-averaging (across markets).
- Have a strong risk management/ contingency planning orientation.
- For FMCG brands, execution is everything – especially in the marketplace.
- Access to cheap credit is a challenge. Consider alternative financing solutions (e.g Exim Bank type support/ barter deals).
- Commit to building brands (and business models) which address social needs.
- Be ready to invest and partner with locals to get your supply chain right.

### Benefits of new products and innovations

*Pirkko Petäjä, principal, Pöyry Management Consulting Oy, Finland, Mikko Helin, principal, Pöyry Management Consulting Oy, Finland*

- 1 In order to grow, add-value and improve profitability, companies need to constantly innovate, develop and renew their products and marketing.
2. Enlarging the product portfolio – with products already existing in the market, but not part of the company's current offering.
3. Creating new products or improving existing products – new products, features, packages etc.
4. Inventing new market "segments" and new needs – recognising new consumer segments with needs for customised products.
5. Process innovations, e.g. new raw materials or technologies that lead to new or improved products, market innovations, improved efficiency or reduced costs.

### How new products and innovations add value?

Besides increasing sales volumes and adding value, new products and innovations are fundamental in building product brand and image:

- Increased sales volumes
- New products in the company portfolio and/or in the market
- Improved products with new features
- New needs and market segments.
- Higher pricing
- New or improved products allowing higher price and pushing consumers to the premium end of the market
- The product portfolio becomes less vulnerable to price driven competition and pulp price fluctuations.
- Brand value
- Product innovation and differentiation is most beneficial when related to a brand the company can keep or increase the market share
- Strong brands bring producers closer to consumers
- Innovative image catches also the attention of investors and talented personnel.

Small innovations matter. Individual smallish innovations have limited value as such, but they maintain and develop the value of a basic product and lengthen





**Main attraction:** companies such as Aktül Kağıt (above), Eczacıbaşı Tüketim Ürünleri, Hayat Kimya, and Lila Group attended

its life cycle.

- Product innovation is typically led by the branded players. Product differentiation is most beneficial when related to a brand.
- Tissue and traditional hygiene products have strong market and client synergies, but some wet wipes can additionally share the same brand with tissue, with mutual benefits

### HYGIENE BUSINESS – TYPICAL COMBINATION WITH TISSUE

Out of the various hygiene product businesses, selected wet wipes have the best market synergies with tissue.

- Tissue and hygiene products typically go hand in hand; especially there are market, distribution channel and client synergies.
- The global leading producers, such as P&G, K-C and Essity, are strongly present in both segments. Also in MENA many regional players, like Hayat, Eczacıbaşı, FHH and INDEVCO, have a wide range of hygiene products in their portfolio.
- There are also specific producers for both segments; many tissue producers have some selected hygiene products like wet wipes, while pure hygiene players seldom offer tissue products.
- Smaller tissue like products, such as some wet wipes, can be seen complementary to tissue products, strongly leveraging the same brand and customer base.

### Market trends and demand drivers:

Consumer wipes market is experiencing healthy growth, driven particularly by personal care wipes, moist toilet tissue in the forefront.

- Basic economic growth, increasing disposable incomes and demographic developments are the fundamental drivers also for the wipe consumption.
- Essentially consumers are looking for convenience with these products. Hygienic and disinfecting reasons are also important.
- With constantly increasing relevance of environmental issues, biodegradability is becoming more and more important.

### Discussing Unmet Potential in Retail Tissue in the Middle East and North Africa: Growth, Trends, Risks and Opportunities

*Mike Kruiniger, analyst, Euromonitor International, UK, Caglar Altunel, analyst, Euromonitor International, Turkey*

Retail tissue per region: Middle East and Africa continues to grow. Retail tissue split: paper towels fastest in value.

### The Region's Unmet Market Potential

Per capita consumption of retail tissue: UAE remains dominant. Global 3.2kg Middle East and Africa 0.9kg. Egypt leads in unmet potential in retail tissue. Unmet potential in MENA 2 Billion

Kilogram. 5% of global unmet potential.

What will be driving growth in the next five years? Retail volume sales growth: Egypt – product price 2.3%, population – 2.1%, Turkey – product price – 0.5%.

TURKEY: Retail tissue continues to register double-digit growth in local currency terms.

Unit price main driver of value growth. Decline in USD

2017: – 3.6% y-o-y growth, USD current value

Stagnation in the income level of consumers hinders volume growth.

Positive volume growth continues despite the economic unease, thanks to:

Rapid urbanisation: Istanbul's population is 15m as of end of 2017;

Modern grocery retailers: value share of modern grocery retailers reaches 95%.

Increased urbanisation brings about an increase in the per capita retail consumption. Due to swift expansion of modern groceries, retail tissue has been reaching larger masses.

Key Takeaways: Strong unmet potential, markets of the future, economy products, multi-usage, strong local players.



# THIS IS AN ACT OF A HERO

In every decision you make, you can make a difference. Even when choosing tissue papers that originate from sustainable forestry you are doing so. While blowing your nose you are playing an important role in the transition towards a bio-based society. And everyone who contributes to that transition is a hero.

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**State-of-the-art:** Vinda's new TM will increase the group's production by over 60,000tpy

## CHINA

### Vinda Personal Care increases capacity by 60,000tpy

Vinda Personal Care (Guangdong) has fired up two new Toscotec-supplied Ahead-2.0M tissue machines at its Yangjiang, Guangdong-based site. They will increase the group's annual production by over 60,000 tonnes. With these start-ups, Vinda kicked off production at its new Yangjiang mill, strategically located by Yangjiang Port in south-west Guangdong. Toscotec's Ahead-2.0M lines feature a second generation TT SYD-18FT of 5.4m diameter and state-of-the-art energy saving technology included in the profitable TT DOES package (Drying Optimisation for Energy Savings). The two tissue machines started up on

the same day at the same time. In the coming months, Vinda will fire up another four Toscotec-supplied lines at its new paper mill in Xiaogan, Hubei province.

### Yibin Paper boosts capacity with investment

Yibin Paper has boosted its production capacity after starting up a TM2-ideal line. Supplied by A.Celli Paper, TM2 has a design speed of 1,800m/min, an operating speed of 1,600m/min and an untrimmed roll width of 2.8m. The scope of supply for the tissue machine consists of an Approach Flow system, a complete set of Crescent Former tissue machines, a MCS control system, an air system and a dust removal system.

TM2 was the first in an order for five sets of ideal tissue machines. The remaining four are scheduled to be started up by the end of 2018, boosting production capacity to 120,000tpy.

### Taison Pulp boosts capacity

Taison Pulp (Group) has invested in two PrimeLineST W8 tissue machines for its mill in Suzhou, Anhui province. The machines will produce up to 120,000tpy and are designed for 12 – 42g/m<sup>2</sup> for facial and toilet paper. Start-up is scheduled for 2019. They have a design speed of 1,800 metres per minute and a paper width on reel of 5.6m, and the 18ft PrimeDry Steel Yankee with steam-heated hood enables "highly efficient drying with substantial energy savings", according to supplier Andritz. The scope of supply also includes the stock preparation system, comprising two lines to process short fibre pulp and a mixture of bamboo and long fibre pulp as raw materials, as well as the approach system and Disc Filter Savealls for fibre recovery.

**Taison Pulp (Group) has invested in two PrimeLineST W8 tissue machines for its mill in Suzhou, Anhui province. The machines will produce up to 120,000tpy and are designed for 12 – 42g/m<sup>2</sup> for facial and toilet paper. Start-up is scheduled for 2019.**

## CANADA

### Kruger announces price hikes in Canada

Kruger Products (KPLP) will increase the price of its consumer branded tissue products sold in Canada as of 14 October.

The company said the increase is required "to offset unprecedented and sustained cost increases on input materials and freight with pulp costs being up over 23% since our last pricing announcement in July 2017".

KPLP is a leading Canadian manufacturer of quality tissue products for household, industrial and commercial use.

## FRANCE

### Essity restructures consumer tissue operations in France

Essity has said it is closing a converting facility for retail branded products in Saint-Étienne-du-Rouvray and will invest in its remaining integrated production facilities in France.

The closure is to "further strengthen competitiveness and increase efficiency" and is expected during the fourth quarter of 2018.

It said the move was aligned with its strategy "to optimise the production footprint, to increase cost and capital efficiency, and further increase value creation in the consumer tissue business area".

The restructuring costs are expected to be SEK 480m, of which approximately SEK 430m is expected to be recognised as an item affecting comparability in the third quarter of 2018.

## ARGENTINA

### CMPC boosts consumer and AfH presence in Argentina with investment

CMPC Tissue has invested in an Advantage tissue production line to be installed at its Zarate mill.

Supplied by Valmet for an undisclosed sum, start-up is expected in the fourth quarter of 2019 and will add 50,000tpy of high quality toilet and towel grades to the company's annual production.

Scope of delivery includes a complete Advantage DCT200 tissue production

**Kruger said the price increase was required "to offset unprecedented and sustained cost increases on input materials and freight with pulp costs being up over 23% since our last pricing announcement in July 2017".**

line with stock preparation equipment and tissue machine.

It will also include control systems, electrification, mill engineering as well as installation. The raw material for the new line will be virgin and DIP pulp.

CMPC is one of the leading pulp and paper companies in Latin America with operations in the fields of forestry products, wood pulp, paper and tissue.

It runs 23 tissue machines in seven countries with an annual production

add 35,000tpy to the company's current production of high-quality facial, toilet tissue and kitchen towels.

Scope of delivery includes a tissue production line featuring stock preparation systems and an Advantage DCT100HS tissue machine.

It is equipped with OptiFlo headbox and Valmet Steel Yankee cylinder as well as the Advantage technology including ViscoNip press, AirCap hood, WetDust dust system and SoftReel reel.

**CMPC is one of the leading pulp and paper companies in Latin America with operations in the fields of forestry products, wood pulp, paper and tissue. It runs 23 tissue machines in seven countries with an annual production capacity of 700,000 tonnes of tissue products for the Latin American consumer and AfH market.**

capacity of 700,000 tonnes of tissue products for the Latin American consumer and AfH market.

Valmet has previously delivered an Advantage DCT200 tissue line to the company's Talagante mill in Chile, a TM to Altamira in Mexico and an Advantage ViscoNip rebuild to CMPC's Caieiras mill in Brazil.

### Papelera San Andrés de Giles boosts high-quality tissue capacity

Papelera San Andrés de Giles has invested in a Valmet-supplied Advantage DCT100HS tissue machine and extensive automation package at its Buenos Aires-based mill.

Start-up is planned for the second half of 2018 and the investment will increase the company's production of high-quality tissue products.

It will have a width of 2.8m, a design speed of 2,000 metres/minute, and will

Papelera San Andrés de Giles has an annual production capacity of 20,000tpy.

The value of the order was not disclosed.

## INDONESIA

### APP's Perawang mill increases capacity

Asia Pulp & Paper's (APP) Perawang mill has successfully started-up three E-wind winders for tissue production.

Supplied by A.Celli, the three new generation winders are a partial delivery of a larger sizeable order currently under delivery and consisting of two E-wind T200 winders, a calender and Slittomatic automatic knives positioning system, and an additional E-wind T200 winder.

The investment will help the site reach its production targets to increase and strengthen its presence in Indonesia and through all of Asia.

**Asia Pulp & Paper's (APP) Perawang mill has successfully started-up three E-wind winders for tissue production. Supplied by A.Celli, the three new generation winders are a partial delivery of a larger sizeable order**



## AMERICA

### RGE boosts pulp capacity with Lwarcel Celulose purchase

RGE (Royal Golden Eagle) – the holding company of pulp and paper manufacturer APRIL Group – has boosted its global pulp capacity after acquiring Lwarcel Celulose from Lwart Group.

The acquisition of the 250,000tpy pulp mill in São Paulo, Brazil, was confirmed on 31 August.

In a statement, RGE said the purchase adds to the company's strategy to "increase its global pulp capacity for competitive advantage".

Lwarcel will be managed as a member of Bracell Group, which operates RGE's cellulose businesses in Brazil.

Bracell Group will now comprise Lwarcel and Bahia Specialty Cellulose, one of the largest specialty cellulose producers in the world.

The Bracell Group will be based in Singapore, with sales offices in Asia, Europe and the United States.

RGE added that among Lwarcel's immediate priorities was the study of potential mill expansion plans in the near future.

The company was founded in 1973 and manages a group of manufacturing companies with global operations.

### Nine Dragons to purchase Resolute's Fairmont mill for \$55m

Hong Kong-based Nine Dragons has entered into an agreement to purchase Resolute Forest Products' pulp mill in Fairmont, USA. The mill produces recycled bleached kraft pulp that is used in packaging and tissue products and has a production capacity of 220,000tpy. Resolute entered into the agreement with ND Paper, a subsidiary of Nine Dragons.

Nine Dragons is one of the largest producers of packaging paperboard in the world. Its move into the US follows in the wake of China's National Sword policy, where the flow of scrap paper to China has diminished.

In addition to nine paper mills operating in Asia, the company also operates two US-based facilities in Wisconsin and Maine.

ND Paper has agreed to offer employment to Fairmont mill staff, effective upon closing of the transaction, which is expected within the next

### Bracell Group will now comprise Lwarcel and Bahia Specialty Cellulose, one of the largest specialty cellulose producers in the world.

two months.

Resolute Forest Products produces a range of products including market pulp, tissue, wood products, newsprint and specialty papers.

Yves Laflamme, president and chief executive officer of Resolute, said: "Proceeds from this asset sale will enable us to further increase liquidity, and continue to improve our balance sheet and financial flexibility."

"Over the coming days, we will communicate with our customers to discuss the transition of supply as we seek to optimise our recycled bleached kraft pulp business at our Menominee, Michigan facility."



*"We elected to sell our Ladysmith facility, which manufactures recycled paper and does not align with that strategy," Linda K. Massman, Clearwater president and chief executive*

### Clearwater Paper announces sale of Ladysmith Facility to Dunn Paper

Clearwater Paper Corporation has sold its Ladysmith, Wisconsin-based facility to Dunn Paper for \$72m, and reiterated its focus on the production of ultra-quality tissue products.

The company will use the net proceeds to help fund the expansion of its Shelby, N.C. facility.

Linda K. Massman, president and chief executive, said the strategy for its consumer products business is to "match the growing demand for the ultra-quality segments of the tissue category".

She said: "As a result, we elected to sell our Ladysmith facility, which manufactures recycled paper and does not align with that strategy."

Effective 21 August, Ladysmith employees are now employees of Dunn Paper.

Brent Earnshaw, chief executive of Dunn Paper, said: "Ladysmith is a critical piece of our strategic growth at Dunn."

"The additional capacity at Ladysmith will enable faster growth in the specialty tissue/absorbent market and their recycled fibre source is well suited for a variety of applications within the Dunn portfolio."

Clearwater Paper manufactures quality consumer tissue, AfH tissue, parent roll tissue, bleached paperboard and pulp at manufacturing facilities across the nation.

The company is a premier supplier of private label tissue to major retailers and wholesale distributors, including grocery, drug, mass merchants and discount stores.

Dunn Paper is a manufacturer of high-performance, advanced paper materials for lightweight technical food packaging and tissue products throughout North America.

It currently manufactures products at six locations across the Midwest, East Coast, and Ontario, Canada.

Dunn Paper is a portfolio company of Arbor Investments, a Chicago-based private equity firm.

### St. Croix Tissue's Baileyville site in industrial spill incident

An incident at St. Croix Tissue's Baileyville, Maine-based tissue plant has resulted in a leak of more than a half million gallons of industrial wastewater spilling into the St. Croix River.

The spill occurred on 10 August when a pressurised wastewater pipeline cracked.

According to local reports, following the spill the mill temporarily shut down but has since resumed operations.

The Maine Department of Environmental Protection is currently investigating the environmental impacts of the spill.

In 2016, pulp producer St. Croix Tissue started up its first PM at Baileyville, USA.



# TISSUE WORLD

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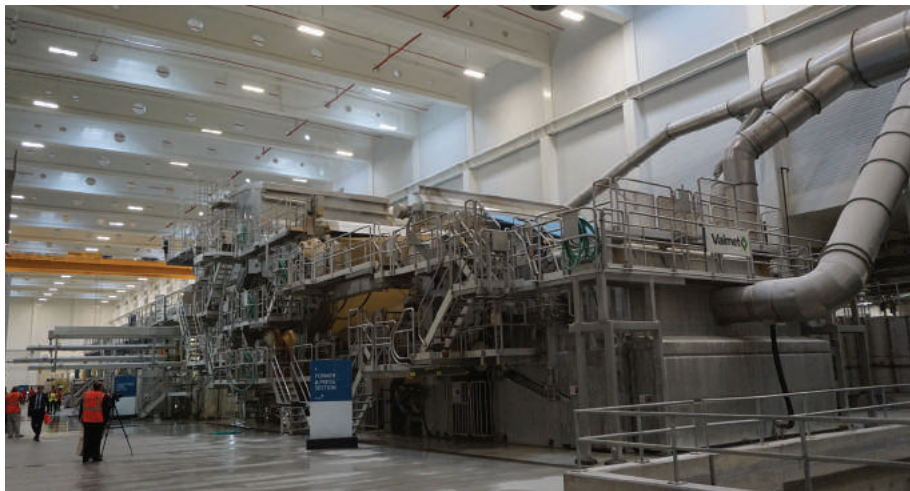


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**USA expansion:** one of the two Advantage NTT 200 TM's at Sofidel's Ohio-based site, which will produce a total of 140,000tpy once running at full capacity

## Sofidel opens its "largest and most innovative" tissue plant in Ohio

Italian tissue giant Sofidel has officially opened its 280-acre, \$400m plant in Circleville, Ohio.

The site is one of Sofidel's most technologically and environmentally-advanced paper plants in the world, and its largest worldwide. It is also the group's first integrated paper mill built from the ground up in the United States. Equipped with two Advantage New Tissue Technology (NTT) 200 paper mill machines supplied by Valmet, each machine can produce 2,000 metres of 5.5-metre-wide paper sheets per minute. The plant has 10 lines for producing finished products, including three Constellation lines supplied by Fabio Perini.

Once running at full capacity, it will employ 700 people and have a production capacity of 140,000tpy.

Luigi Lazzareschi, chief executive of the Sofidel Group, said: "The United States is a crucial market for us and is where we intend to grow. This plant will help us fuel our growth significantly and further our commitment to sustainable, environmentally responsible development."

Since expanding to the United States in 2012, Sofidel now has operations in seven states: Florida, Mississippi, Nevada, Ohio, Oklahoma, Pennsylvania and Wisconsin.

## Sofidel announces winners of its Sustainability awards

Sofidel has announced the winners of the third edition of the Sofidel Suppliers

Sustainability Award (3SAward). Held in Columbus, Ohio, in conjunction with the official opening of Sofidel's "biggest, most modern and sustainable plant to date", its Circleville plant, it rewarded "the most virtuous supply chain partners of the tissue group for the environmental and social commitment that they have shown".

This is an accolade awarded each year by the tissue manufacturer, led by the Stefani and Lazzareschi families, to the suppliers that have distinguished themselves through their environmental and social sustainability activities.

The award is based on the "TenP – Sustainable Supply Chain Self-Assessment Platform" conceived and promoted by the Global Compact Network Italia Foundation (GCNI Foundation), of which Sofidel Group is a "Founding Promoter Member". A performance self-assessment tool based on the Ten Principles ("TenP") of the United Nations Global Compact.

## Sofidel set up two awards categories

Best Supplier, for companies with the highest scores based on the TenP platform. The companies awarded are:

*Pulp Producer Category: Södra;*

*Procurement & Purchasing Category:*

*International Paper;*

*Logistics Services Category: Arcese*

*Trasporti S.p.A.;*

*Marketing & Sales Category: Ecoverde S.p.A.*

Best Sustainable Project, an acknowledgment that goes to the companies that implemented a particularly significant environmental and social sustainability initiative. The companies awarded are:

*Environment Category: Henkel AG & Co. KGaA;*

*Environment Category: Semo Packaging;*

*Social Category: Södra.*

The Sofidel Supplier Sustainability Award 2018 has been held in partnership with: Columbus2020, Elettric80, Fabio Perini, Gray, Solenis, Suzano Pulp and Paper, Valmet (Main Partners); ACelli, Covermat, International Paper, Pulsar Engineering, Toscotec (Partners); Tissue World magazine (Media Partner).

The Sofidel Suppliers Sustainability Award was set up to drive, disseminate, value and reward the best practices and improvement actions taken by the group's suppliers in terms of environmental and social sustainability. Almost 300 suppliers took part in the 2018 edition of the 3SAward.

The first edition was held in Lucca and the second in London.



**Award winners:** (L-r) Marcus Hellberg, sales director, Södra; Andrea Piazzolla, chief purchasing officer, Sofidel; Gunilla Saltin, CEO Södra Cell; Luigi Lazzareschi, CEO, Sofidel

## GLOBAL

### Resolute reports "improved operational performance" but tissue segment incurred operating loss in 2Q results

Resolute Forest Products has reported net income for the quarter ended 30 June 2018 of \$72m, compared to a net loss of \$74m in the same period in 2017. Sales were \$976m in the quarter, an increase of \$118m from the year-ago period.

The company recorded operating income of \$121m in the quarter, compared to \$48m in the first quarter of 2018, reflecting higher prices realised across almost all of its product offerings, a reduction in energy costs, largely seasonal, favourable fibre usage, and higher shipments following distribution constraints in the first quarter.

Operating results also benefited from the effect of the weaker Canadian dollar. The company said this compensated for the 20% increase in market-based stumpage fees and a rise in recovered paper prices.

The tissue segment incurred an operating loss of \$10m, compared to \$1m in the first quarter, largely attributable to the first time inclusion of Calhoun's results in the second quarter. When compared to the previous quarter, Calhoun's operating results improved by \$3m, mainly due to an increase in shipments.

If Calhoun's first quarter sales, included in the tissue segment, overall tissue sales would have risen by 5%, as product mix shifted favourably towards more converted product volume. EBITDA for the segment was negative \$5m.

Yves Laflamme, president and chief executive, said: "Overall positive price momentum and improved operational performance led to record profitability this quarter.

"Our strong financial results allowed repayment of \$105m of debt during the quarter, significantly improving our balance sheet and leverage."

The company's operating income improved by \$169m, compared to the second quarter of 2017.

Laflamme added: "Our view on pulp markets remain optimistic through the third quarter, as supply and demand dynamics are expected to be strong in most markets.

"Despite extensive pulp downtime related to the major capital project in Saint-Félicien, which will increase pulp



**Record profitability:** Yves Laflamme, Resolute president and chief executive

production in the long term, we expect our pulp performance to remain solid.

"We believe the underlying market fundamentals for lumber will support healthy operating results in the medium term, in spite of a recent pull back in lumber prices.

"For tissue, we have made progress in increasing sales and market penetration. Our operations are now focused on supporting our strengthening market position."

### Cascades reports record sales in 2Q 2018; tissue segment results down due to "competitive marketplace"

Cascades has announced record sales of C\$1,179m in its second quarter results, up 4% year-on-year.

This is compared to C\$1,098m in Q1 2018 and C\$1,130m in the second quarter of 2017 and was driven by an 11% increase in the containerboard division, reflecting higher sales prices, the acquisition of Ontario converting facilities at the end of 2017, and higher volumes during the period.

Adjusted operating income for the quarter of C\$76m compared with C\$50m in the first quarter of 2018 (+52%) and C\$51m in the second quarter of 2017 (+49%).

Sales in the tissue segment increased marginally compared to prior year levels as the benefit of higher volumes was offset by a less favourable product mix and the Canadian dollar - US dollar exchange rate.

In the company's tissue segment, adjusted operating income before depreciation (OIBD) for the quarter was

C\$7m, down from C\$13m in the first quarter of 2018 and C\$35m the same time a year earlier.

Mario Plourde, president and chief executive, said: "We are pleased with our consolidated second quarter financial and operating performance.

"Results from our tissue segment were down, reflecting the competitive marketplace and higher virgin pulp and white recycled fibre costs.

"This was in line with our updated outlook of stronger sales and shipment levels during the period.

"Transportation costs and availability also presented challenges for our North American operations."

He added that the company expects sequentially flat results from the tissue segment "as benefits from anticipated volume growth continue to be muted by higher raw material pricing and more competitive market dynamics".

"Finally, we anticipate that elevated transportation costs will continue to impact results for our North American operations.

"We continue to analyse and implement strategies to optimise our logistic strategies in light of this new higher pricing reality.

"From a broader and more strategic standpoint, we will continue to optimise our business platform, and increase the depth of productivity and efficiency benefits.

"We are similarly focused on the successful execution of our planned 2018 investment programme, ramping up operations at the new containerboard converting facility in NJ, and accelerating market penetration of our converted tissue products in Oregon."

### Fabio Perini achieves ISO 50001 certification

Fabio Perini has boosted its environmental sustainability efforts after becoming ISO 50001-certified.

The company has previously made a formal statement to highlight its focus on energy efficiencies.

Riccardo Signorini, maintenance and capex manager for the business, said: "To achieve the award we deployed steps that can be defined as 'good housekeeping' such as switching off the overhead cranes at night and using our domotics to reduce waste of electric power and heating.

"Additionally, through LSS methodology we identified the best strategy for a more efficient energy management system."



The company also introduced led lights in the workshops, solar heating to create warm water in summer, solar films for windows facing south and west and, finally, replacing an air compressor with a new generation model with inverter. Since 2015, the business has saved 12% of its energy costs and 1,530t of CO<sub>2</sub>, which it said is equivalent to saving 729 hectares of forest.

### Essity launches cost reduction programme as raw material costs hit margins

Essity has targeted its long-term cost efficiencies after announcing a group-wide cost-savings programme.

The group said its margin was "negatively impacted in the first half of 2018 by significantly higher raw material costs". It added that during the third quarter of 2018, the negative impact of "sharply increasing costs for pulp, oil-based raw materials and energy, have accelerated further".

The programme is expected to generate annual cost savings of approximately SEK800m, with full effect at the end of 2019. It is being implemented in all parts of the group to reduce the cost base related to cost of goods sold and sales, general and administration costs. This will include headcount reductions and reduced costs for projects, consultants and travel. Personnel changes will be subject to customary consultations. It is in addition to the efficiency initiatives already in progress in the group, including the "Tissue Roadmap" and "Cure or Kill".

Magnus Groth, president and chief executive of Essity, said: "Sharply increasing raw material costs and higher energy prices are affecting our margins in the short term.

"We are implementing this savings programme to increase profitability and strengthen our competitiveness. At the same time, we are continuing to invest in innovation and our strong brands."

### FSC suspends roadmap process for APP disassociation

The Forest Stewardship Council (FSC) has suspended the process to design a roadmap for ending disassociation with Asia Pulp and Paper (APP).

The environmental certification scheme has been disassociated from APP since October 2007. While APP's status

### The Forest Stewardship Council (FSC) has suspended the process to design a roadmap for ending disassociation with Asia Pulp and Paper (APP). The environmental certification scheme has been disassociated from APP since October 2007.

remains unchanged, for several years FSC pursued a roadmap for re-association, a pathway for action APP could take to get FSC-certification. However, a spokesman for FSC confirmed that this process was suspended in August 2018.

In a statement, FSC said: "FSC has taken this decision in order to reassess the roadmap process while it awaits further information from APP related to its corporate structure and alleged unacceptable forest management activities by companies thought to be related to APP.

"Dialogue with APP will continue in view of ensuring full disclosure about these issues. APP remains disassociated from FSC until such time as it has fulfilled the requirements set by FSC."

In response, a spokesman for APP told TWM: "It is our understand that FSC is undertaking an assessment of its entire re-association process and the announcement to suspend APP's re-association is part of that process as there is currently no baseline for ending disassociation, and one of the reasons why APP welcomed the announcement from FSC on developing a set of guidelines and a framework that will be adaptable to all businesses.

"The new roadmap process will formalise guidelines and frameworks to better address the complicated process of re-association.

"We look forward to examining the new roadmap process more closely in the coming months, and trust that it will be robust, transparent and fair.

"APP remains committed to zero-deforestation across our entire supply chain and as mentioned by FSC, will continue discussions with FSC to ensure full disclosure about our suppliers and forest management activities, even as the new roadmap is developed, will be providing FSC with all the information they have requested for despite the suspension of the current roadmap."

### The Navigator Company announces tissue price hikes

The Navigator Company will increase the price of its tissue papers by 8 to

12% in all products and markets.

This increase will be effective from 1 November deliveries and follows two previous price increases in January and July.

The company said the move was "due to the continuous increase in key raw materials costs, namely short and long fibre pulp, energy and chemicals which are generating an unsustainable pressure on all producers' margin".

The Navigator Company is a printing and copy paper producer that entered the tissue market in 2015 with the acquisition of the AMS mill in Vila Velha de Ródão, Portugal.

### APP and APRIL accused of violating zero-deforestation policies

Paper giants Asia Pulp & Paper (APP) and Asia Pacific Resources International Holdings Limited (APRIL) have been accused of defaulting on their zero-deforestation commitments, according to a new report by a coalition of NGOs. It alleges the two businesses purchased wood from companies clearing natural forest on the Indonesian island of Borneo.

Signed by NGOs including WWF, the Indonesian Forum for Environment (Walhi), Environmental Paper Network, GAPETA Borneo and Forest Peoples Programme, the report claims that wood utilisation reports show that in 2017, pulp mills operated by APP and APRIL purchased wood fibre from PT Fajar Surya Swadaya (PT FSS), which manages an industrial pulpwood plantation concession in East Kalimantan with a total area of 61,470 hectares.

Additionally, it is alleged that APP purchased wood from PT Silva Rimba Lestari (PT SRL), which manages an industrial pulpwood plantation concession of 88,000 hectares in East Kalimantan.

PT FSS and PT SRL are majority owned through holding companies by members of the Hartono family founders of the Djarum Group.

According to the NGO report, in 2016 and 2017 PT FSS and PT SRL harvested

more than 50,000m<sup>3</sup> of commercial wood from natural forests.

Both APP and APRIL have denied the allegations.

APP said: "We believe the report contains factual errors and presents incomplete information.

"APP is not engaged in deforestation, either directly, through companies owned by APP, or indirectly, through third parties.

"APP does not own or control PT Sarana Bina Semesta Alam (PT SBSA), which is alleged to have acquired fibre supply from PT SRL and PT FSS.

"Neither PT SRL nor PT FSS are approved suppliers of fibre to APP. APP did conduct a SERA evaluation on PT FSS from March 2017 - November 2017, but it was not eventually approved as a supplier.

"In an administrative lapse, APP did purchase a quantity of wood from PT FSS. A pilot shipment was delivered after the supplier passed the SERA desktop assessment, but before the SERA onsite assessments were completed.

"This pilot shipment was delivered to APP's Indah Kiat Pulp & Paper (IKPP) mill in Perawang on 1 November 2017. However, as the SERA onsite assessment surfaced issues surrounding PT FSS, the delivery was flagged and quarantined.

"To date, the shipment remains quarantined in IKPP's log yard. No fibre from this shipment has entered APP's production supply.

"This administrative lapse and our quarantine response, was shared with our FCP implementation partner, TFT.

"The report also repeats previously debunked theories that APP owns or controls PT Muara Sungai Landak (PT MSL) and PT Bangun Rimba Sejahtera (PT BRS). APP has no ownership, financial or legal relationships with either company."

APP added that it has also "engaged a big four accounting firm to conduct a comprehensive assessment of all industrial forest plantation companies in Indonesia".

"The purpose of this assessment is to shed light on APP's ownership and governance structure and provide facts towards resolving the ongoing

and unsubstantiated allegations of using opaque ownership structures in companies that are in breach of APP's zero-deforestation commitment."

APRIL said its operations are "firmly guided by our Sustainable Forest Management Policy 2.0 (SFMP 2.0)" launched in June 2015.

It said: "This policy embeds APRIL's commitments to no deforestation, responsible peatland management, conservation and restoration, community empowerment and engagement, and verification and transparency.

"These commitments remain steadfast and progress on implementation – including our challenges – continues to be independently verified and publicly reported."

In response to the report, APRIL confirmed that "PT FSS is an Open Market Supplier of plantation wood to the company, starting in June 2017, and following completion of the internal due diligence process.

"We confirm that APRIL did not purchase and use natural forest wood from this Open Market supplier or from any other supplier."

APRIL has been in dialog with the FSC since early 2016 on its process to end its disassociation.

In 2018, FSC has continued its dialogue with APRIL and interested stakeholders in view of developing a roadmap towards ending its disassociation.

Part of this process is a baseline assessment to inform the roadmap, which will be carried out by an independent team of experts appointed by FSC.

Over the past decade, APP and APRIL have made heavily publicised commitments to have "zero deforestation", along with announcements of large capital investments in pulp production and downstream processing to offer assurances that they had adequate supplies of plantation grown fibre to support their raw material needs.

The NGO coalition report added: "This appears to signal that each group has begun to default on its no deforestation commitment as it seeks new sources of wood."

## SPAIN



**Full integration:** TM7 strengthens Gomà-Camps' presence in the Iberian Peninsula

## Gomà-Camps boosts Iberian Peninsula presence with TM start-up

Spain's Gomà-Camps has announced the successful start-up of its Voith-supplied XcellLine machine at at Ejea de los Caballeros, Spain.

TM 7 has a working width of 2.8m and produces toilet paper and paper towels from 100% virgin pulp at a working speed of 2,000 metres per minute.

The scope of supply included from BlueLine stock preparation and the double dilution approach flow system, the TM 7 XcellLine tissue machine, auxiliary equipment and system accessories all the way to the full automation, electrification and engineering.

According to the supplier, its XcellLine machines feature "seamlessly coordinated and integrated components, technologies and services that enable fast start-up, excellent performance and high added value for its customers' investments".

Jordi Gomà-Camps, president of Gomà-Camps Group, said: "With the integration in the Ejea site, the new TM 7 is a strategic step to strengthen our presence in the Iberian Peninsula and to deliver superior tissue quality with focus on sustainability."

Gomà-Camps is a family-run business group founded more than 260 years ago and present in the international market.

**In 2018, FSC has continued its dialogue with APRIL and interested stakeholders in view of developing a roadmap towards ending its disassociation. Part of this process is a baseline assessment to inform the roadmap, which will be carried out by an independent team of experts appointed by FSC.**



# China steps up industry revamp to target massive untapped potential

*As the global tissue leader re-structures its entire economy by turning inward, natural gas, faster machinery, TAD pilot scale experiments, integrated plants and expanded e-commerce are just part of its strategy.*

China has taken the lead in tissue production, and total consumption in the last ten years. Because its per capita tissue consumption still lags behind more developed countries, it has the opportunity to continue to lead the global tissue business for the foreseeable future. This will continue until India awakens to tissue growth or China's soaring economic development stalls. Not only does China lead in tissue production, but also it will increasingly drive tissue equipment design and innovation in the future.

China has the world's largest population at 1.379bn and the fifth largest physical area in the world (slightly smaller than the United States). Its population growth has slowed to about 0.41% (2017) compared with the United States at 0.81% (2017). However, China has over a billion more people than the United States. These people each consume one third to one-half of the tissue that an average American uses. China has a long way to grow before maturing to the slow tissue growth business stage we now see in North America, Japan, and Western Europe.

China is also diverse with different growth rates and characteristics. The southern coastal area has developed tissue manufacturing and consumption first, followed by the northern coastal region. Now we see the tissue production and consumption moving inland and to the western regions as well.

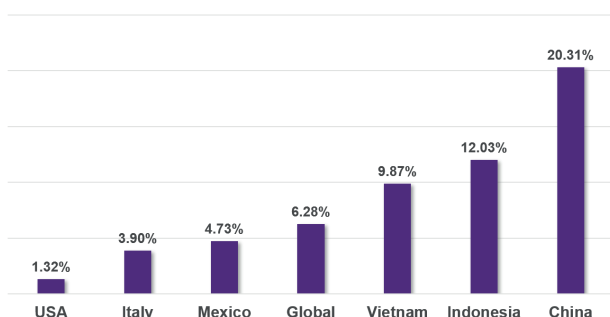
Comparing global pulp and paper capacity growth in the last ten years to China helps put some of these numbers into perspective. 2008-2017 was a disastrous period for the worldwide pulp and paper business, and Figure 1 summarizes the global capacity trend. Global industry growth (CAGR) was 3.14% while tissue proceeded at 6.28% CAGR. However, while China's paper industry grew at a remarkable 10.28% CAGR, the tissue grade portion



had almost twice the growth rate at 20.31% CAGR. In contrast, the paper industry in the United States shrunk at -0.83% CAGR overall while tissue grew at 1.32%. China is now the leading tissue manufacturer with about 31% share by FMT (Finished Metric Tons) as shown in Figure 2. United States, Japan, and Italy

**China has the world's largest population at 1.379bn and the fifth largest physical area in the world (slightly smaller than the United States). Its population growth has slowed to about 0.41% (2017) compared with the United States at 0.81% (2017).**

2008-2017 Tissue Development CAGR

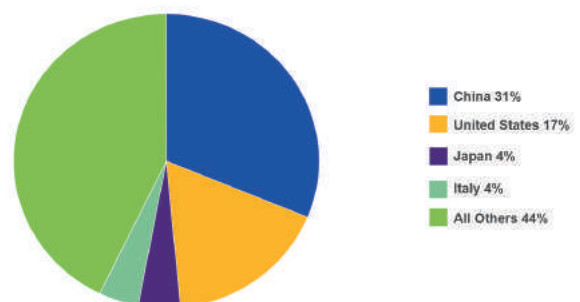


©2018 Fisher International, Inc.  
Source: FisherSolve™



Figure 1: Tissue Development CAGR

Global Tissue Capacity Share



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Source: FisherSolve™



Figure 2: Global Tissue Capacity Share

shares are included to provide better visual perspective.

The remarkable evolution of the Chinese tissue industry is dependent mostly on the development of domestic consumption. China's tissue business has a limited interaction in international trade as shown in the import and export Figures 3 and 4 derived from the UN World Trade database. China imports only about 0.2% of its tissue needs, and most of these tonnes are brought in as parent rolls.

Exports account for only about 4% of China's production. Converted facial tissue, towels, and toilet tissue exports are broader categories than parent rolls. Key importing partners for China's tissue products are Australia, United States, Japan, Hong Kong, and Malaysia (Figure 5).

Despite the phenomenal tissue industry growth, there is still significant room for China's tissue business to continue to grow based primarily on domestic demand. China has slowed its population growth, but the tissue consumption per capita continues to lag behind the developed tissue consuming regions of Western Europe, Japan, and the United States. China's apparent tissue consumption was about 10kg per person in 2017, while the developed areas were consuming at nearly twice that rate. We don't expect China will close that gap quickly, but it is reasonable to assume that the next ten years will see China approach 15kg per person consumption if the rate of economic growth continues. This change alone will add 50% to China's consumption and will ensure continued Chinese leadership of the tissue making business.

While China has the large numbers in tissue making and consumption, how does the quality of its processes compare to the rest of the world? Figure 6 illustrates the average tissue production cash costs for each producing country. China and the United States provide a direct comparison. China's tissue production is now significantly greater than the United States, but the United States retains a cost advantage of less than US\$100 per metric tonne at current conditions.

The reason for the cost advantage is evident from the chart details. The United States has a lower "Pulps Cost" (red bar colour). We will see in the next section that China does not use much recycled fibre for tissue making and tends to rely on purchased market pulp. The United States also has a noticeable "Raw Material Fibre Cost" (green bar colour)

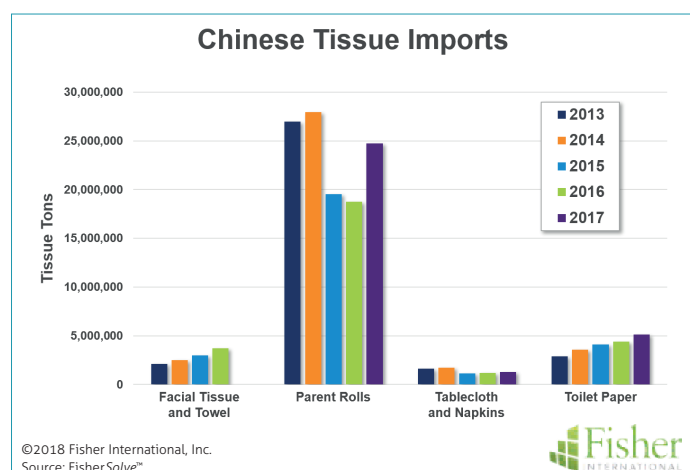


Figure 3: Chinese Tissue Imports

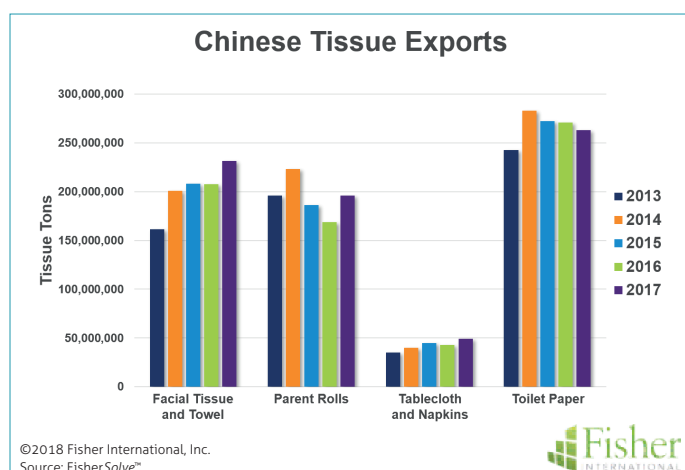


Figure 4: Chinese Tissue Exports

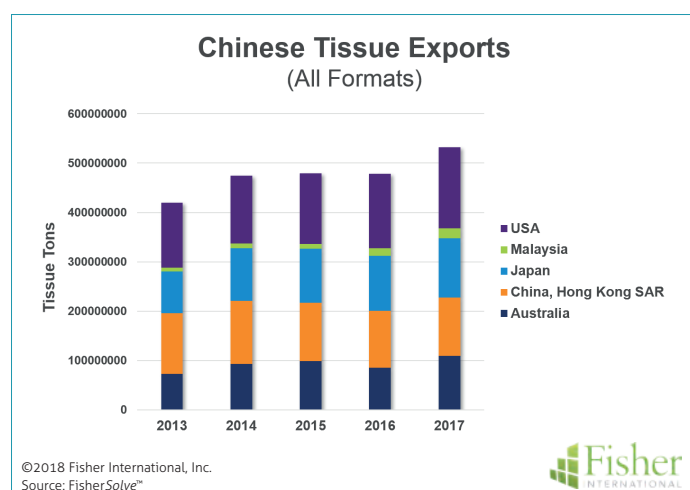


Figure 5: Chinese Tissue Exports (all formats)

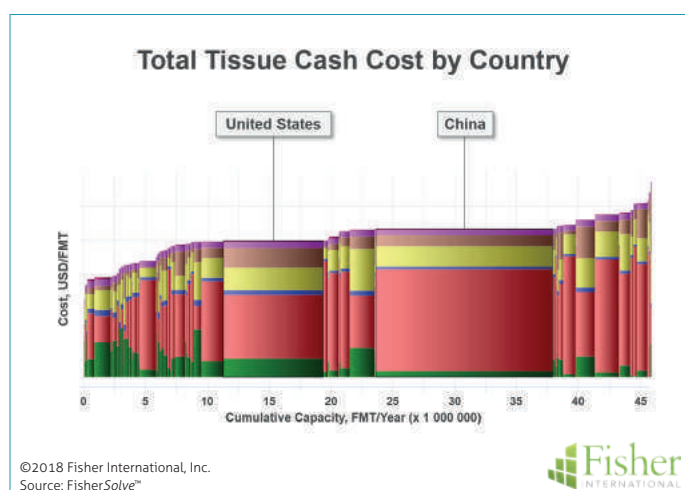


Figure 6: Total Tissue Cash Cost by Country



versus China. This indicates that there are more integrated virgin and recycled tissue mills versus China where integration is mostly limited to non-wood pulps.

Figure 7 yields similar conclusions as both countries are in the middle of the pack. The United States risk is increased by the higher proportion of older equipment than China as shown in the red bar. However, China shows more risk due to the lower average capacity tons/inch of width (gold bar colour).

The bubble chart in Figure 8 holds the technical changes constant to compare each country's tissue business only on economic risk due to potential currency fluctuations. Here we see that the United States again is similar to China, but slightly lower risk due to less currency risk for imported materials.

China uses much less recycled furnish in tissue making than most tissue producing countries. One reason for this is cultural and regulatory restrictions on the use of potentially contaminated recycled or recovered materials in tissue products for food or intimate contact. Figure 9 shows recycled fibre in specialty and industrial grades.

Although China uses very little of this fibre in tissue making, the effects are felt as increased worldwide prices for market pulp.

Figure 10 illustrates the United States cost advantage by comparing the number of integrated tissue mill sites at several top tissue producing countries. China has a low percentage of integrated sites compared to Italy, Japan or the United States. Therefore, China tissue production cost and viability are dependent on

imported market pulp. As we can see in Figure 11, non-wood fibres such as straw and bamboo make up only 18% of China's tissue furnish. This provides a starting point for making predictions for the future of China's tissue business.

High fibre costs will continue to be a focus for China. We should expect continued efforts to secure supply lines for market pulp and develop internal non-wood pulp sources to ameliorate this cost and supply issue. China is already the leader of technology development for non-wood pulping with significant technical publications and new plants under construction.

Will China develop a consumer market like North America or Western Europe? Will the product formats and distribution follow the standard curve or will e-commerce distribution move ahead of

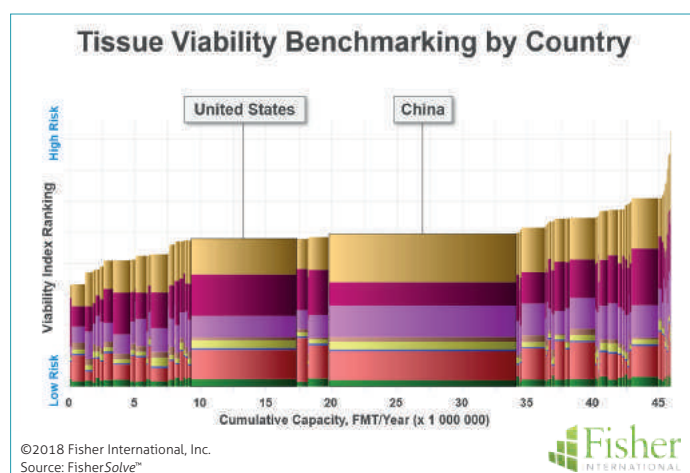


Figure 7: Tissue Viability Benchmarking by Country

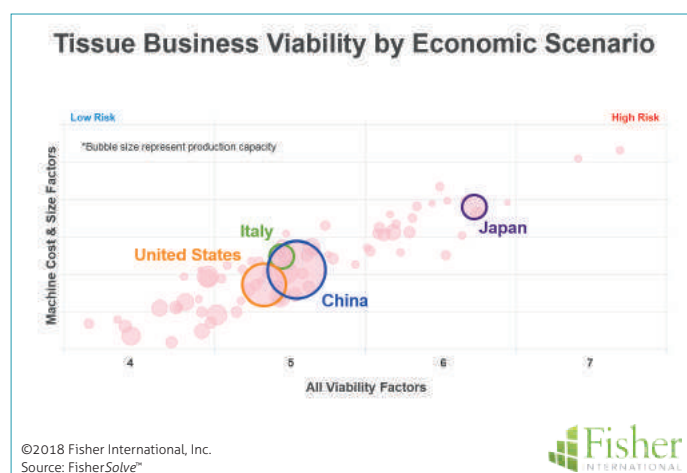


Figure 8: Tissue Business Viability by Economic Scenario

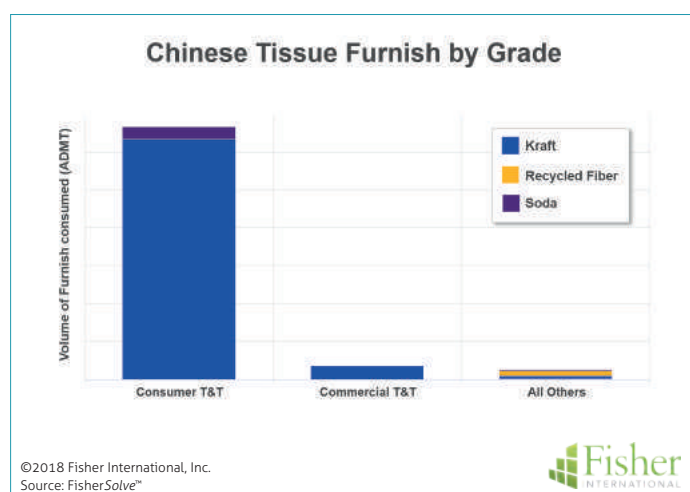


Figure 9: Chinese Tissue Furnish by Grade

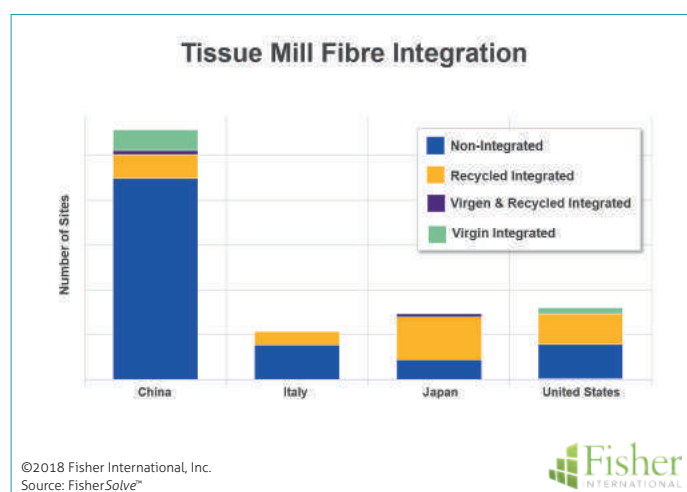
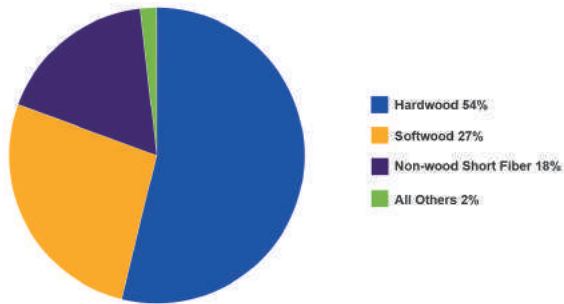


Figure 10: Tissue Mill Fibre Integration

## Chinese Tissue Furnish



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Source: FisherSolve™



**Figure 11:** Chinese Tissue Furnish

retail and private label development? China is implementing e-commerce like North America. Anecdotal reports indicate that coastal cities see consumer interest in paper towels for kitchen use. Will these become a more significant part of the tissue product mix like North America?

Another question is technology adoption. China has many slower machines using steam heated hoods that limit production speeds. Will the new focus on natural gas imports allow the shutdown of coal steam plants and implementation of faster tissue machines?

If China continues to be tissue fibre limited, will advanced technologies that extend fibre performance at lower basis weights make sense? Anecdotal evidence indicates that small-scale experiments with TAD pilot scale machines are underway.

A final question is what is the expected rate of economic development expected for China in the next ten years? This analysis assumes that the China miracle will continue with only a slight moderation of the growth rate as the economy develops. A world embroiled in trade wars is only one scenario that could deflect from this course.

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# China: Health awareness and product upgrades drive consumer tissue market

**D**riven by consumers' rising hygiene and health consciousness as well as upgrades to tissue quality and variety, the retail tissue market recorded healthy growth in 2017 in China, in both value and volume. Growth is also expected to remain strong in the next five years, through to 2022.

Rising raw materials costs have been passed on to consumers in the form of retail price increases and a focus on premium tissue, helping to support value growth in the market. However, increasing disposable incomes enable many consumers to trade up to value-added products as well as spend more on still underutilised categories like paper towels. Furthermore, in pursuit of improving living conditions, consumers are more willing to invest in tissue products. They tend to opt for safety over price for health and comfort. To keep up with the trend, tissue manufacturers have been offering new products with certificates from the FDA, AP, and LFGB to demonstrate their safety.

## Higher purchasing power supports demand for retail tissue

Although the per capita consumption of retail tissue in China still lagged

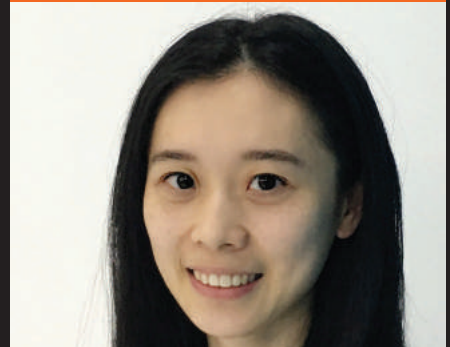
behind consumption in North American and Western European countries in 2017, largely due to low consumption in undeveloped rural markets, stable economic growth in China and rising incomes supported the increase of retail tissue in volume terms in 2017.

Toilet paper remained the biggest category in retail. However, its share within overall consumer tissue sales is expected to continue to decrease in China, as consumers embrace other product categories, such as facial tissues, to clean their face and hands. In fact, facial tissue is expected to achieve a double-digit volume CAGR over 2017-2022, to account for a rising share of retail tissue consumption in the country.

Growing consumer awareness is also supporting fast growth of paper towels. As an emerging category with a relatively high unit price, only high-income consumers in wealthy urban areas and those consumers who have been exposed to paper towels while living abroad typically purchase paper towels in China currently. Nevertheless, with more of the leading tissue manufacturers launching paper towels and distributing them more widely, an increasing number



Shuang Chen



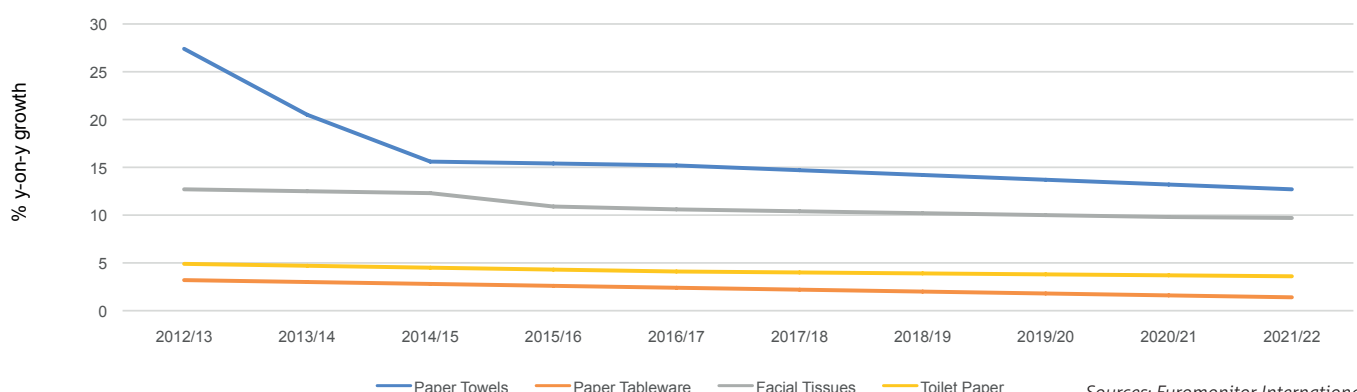
Research analyst,  
Euromonitor International, Shanghai, China

of consumers adopt them as part of their household routine, replacing traditional reusable cloths.

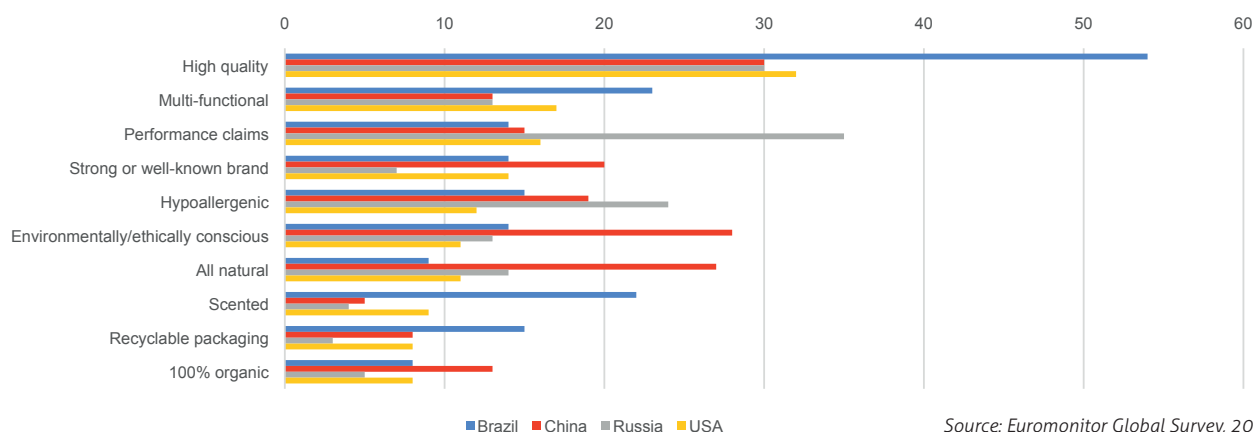
## Production costs and consumption upgrades behind price increases

The average unit price of retail tissue products rose in current terms in 2017. In China, most wood pulp raw materials are imported. Affected by unfavourable exchange rates and the rise of global pulp prices, prices in China witnessed significant growth in 2017.

Retail tissue volume, by category, '000 tonnes, % y-on-y growth, 2012-2022



Sources: Euromonitor International

**% of respondents willing to pay more for household essentials, 2017**

Source: Euromonitor Global Survey, 2017

With increasing raw material costs, retail tissue manufacturers have been passing on the rising costs to end consumers.

Price increases are also backed up by product upgrades to meet the evolving needs of Chinese consumers. Many consumers, especially with higher incomes, are no longer satisfied with basic tissue products, but seek products with innovative features. For instance, moist facial tissues target female consumers and those with allergies.

Examples of other innovative premium tissue products in China include the launch by Guangdong Vinda Paper of four-ply toilet paper, facial tissues and paper towels, made with 4D-Deco embossing technology, which is said to enhance the strength, softness and absorbency of its products. The company employed a variety of marketing techniques to support the launch, including a popular actress Lin Chi-Ling modelling a hand-made wedding dress made from 4D-Deco embossed tissue by acclaimed fashion designer Lan Yu, which was featured at the 2017 Paris Haute Couture Fashion Week.

### Rising popularity of unbleached tissue products

With increasing environmental and health consciousness, unbleached paper has gained popularity in China. In fact, in Euromonitor International global surveys on product features consumers are willing to pay for, China stands out as one of the

markets where eco-friendly features are among the top listed. In 2017, Clean & Soft by C&S Paper introduced the Natural Wood series, which does not use whitener and is said to be softer, purer and tougher than many other unbleached products on the market. Furthermore, unbleached products, including Clean & Soft's Natural Wood series mentioned above, as well as Breeze unbleached tissue by Gold Hongye Paper Group, the Hygienix Air Plus range by Shanghai Orient Champion Group and Sun Elements Origins range by Shandong Sun Paper Industry, all gained at least two certificates from FDA, AP and LFGB, which appeals to consumers looking for products they see as healthier.

### C&S Paper and Essity enjoy strong growth

C&S Paper saw strong value growth in 2017, in fact the fastest amongst the top five players in retail tissue in China. The company continued to improve its distribution network, and its marketing networks covered most areas of China. In addition, C&S Paper has been investing in e-commerce platforms such as Tmall, JD, YHD and Suning, with corresponding logistics systems.

Essity also enjoyed one of the most impressive value growth rates amongst the top manufacturers in 2017. Its Tempo brand extended its presence in cities in South China and Central China in 2017. Its wider sales coverage led to a strong performance in key cities beyond the Pearl River Delta and Yangtze River Delta.

In addition, the company introduced innovative marketing campaigns to increase brand awareness amongst local consumers. For instance, it cooperated with JD.com and launched the world's first premium tissue products conference in May 2017, during which the company introduced a vintage edition of Tempo products to celebrate its 88th anniversary. The exquisite packaging for the product helped to strengthen the super-premium brand image of Tempo and attract high-end consumers.

### Significant unmet potential

Considering the still relatively low overall per capita consumption of retail tissue products in China – at 5kg per capita in retail sales vs 13kg and 9kg average for North America and Western Europe, respectively – the country still offers enormous potential for industry growth. In fact, Euromonitor International estimates unmet potential in retail in China to exceed four million tonnes, or potentially USD11 billion in incremental retail sales of consumer tissue.

Capturing this potential calls for a number of strategies; from expanding distribution into areas outside of major urban centres, including rural China, to supporting value-added premium innovation and building on the demand for products with environmentally friendly features, including unbleached tissue, certified by well-known agencies to support claims.



By Tissue World senior editor Helen Morris

# Hengan Group shuns the price war to concentrate on quality, brand and good service

**Consumer demand – with ‘consumption of household paper set to increase by 6-8%’ – is shifting to medium and high-end tissue, and urbanisation is carrying products into third- and fourth-tier cities and rural markets. TWM talked to Chen Changming, paper manufacturing division general manager, Hengan Group.**

## TWM/1: What is the current consumption growth of the Chinese tissue market?

“In 2016, China’s consumption was 7.876m tonnes and in 2017 it was 8.501m tonnes, up 8.1%. In 2016, the domestic market was 98.8bn yuan, and in 2017 it was 110.64bn yuan, up 12% year-on-year.

“In 2017, China’s per capita consumption was 6.1kg, much lower than the average American consumption of 21.9kg. In 2016, China’s per capita consumption was 5.7kg, and in 2017 it was 6.1kg, an increase of 7%. It is expected that the per capita consumption growth will be controlled at 6-8% in the next few years. At present, China’s per capita consumption is still low, and the penetration rate of the tissue paper market is low. There is still room for growth. With the country’s economic growth and the liberalisation of the two-child policy, the demand for high-end tissue paper will see a sharp increase. In addition, the elimination of backward production capacity will also bring new production capacity to the market.”

## TWM/2: What are your future expectations for tissue paper in the Chinese market?

“The future trend of tissue paper in the sales of its own channels will be mainly based on offline sales, supplemented by E-commerce sales, and a small amount of overseas sales; the proportion of overall sales of E-commerce will increase substantially and the proportion of offline sales will therefore decline. With the elimination of the backward production capacity of the industry and the new paper industry of some

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Helen Morris

Senior editor,  
Tissue World magazine

enterprises, the number of self-owned brands in supermarkets will increase slightly. In the next few years, the consumption of household paper will increase by about 6-8%. With the impact of economic growth and consumption upgrades, the proportion of toilet paper will continue to decline. The consumption and consumption ratio of products such as liner and kitchen paper will continue to grow.

“In its own channels, with the popularity of the internet and the shift of young consumers’ consumption places (from offline to online), E-commerce sales will become a new consumer battlefield, impacting traditional offline consumption, eroding the line.

“A lower sales share will undermine the traditional offline layout. At the same time, the big data analysis of E-commerce will timely and effectively convey the current market demand, which will help production enterprises flexibly adjust production and comply with market demand.

“With its own brand and with the rapid growth of production capacity, the number of supermarket brands will increase, and the excess capacity will intensify market competition, forcing manufacturers to produce more powerful and better quality products, and accelerate the market in a survival of the fittest.



**Product variety:** Hengan currently has six tissue paper production bases located across China producing 1.45m tonnes per year

"In the sanitary paper products sector, the proportion of the traditional bulk toilet paper market will continue to decline in the future. High value-added paper towels, kitchen paper, napkins, facial tissues, etc. will change with economic growth, consumption upgrades and consumer awareness. With substantial growth, the overall market penetration rate will increase. The challenge is that the market's production capacity is relatively surplus, and the competition in the follow-up market is still fierce."

### **TWM/3 : What has been the impact of China's current economy on the tissue market?**

"There have been a number of implications. Firstly, household paper is a product with consumption upgrade attributes and its per capita consumption is positively related to per capita GDP. As China's per capita GDP grows and residents' spending power increases, it will further promote the release of household paper."

"Secondly, in the context of improving the economic level, people's quality of life has improved and more emphasis has been placed on cleanliness, health and kitchen hygiene. Consumer demand has diversified and transitioned to medium and high-end products. The market potential is huge (the proportion of facial tissues, paper towels, kitchen papers, etc. has risen, while toilet paper is gradually decreasing).

"Thirdly, with the rapid growth of China's economy, in an environment of increasing environmental protection requirements and fierce market competition in the country, the pace of elimination of backward production capacity in the tissue paper industry will accelerate, which will further promote the optimisation and upgrading of the industry."

"And then lastly, with the increase of urbanisation in China, medium and high-end products are further popularised in third- and fourth-tier cities and rural markets."

### **TWM/4 : Are the sales of China's tissue paper market still dominated by price wars? What are your responses to this situation?**

"The price war in the Chinese toilet paper sales market still exists. At present, there is excess capacity of toilet paper, and the average operating rate of the industry is low. Some enterprises will choose low-price promotions to win price wars in order to gain market share."

"In response to this situation, our company has long insisted on quality-based products and does not participate in price wars, but rather we win the market share with quality, brand and good service. The main measures are as follows: 1: As always, maintain the high-quality requirements of Hengan Hearttex and other brands; 2: continue to develop new products such as: Minions, Zhu Pai, bamboo colour paper series; 3: through continuous lean production, energy saving consumption, reduce production costs; 4: efforts to expand overseas markets."

### **TWM/5 : Describe your current paper business.**

"Hengan currently has six tissue paper production bases which are located in Changde, Hunan (production capacity 290,000tpy), Shandong Weifang (315,000tpy), Jinjiang, Fujian (315,000tpy), Chongqing Banan (240,000tpy), Anhui Wuhu (240,000tpy), Xinjiang Changji (50,000tpy). The company's annual production capacity is 1.45m tonnes."

"The main products of each base are toilet paper, facial tissue, handkerchief paper, kitchen paper, liner paper, etc. Paper towels are mainly produced by Shandong PM2."

"In 2018, our company has brought on-stream two lots of 60,000tpy Valmet paper machines (PM21, PM22); another paper towel machine (3#) is under construction and is expected to be put into production by the end of 2018."

### **TWM/6 : What are your main business markets?**

"Hengan tissue paper supermarket free brand is our leading branded product with Hearttex, Premium, Pinuo, Zhu Pai series. Hengan finished tissues are sold in channels such as supermarkets, hypermarkets and other physical stores, online sales at Taobao, Tmall, Hengan Group official mall and other E-commerce, and overseas sales; the original paper channel sales have domestic special sales and overseas base paper sales."

"Hengan's tissue paper business includes toilet paper, facial tissue, handkerchief paper, napkin, paper towel, liner paper, kitchen paper, etc. From January to August 2018, the production of toilet and facial tissue accounted for more than 80% of the company's total, and other items accounted for about 20%. At present, the company mainly produces popular toilet and facial tissues, and continues to promote the sale of high value-added niche raw paper items such as paper towels, liner papers and kitchen papers, and expand the penetration of high value-added items in the market. Our aim is to expand our market share in these sectors."

### **TWM/7 : Do you produce high-end tissue paper products (specifically TAD/ATMOS products)?**

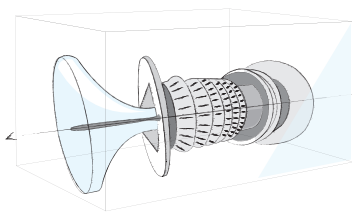
"At present, our company has not produced TAD/ATMOS high-end toilet paper (the company does not currently have TAD/ATMOS equipment). No related equipment has been introduced in China."

### **TWM/8 : Do you export household paper products?**

"Every year, Hengan has a certain amount of processing and export business. The main destination areas are Australia, America, south east Asia and so on."



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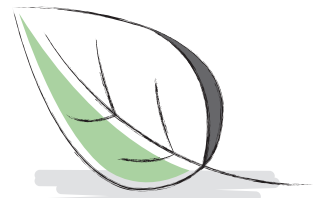
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**TWM/9: What are your growth expectations for Hengan in the next few years?**

"At present, Hengan's total rated capacity is 1.45m tonnes, and there is still room for improvement in the overall capacity utilisation rate. In the following period, the company will continue to increase its capacity utilisation rate and expand production capacity. If necessary, it will reasonably evaluate the necessity of a new factory and rationally expand production."

**TWM/10: How popular is environmentally-friendly household paper in China? Do you produce such products?**

"Environmentally-friendly household paper is becoming more and more popular in China. Our four bases in Hunan, Shandong, Wuhu and Chongqing all produce natural paper. At present, the Group has developed a variety of "Bamboo" unbleached tissue and soft coloured paper, the original colour handkerchief paper. Due to the outstanding green and low-carbon properties, our household paper brands, including Hearttex and Zhu Pai, were selected as the recommended products of the World Environmental Protection Conference (WEC)."

**TWM/11: Is there any overcapacity in China's tissue industry?**

"At present, China's overall production capacity is still excessive. The output of the household paper industry increased from 4.78m tonnes in 2009 to 9.23m tonnes in 2017. The capacity utilisation rate decreased from 86% in 2009 to 76% in 2017. The actual production capacity of paper is much lower than the planned production capacity, and some projects are delayed in production or release. The backward production capacity of the industry is eliminated and upgraded, and the new production capacity is far greater than the elimination of production capacity. In 2017, the net production capacity of domestically eliminated and discontinued household paper was about 1.37m tonnes."

**TWM/12: What are your responses to the current rising cost of raw materials and wood pulp? What kind of challenges does this pose to our market?**

"The cost of wood pulp has risen sharply, resulting in a significant increase in the production costs of the group's tissue business. Countermeasures include: through product upgrades, increase the proportion of sales, and increase the price of some products, we can effectively offset the pressure of rising raw material prices of paper. Through technological innovation, we can further optimise product production processes, improve production efficiency, integrated consumption reduction; Eliminate waste and reduce production costs through continuous lean production.

"The cost of wood pulp raw materials accounts for 60-70% of the production cost of raw paper and its price fluctuation will seriously affect the production cost of the base paper.

Companies are required to work hard to expand their business and to ensure the long-term stable supply of wood pulp and purchase prices to consolidate and strengthen the group's ability to control the market and continue to profit; accelerate the development of high value-added products."

**TWM/13: What impact does the US President Trump's trade protection policy have on the Chinese tissue market and industry?**

"The trade wars and interest rate hikes triggered by the United States will all impact China's trade, leading to the depreciation of the RMB. Most of China's high-end toilet papers use imported wood pulp as raw materials, and purchases are settled in US dollars. The depreciation of RMB has invisibly increased the cost of wood pulp raw materials and increased the production cost of toilet paper.

"As a countermeasure against the United States to impose tariffs on goods imported from China, China decided to impose tariffs on about US\$60bn of goods originating in the United States. Among them, pulp is taxed at 5% (previously 0), and paper and timber are taxed at 20%-25%. In 2017, China's main source of imported softwood pulp, the United States accounted for 19.66%, ranked second, so China's tariff on the United States pulp, the Chinese pulp and paper market has a large impact."

**TWM/14: What are your main challenges in the next few years?**

"The overcapacity situation will not change in the short term, and the oversupply will make the future life paper market competition more intense.

"Facing the cost pressure risk of fluctuations in the price of raw materials of wood pulp and exchange rate fluctuations."

**TWM/15: Where are the main opportunities?**

"From 2011 to 2017, the annual growth rate of global consumer paper consumption did not exceed 4%. The annual growth rate of China's tissue consumption is not less than 6.6%, and the growth rate of tissue paper will maintain a relatively high growth rate in the future. China's per capita consumption of household paper is still low (6.1kg in 2017) and factors such as accelerated economic growth and urbanisation, population growth (especially the two-child policy), and accelerated elimination of backward production capacity will promote the continued growth of the industry.

"China is also in the stage of consumption upgrading and the product category structure continues to be optimised. The proportion of high-end tissue paper such as paper, paper towels, paper towels, and kitchen paper has increased significantly, and the market potential is huge."



By Tissue World senior editor Helen Morris

# Thriving against a price war, an overcrowded market... and Trump

**With two paper machine start-ups planned for next year pushing total output to 140,000tpy, Hebei Jinboshi Group will prioritise product quality and variety, expand sales channels and develop markets with low price sensitivity. Zhang Junqing, president, Hebei Jinboshi Group, spoke to TWM Senior Editor Helen Morris.**

## TWM/1 : Describe your tissue business

"We have two manufacturing bases, one located in Daceyang Paper Industrial Zone, Baoding City, Hebei province (base A), and the other located in Shitou Village, Mancheng district, also in Baoding City (base B). At present, base A produces toilet paper, with an annual output of 30,000 tonnes. Base B is 75% toilet paper, 13% tissue paper, 2% handkerchief paper, toilet paper, napkin and kitchen paper.

B base currently has two PMP3650# 1,300m/min paper machines and one Shandong Xinhe 3600# 1,200m/min paper machine. Two PMP paper machines were started up in 2017 and the third paper machine was started up in 2018. In addition, two Shandong Xinhe 3700# 1,600m/min paper machines are currently being installed and are planned to start up in February 2019."

## TWM/2 : What tissue markets are you in?

"At present, traditional trade (sale through distributors) contributes 80% of sales, while key accounts (KA), well-know

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Helen Morris

Senior editor,  
Tissue World magazine

retailer/supermarkets such as RT-Mart, Walmart, contributes to 18% of sales. Special channels such as restaurants, railway stations, airports contribute to 2% of sales. In the future, I want to focus on the KA channel, special channels and E-commerce because of image building, special channel has good user stickiness, and E-commerce has better development prospects."

## TWM/3 : Do you focus on producing high quality tissue products or economy products? Which are you seeing more growth in in China?

"We produce high-quality household paper, and some of them have higher quality, such as cream paper. High-quality household paper is a trend in China. The per capita consumption of paper in China is constantly increasing, which will inevitably lead people to pursue better quality of household paper.



Growth opportunities: as per capita consumption of paper in China is constantly increasing, the company will boost its capacity and start up two paper machines in 2019



**Tissue-making tradition:** the company – and country – has a strong history in the manufacture of tissue products

"We have also developed a new soluble roll paper - our products are bamboo fibre products, both of which are environmental protection products."

**TWM/4 : What tissue trends are you seeing in China for consumer products, private label, AfH, At-Home products? What are the main challenges and opportunities for these sectors?**

"Household paper is a growing trend in China as more and more Chinese people visit during holidays. Kitchen paper is also a growing trend, but we're seeing fewer young Chinese cooks which is a challenge to growth."

**TWM/5 : How is the economic climate challenging the Chinese tissue market?**

"At present, China's household paper production capacity is expanding rapidly, which is an unfavourable condition for profit."

**TWM/6 : Is there still a price war in the Chinese tissue market, and what is your strategy to deal with this?**

"There is a price war in China. Our company's solution is to improve product quality, launch differentiated products, expand sales channels and develop markets with low price sensitivity."

**TWM/7: Are you looking to grow in the next few years? Will this be internally, or through acquisition?**

"We will start up two paper machines next year, and the total output will reach 140,000tpy after starting up. In the later stage, PM 6 and PM 7 will be planned. In the later stage, we will consider setting up factories in areas with good policies."

**TWM/8: Are environmentally-friendly tissue products popular in China?**

"Environmentally-friendly paper is a trend in China, such as disposable wet wipes and dissolving roll paper, but consumers need some more time to accept it."

**TWM/9: How are President Trump's trade changes challenging the Chinese tissue market and industry?**

"The change of Trump, on the one hand, affects the RMB

**"There is a price war in China. Our company's solution is to improve product quality, launch differentiated products, expand sales channels and develop markets with low price sensitivity."**



By Tissue World senior editor **Helen Morris**

**Investment:** the company will start up two more paper machines next year, making its total output reach 140,000tpy

exchange rate, causing the increase in the price of imported pulp and paper, putting pressure on our costs."

### **TWM/10:** What growth is the Chinese tissue market currently seeing?

"I feel that the Chinese market has entered a new period, and it will still be lower than the consumption in the United States, but it will continue to increase in the next five years, but at a slower rate."

### **TWM/11:** How are you dealing with raw material/pulp price increases? What challenges does this present the market?

"We have responded to the increase in the price of raw materials by raising the terminal prices and improving the product structure."

**"At present, we are optimistic about the opportunities to export products, however we currently aren't exporting because we don't have the right talent. We plan to do this at a later date."**

### **TWM/12:** Is there overcapacity in the Chinese tissue market?

"Yes."

### **TWM/13:** Do you export, and if so, what percentage of your products are exported and where? Do you plan to increase this?

"At present, we are optimistic about the opportunities to export products, however we currently aren't exporting because we don't have the right talent. We plan to do this at a later date."

### **TWM/14:** What are the main challenges you face in the next few years?

"The biggest challenges are price competition and increased investment."

### **TWM/15:** What are the main opportunities?

"The biggest opportunity is the stability of product quality and the trust of customers. Also, the scale effect of increased production and help from local government."

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**"Give me quality over price any day ... I think people get too caught up in the race to the bottom and price being a driver, if that was always the case no one would ever buy an iPhone... the lack of innovation has made tissue too focused on price and I want to disrupt that."**

Julie Chen and Chris Forbes are the founders of The Cheeky Panda, the multi-award winning UK based and global suppling sustainable bamboo tissue manufacturer. Here, Chris discusses their own retail preferences that convinced them to launch the business.

### **TWM/1 : How did the idea for The Cheeky Pandas come about?**

"The Cheeky Panda was an idea in 2015 by my wife Julie. She had been involved in the early stages of LED lights and she understood the gap and need for more sustainable tissue. I was the owner and MD of a global executive recruitment business and I liked the concept so I decided to back it. The key thing for me was the quality of the tissue had to be as good or better than the leading brands otherwise it would just be another alternative to recycled tissue. Using the world's fastest growing plant and turning it to high quality tissue was a bit of a no-brainer but we had to spend a lot of time and money on R&D before launching. The first thing we did was market test it with the crowd. We overachieved our targets so we knew we had a product in demand and a brand that was liked by the general public. The last three years have gone very fast and we have won numerous awards and recognition by retail and B2B, cementing The Cheeky Pandas position as one of the leading innovators in tissue. Our products are much softer and a kinder substance on the skin and won't cost consumers more than the other big brands toilet paper. For every pack of tissue bought, some money goes back to protecting the rainforest in Vietnam and the offset means cradle-to-grave our tissue has no carbon footprint."

### **TWM/2 : What tissue products do you use?**

"We have lots of products from toilet rolls of all sizes, handtowels, kitchen rolls, facial tissue. We have our first child coming so we will shortly be launching wipes and nappies so we can give them the best. It's important for us to know how things are made and it's a great message to our fans."

### **TWM/3 : Do you use branded products or do you prefer private label?**

"I have never been a fan of own-labels, they are easy to copy and they don't have any attributable values. With brands you can see the people and the ethics behind the company and that sense of accountability gives people the assurance that the products they use hold high values. It's not always the case with all brands but these are our value pillars."

### **TWM/4 : As a consumer, what characteristics are most important for you when buying tissue products?**



"Give me quality over price any day, after all it's only tissue and it only costs a few pence per day per person. I think people get too caught up in the race to the bottom and price being a driver, if that was always the case no one would ever buy an iPhone. For me, the lack of innovation in the sector has made tissue too focused on price and I want to disrupt that."

### **TWM/5 : Why is it important that the products are environmentally-friendly?**

"The whole ethos of the company is built on sustainability. I was running a very profitable business and we wouldn't have created this brand if it was about the money. This is all about trying to make the world a better place by using more sustainable products. It's a great thing to tell the children and grandchildren that we made a difference. We have also introduced biodegradable plastic to all Cheeky Panda packaging. The new Cheeky Panda Biodegradable plastic is made with recyclable LDPE (low-density polyethylene) material with a small percentage of additive called D2W, which has been created by Symphony, Environmental Technologies PLC. The inclusion of the D2W additive allows the manufacturer to create a life span for the plastic and the new packaging can also be recycled through normal recycling streams. If the packaging happens to become litter, it still biodegrades and breaks down after 18 months."

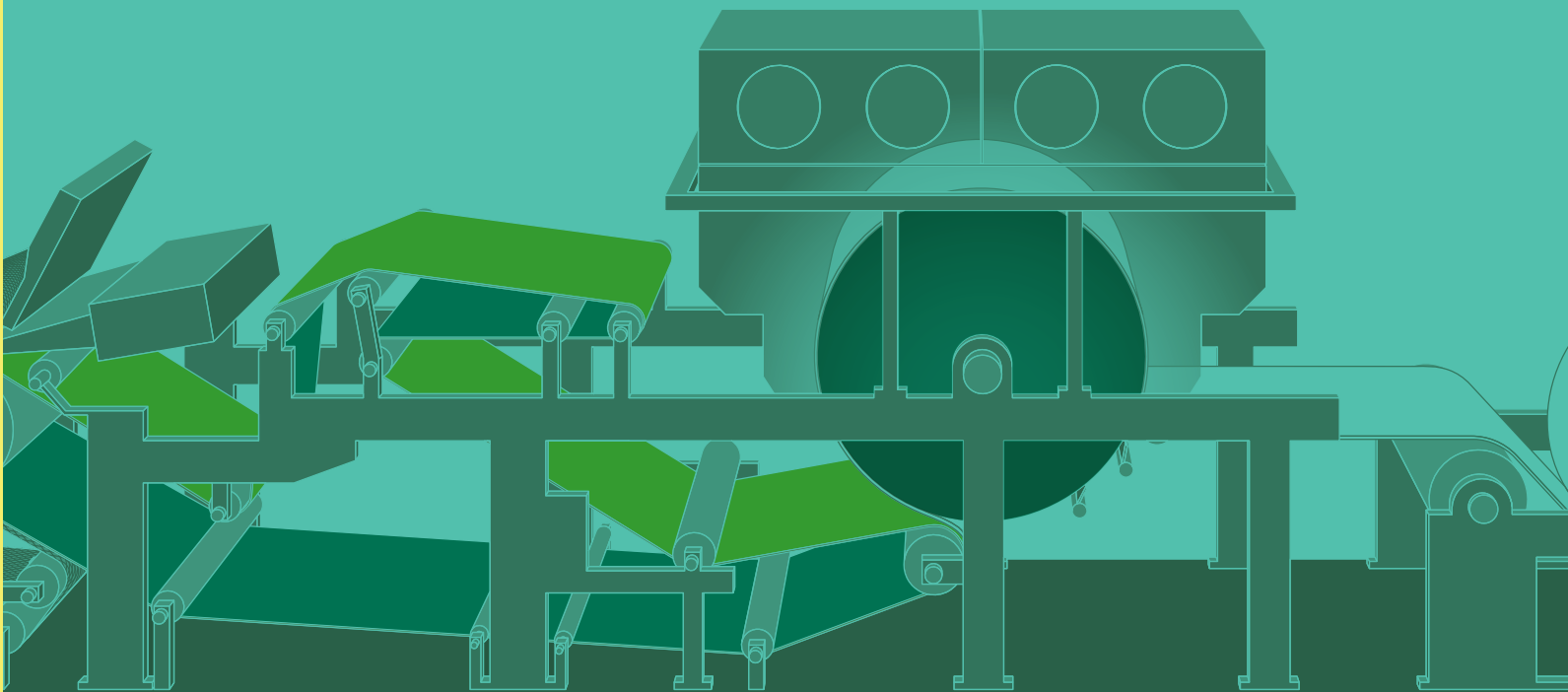
### **TWM/6 : What have you noticed about tissue habits when you've travelled abroad, or compared to where you grew up?**

"I grew up in England in the 80s which was a time when tissue products were very low quality. When I used to go to France it was a hole in the ground at service stations. So I am thankful for the development and level of comfort we have now compared to the 80s."

### **TWM/7 : How do you buy your tissue products?**

"I am fortunate that I will never need to buy tissue again! Before we launched this business, back in 2014 I was using subscription services to buy tissue products as it's more convenient. We are launching our own subscription service so watch this space..."

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# Pulp: signs that prices are finally levelling

**Pulp price is the single most important driver of tissue profitability. Currently at a record high, analysts point towards a temporarily more static market, and even a modest decrease. Report for TWM by Pirkko Petäjä, principal, Pöyry Management Consulting.**

## Pulp prices have been at a record high for a lengthy period

Market pulp prices have continuously risen in Europe since the end of 2016. Q3-18 prices still show a small increase for both BSKP (Bleached Softwood Kraft Pulp) and BHKP (Bleached Hardwood Kraft Pulp), but there are indicators showing that prices are finally levelling. Most analysts project a modest decrease. In real 2017 US\$ terms, pulp prices reached an equally high level last time some twenty years ago, in 2000-2001.

## Pulp prices are strongly impacted by the economic cycles and global supply and trade disturbances

During the economic high cycle everything that consumes paper is booming. Rising paper and board production increases pulp demand. When the demand increases it takes time before the pulp supply can react and a balance is found anew. On the other hand, when pulp supply increases, the steps are very large resulting often in a clear oversupply, especially in an economic downturn. This puts downward pressure on the pulp prices.

Market pulp is a global commodity and the prices, in all markets, are very much impacted by the demand from China, the largest and fastest growing consumer of pulp. Pulp prices were low in 2016, weakened by China's slowing economy. A pick-up in the economic momentum in 2017 spurred higher demand for both BHKP and BSKP, which the market could not meet due to a few

large mills closing unexpectedly and other smaller supply losses. This and the Chinese ban on recovered fibre imports and consequently increasing demand on market pulp have kept the markets tight and the current pulp prices high.

Trade battles can further complicate the matter. China and the US have already put tariffs on large number of products, including pulp and paper. If the USA penalises imports from China further and China retaliates, as is to be expected, the consequences are threatening for the pulp and paper industry globally.

The US's gyrating politics can be scary, especially in case of a full-blown trade war. If Trump's actions trigger a new global recession, the pulp price development will be very difficult to predict.

For instance, the political turmoil and low oil prices have already impacted the tissue industry in the Middle East where imported pulp prices are high and the economic situation has made it difficult to transfer the increased pulp costs to the product prices.

## Pulp price movements can be forecast, but it is often difficult to see the exact timing and magnitude of the changes

Root causes for the pulp price movements can be understood and certain indicators followed in order to forecast the pulp price changes.

The long-term trend price forecasting process focuses on analysing the



Pirkko Petäjä

Principal,  
Pöyry Management Consulting

anticipated changes in pulp supply and demand environment, and consequent implications on the cost position of marginal producers near the high end of the cost curve and cost leaders with low production but high capital costs.

The market BKP trend prices continue to decline, driven by higher productivity, closures of high cost assets and the new coming onstream increasingly to the low cost regions. Large, over one million tonne pulp mills based on plantation wood and best available technology replace higher cost mills and marginal producers' cost level continues to decline.

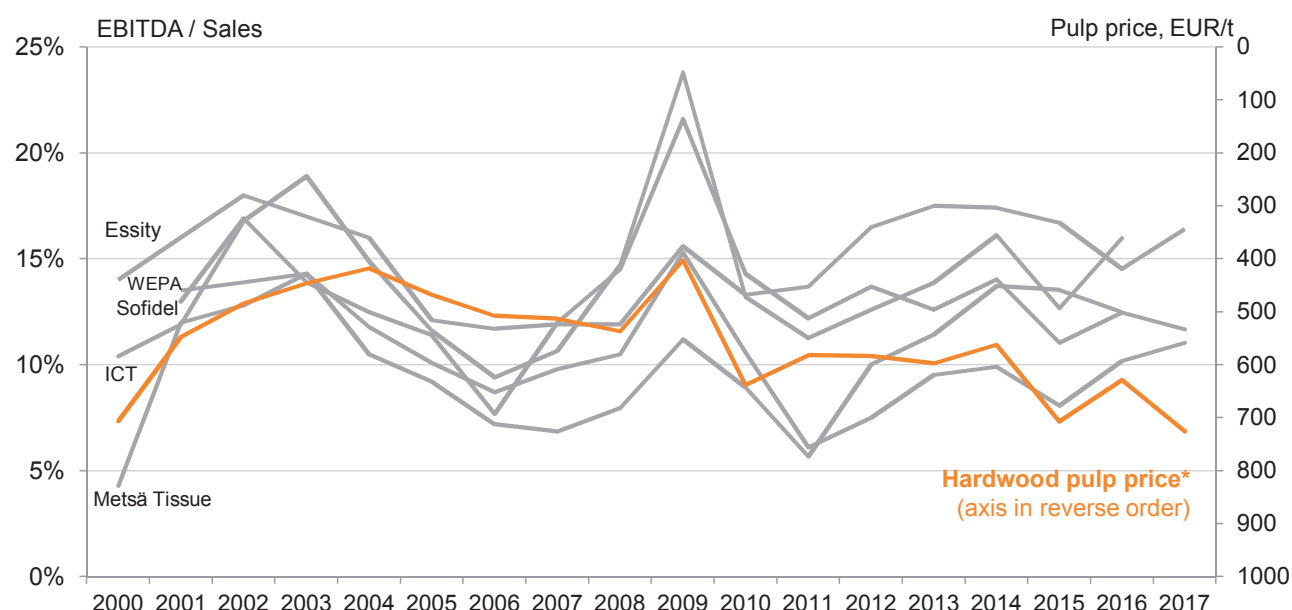
For the short term forecasts, economic indicators, exchange rates, stock levels and short term changes and disturbances are monitored, especially in the supply side. The currently high BSKP price is expected to level near the end of 2018 and start decreasing early 2019 due to an increased supply with fewer expected production losses and a temporary demand slowdown, partly due to de-stocking.

Canfor's repair shut down in Northwood, extended shut downs after the hurricane in the Carolinas as well as suppliers' announcements of price increases in the US and China put some upward pressure still on Q4 prices, while other fundamentals indicate a drop of the BSKP prices.

**Trade battles can further complicate the matters. China and US have already put tariffs on large number of products, including pulp and paper. If the USA penalises imports from China further and China retaliates, as is to be expected, the consequences are threatening for the pulp and paper industry globally.**

## PROFITABILITY – CORRELATION WITH PULP PRICE

**Profitability of tissue companies correlates quite strongly with the pulp price; highest EBITDA margins have been reached when the pulp price has been low**



BHKP prices are widely forecast to start declining, as the supply/demand balance is expected to weaken in early 2019 due to soft demand growth in China and some new capacity.

Recent weak operating rates are due to unfavourable weather, truck drivers' strike in Brazil and boiler problems and other disturbances that are likely not to persist.

The gap between BSKP and BHKP prices in Europe is abnormally wide and will gradually normalise as the substitution of BSKP by BHKP accelerates and forces the gap down. If the BSKP prices do not fall enough, BHKP prices may stay on the current level a little longer.

### Tissue profitability is very much impacted by high pulp prices

Market pulp is the leading solution that comes to tissue fibre sourcing; integration to virgin fibre is relatively rare. Less than 15 % of the global tissue capacity is vertically integrated to virgin fibre. However, the trend towards integration is increasing, especially now with high pulp prices as the integrated

**The gap between BSKP and BHKP prices in Europe is abnormally wide and will gradually normalise as the substitution of BSKP by BHKP accelerates and forces the gap down. If the BSKP prices do not fall enough, BHKP prices may stay on the current level a little longer.**

players have benefitted from their lower fibre costs or at least of the flexibility how to see it. Especially in Asia and Latin America, tissue integration has been rising, but also in Europe, more integration to fibre is seen.

The current pulp prices account for some 70% of virgin tissue jumbo reel costs and about 50 % of the converted product costs. It is clear that pulp price is the single most important driver for the tissue business profitability. The fibre integrated players have had a major advantage since last year. This has further increased the interest of the integrated concept.

Recovered fibre has had a declining trend in tissue furnish due to decreasing availability of high quality recovered paper in the long run. However, in the current situation those who already have recovered fibre treating capacity

have enjoyed of the lesser dependence on the virgin fibre market pulp. The inbuilt flexibility of the fibre furnish has been in good use recently.

### Tissue and pulp price dynamics

Tissue product prices generally follow the pulp price movements; jumbo reels (JR) with a lag of 1-2 quarters and finished products with a longer time lag, e.g. some 4-5 quarters.

As JR prices follow the pulp price movements, the historical gap between the prices has been rather constant. During recent years the price gap has, however, slightly decreased.

The finished goods prices are more resistant to pulp price fluctuations, but still follow the pulp price fluctuations



with less amplitude and with a longer delay than jumbo reels. This is how the current tough pricing environment for the tissue players has developed.

The situation has been particularly difficult for independent converters as purchased jumbo reel prices have already increased and for these smallish players it has been particularly difficult to transfer the high raw material prices to their selling prices.

### Can the high pulp prices be transferred to tissue finished product prices?

Increasing the finished product prices due to the high pulp prices has been a vital target for many tissue companies since mid-2017. Not everybody is in a similar position; there are the 'must-have brands' that are so important for the retailers that they just have had to accept the proposed price increases. These players set a price umbrella for the markets. Large suppliers have a similar market power. They can be branded or private label suppliers, but too large to be easily replaced and therefore there is a sufficient negotiation power backing their price increase initiatives.

Not even the companies with the best negotiating power have been able to increase the prices at the pace of the pulp price increase. Over 10% of price increase often result in a volume decrease even for the best products.

Typically the successful price increases have been at about 6-8%, but there is some upside due to the time lag, as the tissue price increases have fully started much later than the pulp price hikes.

Annual/multi-annual pulp contracts cover typically volumes, discounts and payment and delivery terms etc., but not the actual prices which are agreed upon monthly. Tissue price agreements are longer, for instance for four-six months, and they cannot follow the pulp prices sufficiently fast from the tissue supplier's perspective.

Price dynamics can also be retailer driven. The retail competition, consolidation and other movements also impact tissue prices. Tissue is an important and profitable product category for the retailers. There is tough competition between the chains where a chain cannot increase its prices if it does not want to lose the business to the hard-discounters.

Consequently, the price increase for the tissue supplier is not necessarily always reflected in the retail self-price. In regions where the retailer competition is particularly tough, price increases are challenging, especially for the players with a low negotiation power.

### What if the pulp prices remain high?

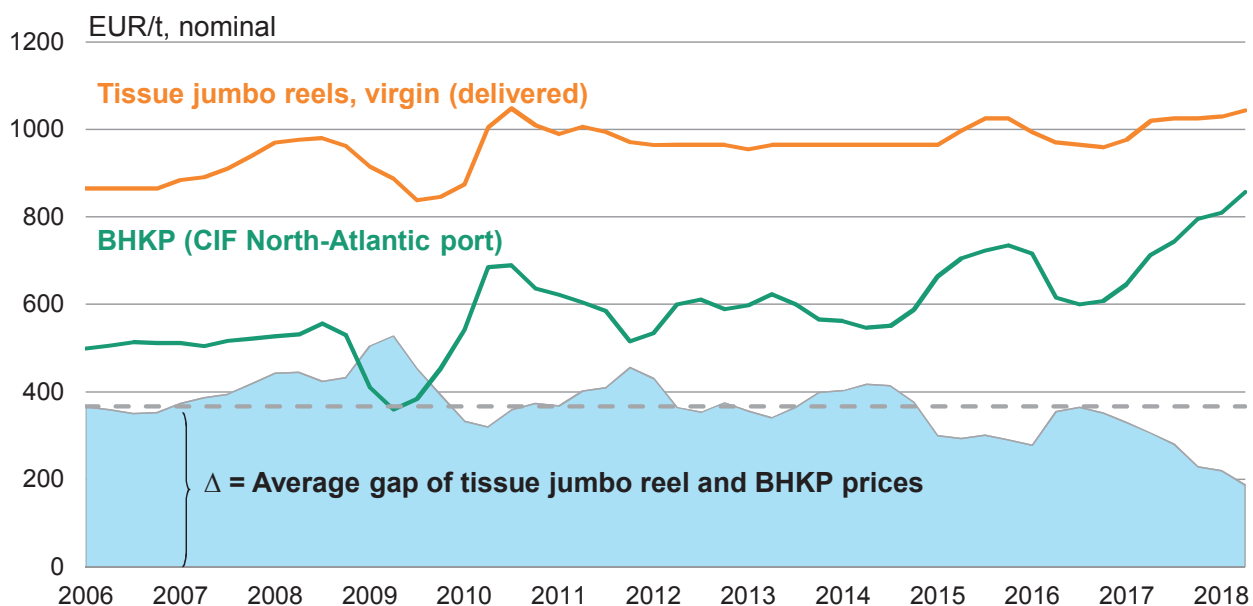
In the unlikely scenario that pulp prices will remain on the current levels in the longer run, the tissue industry will most likely find a way to adjust to the situation. Premiumisation, higher bulk, lower sheet count, developed embossing etc. justify higher prices per tonne and reduce the direct impact of the pulp costs.

Most likely there will be more polarisation to the cost driven competition and to the premium-end that competes with other means than price and can thus easier increase the prices.

*Pöyry Management Consulting is the leading advisor to players within the global Paper, Pulp, Packaging and Hygiene sector ([www.poyry.com](http://www.poyry.com)).*

## JUMBO REEL VS. PULP PRICE IN EUROPE

Virgin fibre-based tissue jumbo reel prices have normally followed changes in pulp prices



# High quality NBSK for premium tissue

By Paul Bicho, Ph.D., manager, optimisation and innovation, Canfor Pulp Innovation

The makers of premium bathroom and facial tissue strive to maximise softness and bulk while maintaining tensile strength to ensure runnability and a high converting efficiency, all while meeting a final quality target. Bulk and softness start with a good furnish, which is followed by the processes and chemicals used on the tissue paper machine, as well as in converting.

Premium tissue requires the use of high quality furnish. Incorporating quality softwood kraft pulps into a fibre furnish improves tissue strength and other quality parameters. The challenge facing tissue makers is maximizing softness and bulk while maintaining the strength specifications of the product all while controlling costs.

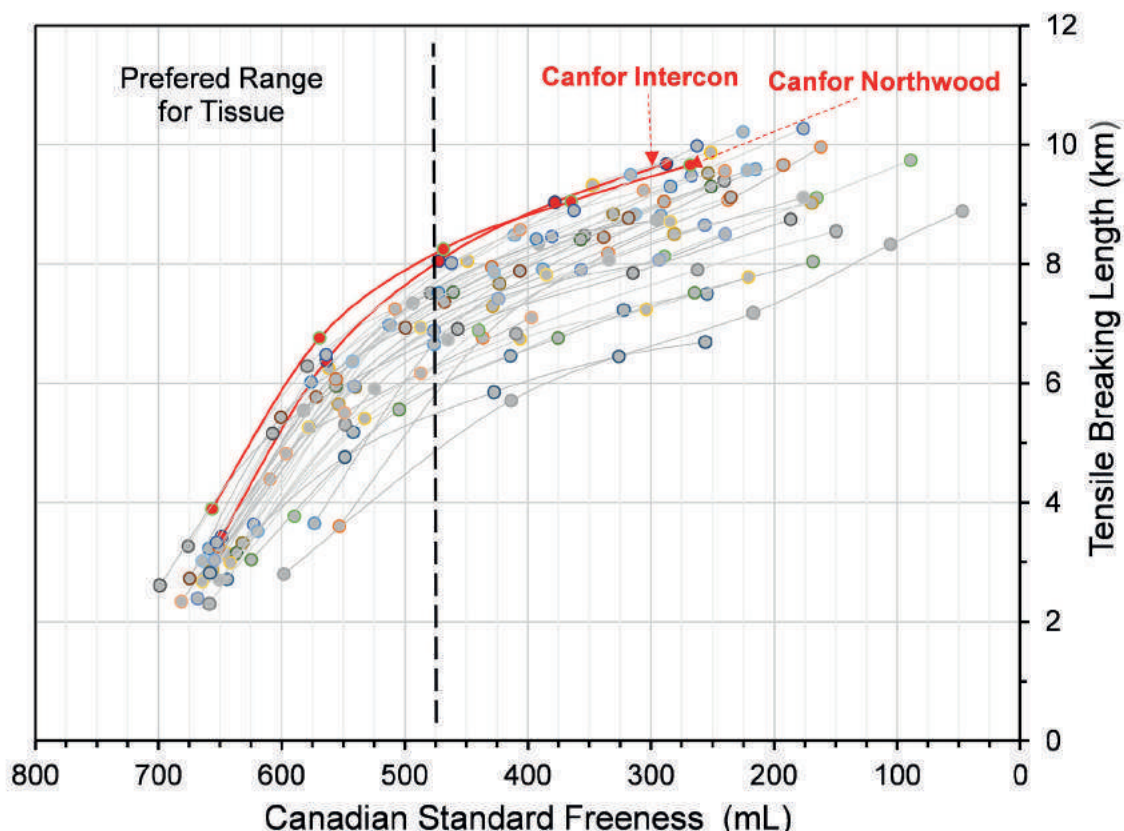
Tissue makers have many tools at their disposal to ensure that strength targets are met while not compromising softness and bulk. Foremost is the judicious selection of a softwood kraft pulp. Softwood pulps with high initial strength and good fibre development during refining can help tissue makers reach their strength targets with either lower softwood pulp levels, less refining or both. In this way tissue makers can minimize the negative impacts that refining has on softness and bulk.

During refining, pulps are subjected to mechanical forces that alter their morphology in a manner that will enhance certain properties, typically tensile strength. This is achieved by fibre straightening during the early stages of refining. As refining progresses, pulp fibres are delaminated and surface defibrillation occurs. The former tends



to contribute to fibre collapse while the latter increases the surface area of a fibre which improves fibre to fibre bonding. The demarcation of these three phases is not clear and there is overlap. At some point the gain in strength due to refining levels off, typically occurring at freenesses (CSF) that are too low for most tissue applications.

If done properly, a little softwood kraft pulp refining can go a long way. However, tissue makers are well aware that excessive refining detrimentally affects other properties that are important for tissue, specifically bulk decreases, CSF drops (SR increases) and softness that is adversely affected. Furthermore, if



**Figure 1:** Effect of refining (expressed as freeness or °SR) on tensile strength (breaking length in km) for 33 northern softwood kraft pulps that are commonly used in premium tissue furnishes. The coarseness of these fibres range from 11 to 17 mg/100m. The two lower coarseness Canfor pulps are highlighted in red.



refining of softwood fibres is not done properly, fibre cutting can occur which can undo the benefits that refining is meant to generate. For these reasons, tissue makers that focus on premium quality tissue grades pay close attention to the softwood kraft pulp that they use and how they refine it. What softwood kraft pulp attributes are desired by tissue makers? Specifically, thin-walled (fine), long fibred pulps with low fines content that have high initial tensile strengths and whose beneficial characteristics are readily developed with minimal refining. Northern bleached softwood kraft pulps, like those produced by Canfor Pulp, are highly prized for these attributes by the makers of quality tissue.

Many factors contribute to the overall quality of softwood kraft pulps. Shorter growing seasons but longer days during growth result in trees with lower proportions of coarser late-wood fibres. Species plays an important role in this with some species naturally producing finer fibres.

These include the spruces and some pines (such lodgepole pine). It is important to emphasize that some pine species (southern pines, radiata pines and some northern pine species) produce very coarse fibres so tissue makers need to be wary of kraft pulps containing these species.

Longer fibres are naturally produced by the tree during the mature wood phase of growth - typically after 60 years or more of growth. Trees that are harvested with a high proportion of shorter fibred juvenile wood will have finer yet significantly shorter fibres. Shorter fibred pulps are weaker in terms of tensile strength and will require either higher proportions in the full furnish or more refining to achieve the desired strength.

Northern bleached softwood kraft pulps from the Canadian interior are intrinsically finer and longer than many of the species found in many parts of the world that have faster growing plantations where volume is valued over fibre quality. In the central interior of British Columbia, Canfor Pulp is fortunate to have three softwood species (white spruce, lodgepole pine, subalpine fir) that are known to be inherently fine fibred.

Furthermore, the rapid onset of cold winters results in slow growing trees

**Many factors contribute to the overall quality of softwood kraft pulps. Shorter growing seasons but longer days during growth result in trees with lower proportions of coarser late-wood fibres. Species plays an important role in this with some species naturally producing finer fibres.**

with very high proportions of fine fibred earlywood and little or no coarser fibred latewood. In addition, the age of the trees (well over 100 years at time of harvest) ensures a high proportion of long fibred mature wood. Forest utilization practices ensure that the inner part of the log is directed towards lumber while the outer part - which is all long fibred mature wood - is directed towards kraft pulping.

In this way, a good fibre for tissue making is made even better. The result is that Canfor pulps are inherently strong and require significantly less refining to develop strength than most other softwood kraft pulps (Fig 1). Tissue makers can take advantage of this by either refining these pulps less or reducing their content in a tissue furnish - or some optimal combination of both. In either case, the result is a soft, bulky sheet that meets the strength expectations of a premium tissue. Other benefits are that higher strengths are reached at higher CSF (lower °SR) which can improve drying efficiency.

Tissue makers appreciate the importance of furnish optimisation in production of high quality premium tissue products. Blends of hardwood and softwood kraft pulps are typically used to enhance the softness, bulk and strength demanded for the particular finished tissue product. It is well known that separate refining of each pulp allows for optimization of each component of the furnish, to obtain a higher quality tissue product.

In many mills, the wide range of products with different softwood contents makes optimal refining of this fibre challenging. In practice this is often overcome by co-refining the hardwood and softwood

pulps. Machine, or touch-up, refiners can also be used.

Recent studies by Canfor, at the Voith Pilot Tissue Machine, have confirmed that co-refining hardwood and softwood improves strength while bulk and softness are lowered. By refining only the softwood, higher bulk and softness are obtained but with the possible need to increase the softwood content to maintain strength. The final decision rests with the tissue maker, depending on the processing equipment they have at their disposal and the requirements of their specific situation.

It is important that tissue makers realize that not all softwood kraft pulps have refining characteristics that are suitable for premium bathroom or facial tissue products. In these grades, softness and bulk are highly valued and excessive refining can rapidly deteriorate these properties. Selecting a superior strength softwood kraft pulp gives tissue makers options to optimize refining and softwood to hardwood pulp proportions to provide the quality required at a reasonable cost. We, at Canfor Pulp Innovation, are well versed in the analysis of both pulp and tissue products, and refiner optimisation for the tissue industry. We can provide the technical support needed to maximise value recovery from our superior quality bleached pulps.

*This article was written for Tissue World magazine by Paul Bicho, manager, optimisation and innovation, Canfor Pulp Innovation.*

**Tissue makers appreciate the importance of furnish optimisation in production of high quality premium tissue products. Blends of hardwood and softwood kraft pulps are typically used to enhance the softness, bulk and strength demanded for the particular finished tissue product.**

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# TWM

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UBM



# Driving home the message – products from sustainable forests do make sense for consumers and the environment

*In October, Södra was awarded the "Best Sustainable Project/Social Category" at the Sofidel Suppliers Sustainability Award. The award acknowledged the pulp supplier's "Act of a hero" marketing campaign, which encourages the conscious consumption of products that originate from sustainable forest. Here, Södra elaborates on the reasons for its launch. A TWM report.*

The industry has made remarkable progress in environmental protection and long-term sustainability, but not always in communicating that fact. Södra Cell has now geared up its marketing of a pulp success story, and claims to be correcting misconceptions.

A few years ago, Magnus Björkman, the president of Södra Cell International, stated that despite remarkable progress in its environmental protection and the sustainable nature of forest products, the industry was still "a lamentably long way from communicating its story to the public".

company: "We all need to sing from the same hymn sheet on sustainability, to communicate the fact that products from sustainably-managed forests are a good thing for the consumer and for the environment."

According to Hellberg, the company's current marketing campaign – Act of a hero – targets further down the chain and aims to educate customers of the efforts being made by the industry.

"This is a pioneering campaign; to our knowledge, no pulp supplier has worked this way before. The result? Over 1.6m impressions in a few months."

**While companies within the sector are working at making themselves and their purchases originate from sustainable sources, Magnus Björkman claimed that the industry's customers are still not aware of their efforts.**

He urged the industry to work together to challenge misconceptions and redress the balance. While companies within the sector are working at making themselves and their purchases originate from sustainable sources, he claimed that the industry's customers are still not aware of their efforts.

"Customers are still on the receiving end of pleas urging them not to print an email and save a tree," says Marcus Hellberg, Södra's sales director for Italy. "Where is the counter-argument and how can we communicate it in a meaningful way?"

He added that it's not enough in the current market just to collect the correct eco-labels as an assurance that everyone recognises you as a sustainable

The campaign used a tongue-in-cheek theme designed to capture attention while delivering a serious message: that consumers of paper from sustainably-managed forests are actually heroes, regardless of whose pulp is in the product they use, as long as it's from a sustainable source.

The challenge was then how to deliver that beyond Södra's usual audience.

Major stakeholders further down the value chain were identified and Södra

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enlisted the help of two of its largest customers to help steer them – both of which are confidential – one in the tissue sector and one in speciality papers.

Their end markets in Europe were then analysed, and the biggest buyers identified.

For the tissue customer, Södra analysed its customers' markets to identify which countries their customers were most active in. Then they studied the major retailers in each country and identified the top three in each customer market. A handful of retailers were then selected from the top handful of countries and pan-European companies added too to ensure as comprehensive a target market as possible.

Hellberg says: "When we presented the findings to the marketing manager of the tissue customer we collaborated with, she was quite impressed that we were reaching further down the value chain than they do in many cases. The marketing techniques we used were highly sophisticated and ensured our message reached the target audience with an impressive level of precision.

"We have had literally hundreds of thousands of hits from our customers' customers."

**The company's current marketing campaign – Act of a hero – targets further down the chain and aims to educate customers of the efforts being made by the industry.**

Over 1.6m impressions have been registered so far: around 4,200 unique users were recoded via web traffic to the campaign site, excluding Södra staff. Over 1.4m impressions were generated via social media campaigns using Facebook, LinkedIn, Instagram and Twitter. Viewings of both tissue and office paper videos linked to the campaign were actively viewed over 100,000 times each (i.e. the viewer took action to open the video and watched all or part of it).

Hellberg adds: "Digital technology may prove to be the tool we need to break through the public's misconceptions. We've talked about better communication for decades but now it's time to act.

"In today's society, transparency is valuable and valued. We have nothing to hide when it comes to our sustainability record, rather we have a responsibility to

**Digital technology may prove to be the tool we need to break through the public's misconceptions. We've talked about better communication for decades but now it's time to act.**

Marcus Hellberg

communicate our sustainability as well as maintain it and offer our customers clear benefits."

He adds for example, one of the company's internal sustainability targets is to eliminate fossil fuels across all its operations: "But if that change were to add to the customers' costs without any direct benefit, they are unlikely to be too enthusiastic," he says.

"However, if we can produce fossil-free fuels for transporting their pulp which

lightens the customers' own carbon footprint, our sustainability becomes immediately more relevant."

Fibre Safe is another example: "A baling strap to replace wire strapping, which is fully recyclable and can simply be thrown into the pulper with the bale – sustainable and convenient for the customer, as well as being a considerably safer option for the operator, especially in the case of manual dewiring, where there's always a chance a bale wire may snap and ping back, risking injury."

## TISSUE MARKET ANALYSIS 2018

*By Knut Omholt, Södra's market research manager*

**T**here are now several events within the pulp and paper business that are influencing the softwood pulp market globally and in Europe specifically. Firstly, we have the situation in China where political decisions have greatly influenced the market balance for all pulps both in China and Europe.

Secondly, a rather unusual tight supply situation for softwood pulps in Europe, and thirdly there is a lot of announced new capacity, expansions and conversions within the pulp and paper industry in Europe that are all offering jigsaw pieces to the bigger European picture for softwood market pulp.

China's 2017 decision to ban all imports of recycled paper graded "waste paper" is making itself felt. So far this year imports of recovered paper to China have been reduced by the equivalent of a yearly fibre volume of 10-15m tonnes.

There has also been a clear reduction in the number of licenses issued permitting the importation of all types of recovered paper and many of China's smaller paper and board mills have been locked out from these allocations.

At the same time, the government is enforcing much more stringent rules on

the quality and purity of imported paper. China is setting a new quality standard for the worldwide trade of recovered paper, and other countries may well follow China's example further on.

Then in recent weeks the ongoing trade conflict between the USA and China escalated further to also include pulp and paper products: The USA announced tariffs of 25% on all Chinese pulp and paper products.

Subsequently, China retaliated with duties of its own, including 25% on recovered paper, while duties of U.S. softwood and hardwood pulps were set at a mere 5%.

While most mills for both technical and economic reasons cannot simply switch from recovered paper to bleached virgin fibre, Omholt adds that there has been a light degree of substitution nonetheless and the latest figures show

an increase in imports of bleached virgin pulp to China.

Overall, there are indications that some 100,000 tonnes of softwood kraft pulp has been redirected from European markets to China last twelve months. That may not sound a lot in a European softwood pulp market of 6.5mt, but at a time when Europe's markets are exceptionally tight, it has an impact.

Another possible scenario that has emerged during the last weeks is the possible effects of the Chinese 5% import tariff on US market pulp. Whether this will encourage US producers to redirect their market pulps to Europe or not remains to be seen.

But if so the volumes of US pulps going to China are so large that it has the potential to totally change the market situation in Europe if they were to be redirected there.

**In recent weeks the ongoing trade conflict between the USA and China escalated further to also include pulp and paper products: The USA announced tariffs of 25% on all Chinese pulp and paper products. Subsequently, China retaliated with duties of its own.**



# 'The right fibres – treated correctly – gets the optimal fibre furnish'

*In the last few years UPM has expanded its pulp production intensively. Due to its recent investments UPM Pulp has established a strong position on the pulp market through developing a versatile product portfolio.*

**UPM** supplies its global pulp customers with eucalyptus hardwood pulp from its Fray Bentos mill in Uruguay and with softwood and birch pulps from all its three Finnish mills – Kaukas, Kymi and Pietarsaari, creating a range of tissue products. Birch fibres are longer than eucalyptus fibres, for example, yet shorter than softwood fibres and so can provide good qualities from both fibre segments.

Due to the qualities of birch pulp it is possible to create a good combination of strength and softness, while at the same time minimising the negative impact on dewatering and bulk. Mats Backman, UPM Pulp's director of technical customer service, says: "UPM Betula is an easy-to-refine hardwood pulp.

Even unrefined birch pulp has very high tensile strength. Thanks to the fact that birch fibres are slender and of intermediate length, birch pulp provides very fast strength development in refining. This opens up possibilities to both reduce use of high cost softwood pulp and to save energy in refining."

"Our aim is to provide products that are trouble free to run as

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well as high and even quality. With tissue products such as paper towels, wet strength and tensile strength are important properties besides absorption capabilities. With UPM Betula our customers can get the best balance of quality and competitiveness," he adds.

## Cost-efficient option

Alongside with high end-product quality properties, UPM Betula can create several economic advantages. "Since birch pulp reaches good strength without excessive refining, less fines are formed reducing wet strength chemical consumption. Therefore, using UPM Betula opens up new possibilities not only to reduce energy used in refining, but also reduce the amount of softwood and minimise the consumption of chemicals. In finding the optimal fibre furnish, the key issue is to select the



**Production boost:** UPM's Kymi mill in Finland



right fibres and treat them correctly," Backman says.

### Ensuring pulp supply

In the past five years UPM has increased its annual pulp production capacity by 500,000 tonnes with focused investments of roughly EUR380m.

These investments have strengthened its position as a global supplier of sustainably produced pulps for growing consumer and industrial end-use applications.

In the Kymi pulp mill, UPM made a EUR160m investment in a new pulp drying machine, debarking plant and modernisation of the softwood fibre line, which was completed in autumn 2015.

In the summer of 2016 the company invested a further EUR98m to increase the mill's annual production capacity to 870,000 tonnes.

Jyri Kylmälä, general manager of UPM Kymi, says these investments have been successful and the new pulp drying machine has enabled the mill to significantly increase production.

"We have removed several bottlenecks and improved our production efficiency at different stages of the process. Further improvements have been achieved in pulp quality as well as energy efficiency and the environmental performance of the mill," he says.

Recent investments have made UPM Betula's production volume roughly equal in size to UPM Pulp's other products – the Nordic softwood pulp UPM Conifer and UPM Euca eucalyptus pulp from Uruguay. UPM Pulp's annual production capacity currently totals 3.7m tonnes.

UPM's three Finnish pulp mills back up



**Above:** A UPM Betula birch pulp sheet from the company's new pulp drying machine. The Griffin imprint has adorned pulp bales of the Kymi mill for over 50 years

each other in the production of birch and softwood pulps. This increases flexibility and ensures availability at all times. "Global demand for pulp is increasing, particularly because of the growing consumption of tissue and

packaging papers. The trend is strong especially in China, so we are in a very good position to respond to that demand," Kylmälä adds.

*This article was written for TWM by UPM.*

**"We have removed several bottlenecks and improved our production efficiency at different stages of the process. Further improvements have been achieved in pulp quality as well as energy efficiency and the environmental performance of the mill."**

Jyri Kylmälä, general manager of UPM Kymi



# ***Metsä Fibre's most recent ambitious development project aims to increase its competences in the field of tissue-grade pulps. A TWM report.***

**T**he Northern softwood pulp supplied by Metsä Fibre in its Botnia-branded products are used as raw material for a range of fibre-based paper and board products, and products based on refined wood-based biochemical. For tissue producers, their requirements for raw material generally include excellent softness and high tensile strength. Depending on the end product, functional properties such as absorption capacity may also play an important role. Botnia softwood in tissue provides high strength to the base sheet throughout the process. The ideal softwood fibre for tissue requires a minimum amount of refining energy to reach the desired strength level in order to minimise generation of fines and maximise dewatering properties and bulk.

## **Gaining deeper knowledge**

Metsä Fibre has recently been studying the effect of the fibre number of its tissue-grade pulps. When producing low-basis-weight paper such as tissue, the fibre number becomes more important than in the case of printing paper or board, with thicker paper and more fibres. The company has observed that the fibre number can be used in conjunction with the yield figures expressed in its Botnia FOX quality index to guarantee performance in both paper machines and converting lines beyond that of competitors' pulps. With the aim of improving customer satisfaction and helping tissue producers more thoroughly, the company has been undertaking an ambitious development project to increase its competences in the field of tissue-grade pulps. By working together with chemical and machinery suppliers, Metsä Fibre has gained valuable feedback, also with regards to the converting stage.

## **Critical converting stage**

One of the main findings reached during the study is the specific role of

high-quality NBSK (Northern bleached softwood kraft) in the production of toilet tissue. Although the type of furnish and pulp grade may not have much effect when making the base paper in tissue mills, critical differences can become visible at the converting stage. The quality of the raw material base becomes particularly evident if embossing is done to the end product.

Another finding during the programme was the realisation how the terminology of paper making can be interpreted differently by different operators along the value chain. For converting operations, for example, "strength" refers to runnability – meaning that there are no breaks in paper production. While for paper machine operators, strength is defined as a different kind of tensile strength.

Based on the results, Metsä Fibre can assert that softwood pulp is one of the key contributors for guaranteeing the runnability of converting lines. For tissue makers, securing the efficiency of the complete production process is crucially important.

## **Answering to Asian demand**

Metsä Fibre's bioproduct mill in Äänekoski, central Finland, started up in August 2017 and is the largest wood-processing plant in the Northern Hemisphere, with a yearly pulp production capacity of 1.3m tonnes. As a completely fossil-fuel free mill, boasting an electricity self-sufficiency level of 240% and a broad range of bioproducts made from production side streams, the plant offers additional advantages for tissue producers looking to sustain the ecological image of their products.

The bioproduct mill was predominately created to address the continuing demand in the Asian markets. In these developing areas, a growing group of middle-class, urban consumers with rising incomes are increasing the demand also for tissue and hygienic products.

A particular observation is the growing demand in certain Chinese cities for embossed toilet tissue. This means that embossing will most certainly be a future technical challenge for China's papermakers, and one with which Metsä Fibre is well positioned to assist with. In Europe, over 90% of the comparable local products are embossed, enabled by the softwood component of the pulp.

## **Making the most of pulp**

The team at Metsä Fibre's Technical Customer Service unit aims to ensure that customers are able to get the most out of the company's high-quality pulp, providing services that are designed to tune production processes and equipment to allow for the reliable and even production of the desired quality and grade of the end product.

For example, Botnia FIT (Fibre Improvement Tool) is a tool for benchmarking commercial pulp grade properties and for simulating applications. The software makes it possible to investigate the impact of changes in the end product furnish or refining on quality and costs.

Another tool offered by the Technical Customer Service team is Botnia FORE (Fibre Optimisation and Refining Evaluation), which helps to overcome challenges related to refining. The software makes it possible to examine all of the various available refining methods and fillings to find the optimal combination for each specific case.

Since softwood pulp is the most expensive component in the furnish, the tools aim to exploit the strength potential of pulp to its greatest extent and reduce the proportion used. This offers tissue producers the attractive advantage of making savings while improving strength.

*This article was written for TWM by Metsä Fibre.*

# 'We are at a very dynamic moment in the tissue industry'

*TWM asks leading figures across tissue's global supply chain for their retrospectives on 2018 and prospectives for 2019. Here they analyse key issues ... raw material costs, integration, overcapacity, automation, E-commerce, sustainability, regional political and military conflicts, technology, restructuring by the big groups, eucalyptus, protectionism, China, and 'Made in the USA.'*



**Juan Corzo**

Vice president,  
South Florida Tissue Paper, USA

## **TWM/1** : How have the events in the tissue industry in the last year impacted your business and the global tissue industry?

"The biggest impact in the tissue Industry this year has been the rising costs in all raw materials. Besides rising prices in pulp, we have seen an increase in cardboard, plastic, and freight. This has paid a major impact in our business and our customers nationwide. What it cost us to make a product in 2017 has significantly changed in 2018."

## **TWM/2** : What main tissue trends are you expecting to see in 2018/2019?

"The main tissue trends we're seeing are for products made in the USA. We see the market giving more value to the "Made in USA" symbol printed on our products. Having our products made in the USA from the core, from the corrugation to the finished roll, has more value than products made overseas."

## **TWM/3** : How are the shifting economic conditions around the world impacting your business and the tissue industry at large?

"We see the economic conditions around the world impacting the rising cost in pulp."

## **TWM/4** : Are you seeing demand for tissue products in new geographical areas, and if so, where and why?

"We see a higher demand for tissue products in Latin America because of our quality. We are able to provide a superior quality that countries in Central and South America are demanding."

## **TWM/5** : What are the main challenges and opportunities facing the tissue market in the immediate future and how are you tackling them?

"An immediate challenge we see in the tissue market is the opening of new mills across the United States. We are seeing new technology in tissue mills able to produce premium paper at a more economical cost. Paper like NTT, for example, has introduced us to newer technologies that allow mills to produce premium quality at a more competitive cost."

## **TWM/6** : What do you make of the Trump/China trade wars?

"We have seen less competition coming from China because of this. China has always been a competitor when it comes to economical tissue products in markets where price is the main factor. In 2018, we have been able to compete more aggressively against customers that have China as their main source. We are starting to see more advantages in our prices when competing with a Chinese manufacturer."



**William A Nelson**

President  
Elettric80 Inc., and Elettric80 S de RL  
USA and Mexico

**TWM/1** "This is a very dynamic moment in the industry. We are seeing major paradigm shifts in supply chain strategies with the continued growth of E-commerce marketplace. As a result, tissue makers are thinking very strategically about efficiencies gained through improved material management and flows from inbound receipt of raw materials to delivery of a custom-made package of finished product at the consumer's doorstep. Likewise, flexible systems are replacing older assets. The emphasis has moved from the model of "buy best assets – run fast – manage outcomes" to taking an integrated approach where all activities are orchestrated



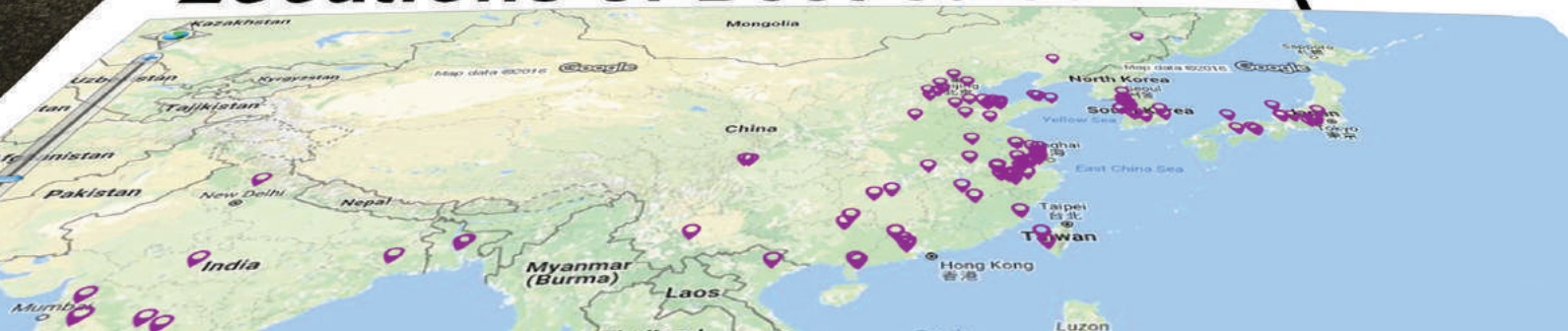
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real-time and software is making decisions based on feedback received from the equipment that are integrated parts of the system solution. All aspects of an existing or new facility can be emulated thereby providing a very accurate estimate of outcomes that are less susceptible to declining results over time. At E80, we are working on major initiatives related to intelligent decision making through big data and IoT that are providing very exciting results in the areas of productivity improvements, predictability of maintenance and adjustment of priorities based on best available resources. Our focus is on the end-user how do we deliver exactly what is needed most directly at the lowest possible cost."

**TWM/2** "E80 sees the market from the prism adding-value through the creation of an integrated supply chain from pulp process to delivery of finished goods at home. Yes, private label is growing in different markets just the same as customers are demanding better performing products. Branded manufacturers are fighting very hard to stem private label growth through product innovation and streamlining production systems at legacy sites. In our estimation, however, whether branded or not, the winners will be those companies that figure out how to make their products most accessible in the configuration that their customers desire and this can be a very fluid request. For this reason, all investments must be able to adapt quickly to changes."

**TWM/3** "Automation is taking hold in low labour cost markets where business tends to be more entrepreneurially driven. One of the most modern tissue facilities in the world is located in South America, for example. There are many more examples in other lower labour cost markets. Entrepreneurs realise that the ROI bet is much more successful when played with integrated systems that provide predictable results day-after-day and that are flexible enough to provide benefits such as better customer service to end user, higher quality and lower cost per unit produced. In more mature markets the same dynamics are driving automation decisions, but even greater opportunities exist due to decreasing availability of labour, increased transport costs and changing buying habits."

**TWM/4** "Yes, of course we are seeing a broadening of the world market in developing markets as disposable income grows. Right now, I think every market is a new market given the shift in supply chain opportunities."

**TWM/5** "The winners will be those who figure out how to make their products the easiest/fastest to access with the given of competitive price and quality. Reducing how many times a product is handled prior to arriving at the final customer's doorstep is critical. Safety, the environment and conservation of all resources will win the day. We will have moved beyond the "run fast and wait" model in the near future."

**TWM/6** "If I could predict the impact of a trade war, I would be a billionaire today – and I am sure a few will profit from this while most will be stuck with the bill. However, as a mere mortal I think limiting competition slows down innovation. E80 is a company comprised of many people who have immigrated to a place where they can best utilise their unique skills to provide value to the final consumer at the lowest possible cost and the highest possible quality. We are a multi-cultural, multi-racial, multi-theist, multi-national company whose employees share in the same joys of living in an open society where goods flow freely and people are able to pursue their dreams without unjust impediments."



## Greg Grishchenko

Tissue industry insider

**TWM/1** "Being a constantly growing part of the paper industry hurt by digital media development, the tissue sector in comparison looks quite immune to almost any event that might affect its state. Recent mergers, acquisitions and mill consolidation can be explained as a normal free market activity with the goal of maximising profits. The other economic factors such as rising cost of raw materials, overcapacity and local import/export activities will not change the direction of the tissue market growth vector, but only add some fluctuation in it within low single digit percentage."

**TWM/2** "In 2018/2019, the main tissue trends will remain attached to regional political and economic development. Indeed, we should expect flat sales growth in the private labels, consumer tissue and AfH in Western Europe, the US and Japan. Eastern Europe (including Russia), Latin America and Asia (except India) tissue markets will show mild growth due to population gain and low consumption initial benchmark. Ending of military conflicts across the world might bring higher tissue consumption (with positive expectation in the Middle East/ MENA region). Recent economic development in the African continent might bring positive surprises in view of consumer and AfH tissue growth (see #4 below)."

**TWM/3** "Changing economic conditions affected by trade disputes and new tariffs might slow down the growth of tissue markets in some areas. The main causes of possible price hikes for pulp and tissue are China's attempts to secure its sources of recycled pulp affected by their government strategies and the US-Canada tariff scuffle on tissue products. New tariffs introduced by President Trump's US administration might affect US-based multinationals importing pulp from Asia, but price hikes in the USA might be unlikely due to competition with local suppliers. The price increase for the US tissue product imports to Canada might be questionable due to the fact that some North America-headquartered tissue makers have mills in both US and Canada."

"Tissue forming and converting equipment manufacturers in Germany, Finland, Austria, Italy and Brazil are principal suppliers for the global market. The share of such imports to the US is not that critical to change the very strong economic position of such companies. Chinese tissue makers might impose reciprocal tariffs on US sourced pulp but the resulting effect on finished product prices remains to be seen."

**TWM/4** "The African continent is a potential source of growing demand for tissue products. The driving force for this development, however, is quite peculiar. In recent years China actively promotes its "Belt and



Road Initiative" across the globe including Africa. The recently run FOCAC (Forum on China-Africa Cooperation) summit in Beijing was attended by an overwhelming majority (over 50) of Africa's countries. Over a period of the last 10 years, China has invested nearly \$100bn in various government, industrial, infrastructural and mining projects in Africa. "Additionally, over \$70bn were distributed there as financial assistance. Obviously, a significant part of commercial product inflow to Africa is consumer and AfH tissue products. Indeed, this trade benefits both sides - creating a significant channel for an overheating Chinese tissue industry from one side and a developing consumer tissue market on the other."

**TWM/5** "Among the main challenges the global tissue market might face in the near future are overcapacity and impact on environment. While the first one can be managed by economical means, the second is connected with certain trends in sourcing of recycled fibre and growing demand for white virgin fibre. The increasing share of fast growing eucalyptus tree plantations is slowly changing balance of a tree stock in nature across the world. Environmental issues rising from this expansion are subject of controversy and must be addressed for the future."

**TWM/6** "See answer to three."



**Olga Rubio**

Marketing director  
Gomà-Camps Group, Spain

**TWM/1** "Competition, market and consumption influence our tissue business. All of our efforts are focussed on the direction to fulfil the customer and consumer needs in our markets and for this reason we have introduced new products, new customers and implemented internal projects based on continuous improvement."

**TWM/2** "Sustainability, E-commerce, added-value products (innovations)."

**TWM/3** "The tissue industry in general is not exempt from the impacts and changes in economic conditions. Gomà-Camps and the tissue industry must be able to adapt to the new market and society changes. In our case, we take these new challenges as one of the right ways to improve as a company, in our processes and organisation."

**TWM/4** "The tissue is a commodity product and in the emerging markets will keep on growing. Our internationalisation strategy is based on reaching these opportunities from the local market. For example, in Morocco, where our local company develops our position in that market."

**TWM/5** "The main challenge for Gomà-Camps is to always keep in mind the environmental impact that we as an organisation have. Our daily efforts to improve this aspect highlight our recycled paper and our commitment to this type of products, increasingly demanded by consumers."

**TWM/6** "We act in a global world and global competition improve the competitiveness of companies. The possibility of reaching a group of larger consumers suggests that it is difficult to understand that protectionist measures are adopted in some countries."



**Armindo Marques**

Manager  
Poppies Europe, United Kingdom

**TWM/1** "The rising pulp costs have been the main factor that has impacted our business in the last 12 months. This has put significant pressure on profit margins as it drives up our raw material costs. Raw material costs have been on an upward trend for such a long period that by the time we pass an element of this on to our customers the cost has moved up again making it impossible to reconstruct the profit margin. This also makes quoting for new business difficult as a sales price quoted one month is not always viable in the following one."

**TWM/2** "As the price of raw material remains very high there will be an increase in demand for substitute products at a lower cost base. Poppies intends to be the front runner by launching its new alternative napkin product range (recycled and part recycled grades)."

"The demand in the AfH market for environmentally friendly products has continued to grow, however the emphasis is no longer just on the core product itself but on every aspect of the product from the carbon footprint of the supply chain to the manufacturing process and the packaging as we enter the cradle-to-cradle era."

**TWM/3** "The political decisions made around the world directly affect the tissue industry. China's policy on recycled fibre imports has fuelled the increasing price of pulp over the last 12 months, whilst the turmoil in Turkey has led to extra capacity of tissue being available on the export market. The currency is hugely affected by political decisions (i.e. Brexit, uncertainty, potential tariffs), which has become more unpredictable in recent years. This has a direct impact on our business as the UK market relies heavily on imported raw material."

**TWM/4** "Since the Brexit vote and the weakening of the British Sterling Pound, we can see that the euro zone has become very interested in UK

manufacturers. England has become very attractive especially for the neighbouring countries where the cost of transport is still moderate."

**TWM/5** "There is a clear movement in the way the big groups are restructuring their operations (Essity and Kimberly-Clark), which includes divesting some areas leading to openings for smaller operators. We are preparing ourselves to take on the challenge if the right opportunity arises."

**TWM/1** "The tissue industry in India has not seen any mergers or acquisitions in the past year."



**Sumit Khanna**

Chief executive  
Beeta Tissues, India

**TWM/2** "Rising paper cost and increase in tissue exports has been the primary trend here, resulting in higher capacities. There has been increasing demand for private label products, which is trending among online and offline retail stores due to acquisitions by Amazon and Walmart."

**TWM/3** "The Indian tissue paper business has been on the rise in jumbo reels and finished goods in the past one year as the Indian rupee has depreciated by about 7%!"

**TWM/4** "Major demand has been from the Middle East countries and USA as India is preferred compared to China due to high import duties on Chinese products.

Due to the large size and population of India the tissue paper industry is consistently growing leading to increase in paper mills and converters."

**TWM/5** "The major challenges in India are the lack of world class converting and packaging machines. Primarily, the Indian-made machines are used by the converters. I feel now there shall be a huge demand for European and Chinese machines for this sector.

**TWM/6** "With the Trump/China trade war, Indian tissue paper is in great demand with increase in exports to USA. Personally, I think Indian tissue converters are now ready to install high capacity machines in converting and packaging to produce a world class product and export."



**Khalid Saifullah**

Managing director  
Star Tissue UK, United Kingdom

"Rising pulp prices compounded with negative volatility in the currency markets has had a major impact on our business over the past year. As manufacturers, we have to now keep one eye on the exchange rate and one eye on productivity to ensure we sustain any profit margin in the business. Whilst demand for tissue products is increasing the number of converters in the market is reducing. This year we have seen a surge in new paper mills across the world but consolidation and tightening in the pulp market.

"We envisage the pulp paper increases will be a lot slower in 2018, but we see increased global instability with the rise of protectionist and populist governments which means we have entered a new world order, and one that is incredibly unpredictable. This will continue to cause volatility in the currency markets, and we'll see rises in costs due to trade tariffs, sanctions and demand, all making it difficult to plan investments for the longer term. This has made it very challenging for UK paper converters as these rising costs and a lag of price recovery has made it difficult to sustain profitability and could lead to more casualties in 2019.

"Star Tissue has overcome these challenges by passing on price increases and continuous investment in improving productivity has helped it remain competitive and profitable. This year Star, has invested over €1.5m upgrading its production lines to ensure it can continue to offer superior products in the hygiene paper industry and increasing its converting capacity to 2000 tonnes per month. Our strategy of investing in people, productivity and processes has propelled us to becoming one of the leading suppliers of AfH products in Europe. This year, we have also invested in a new management information system moving to SAP which has helped us to integrate all our processes giving us real time information on our stocks, productivity and sales. We are seeing a huge shift away from tissue products made from pure pulp to recycled tissue products. Our Ecoroll range has seen an increase in demand by over 40% this year and this has been mainly due to rapid increases in pure paper prices but also customers are preferring a more environmentally-friendly product.

"The other key trend we have seen this year is customers wanting less packaging and concentrated products, for example, instead of the loosely wound 10m kitchen towel they prefer tightly wound 40m kitchen towel and this significantly reduces the carbon footprint by limiting transport, increasing payloads, and reducing plastic packaging. As for Brexit, two years on and we are still no clearer as to what this will look like and how we can benefit from the potential opportunities or how we should prepare for the threats it may pose. I can say we have held back on some of our investments this year until we are clearer as to what trading relationship we will have with Europe and the rest of the world post Brexit."





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# VOITH

Inspiring Technology  
for Generations

# Toilet paper was a luxury on Haiti when Glory Industries began its niche mission for hygiene... and 80% of the market

**A new era of enterprise has started for one industry on the Caribbean republic eight years after a devastating earthquake caused major damage and killed up to 160,000. Long supplied exclusively by multinational brand imports, founder and director general Myrtha Vilbon plans ambitious expansion... and eventually exports. She talked to TWM.**

## TWM/1 : What led you to establish Glory Industries?

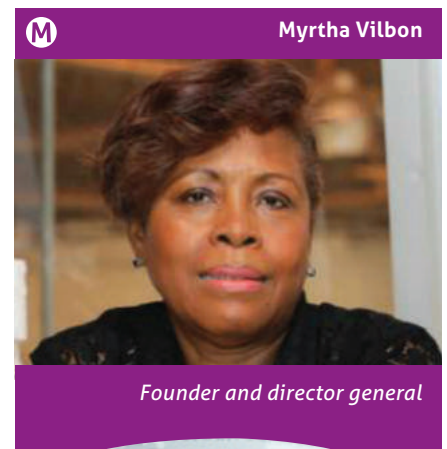
"Following 17 years of imports and distribution of multinational brands with unhappy endings, I decided to seek added-value through local production, promoting products and brands of my own. Toilet paper - a first necessity - overlooked by many, was a luxury, not affordable to 40% of the Haitian population. There I seized the opportunity to respond to a need and a hygiene issue in a population of 11,400,000 inhabitants, who had previously been supplied exclusively with imported toilet tissue paper (100%).

"The company started with the production of 35 gram rolls, which have proven to be a success. The aim is to outfit every Haitian household and institution with affordable personal care tissue hygiene products, starting with toilet paper and napkin, and our pricing strategy consists of having small margins over large volume.

"Our products address the local community's need of affordable, environmental-friendly toilet paper rolls and napkin, which help improve access to sanitary paper. We produce a range of toilet paper rolls in diversified labels, weights and prices, and are one of two local converters sharing 10% of the local market. To meet the needs of Haiti's low-income consumers, our toilet paper rolls can be as small as 35 grams and account for 60% of our production. Our low-cost toilet rolls create an important niche for consumers, moving away from traditional sanitary methods to affordable, improved hygiene habits. We are a key player in hygiene enhancement and social inclusion of rural, marginal urban communities. We look forward to apply this model to all 10 departments of Haiti, to reach 8m inhabitants nationwide.

"Our affordable toilet rolls have impacted a change in personal care awareness across the country, primarily in the city of Port-au-Prince, with an estimated population of 2,618,894 in the metropolitan area. Through this plan we aim to reach 80% of the population, nationwide, by satisfying the growing demand for low cost tissue hygiene products within the next five years.

"Our growth, resulting from hygiene consciousness, will, at the same token, solve serious health and dignity issues."





**TWM/2 : Where are you based and what do you produce?**

"Glory Industries is a family-run business and was established in Port-au-Prince, Haiti, in June 2015. This geographic position provides a significant competitive advantage due to the centralisation of our production to our customers in the western section, and also our proximity to provincial stations. The plant is on an area of 90,000 square feet, with ample space to accommodate planned expansion. We produce toilet paper rolls and napkin and these products are currently marketed in formats to tailor the needs of the market in all sectors. Toilet paper formats range from, Super Mini, Mini, Standard and Extra and they are marketed under colourful brands: Toutou Ni, Siye, Pwop, Joy, Classic. We produce napkins in three formats: (50, and 200 sheets) under the Glory Classic brand, and 500 sheets, unlabelled package for institutional use. "Our company is currently operating with Chinese semi-automatic converting machinery. This choice was made to lower our initial investment. At present, we are looking into higher performing machinery. Our packaging is 100% manual, and PEIXIN International, a Chinese company founded in 1985, is the manufacturer of our initial machinery."

**TWM/3 : How many tonnes per year do you produce and how do you plan to increase this?**

"We produce an average of 300mt per year, and our objective is to expand our operations to 8,000mt. We plan to achieve this goal through financing or partnership, to acquire new machinery, automate our operations, build production capacity, diversify our production range, maintain continuous production and grow sales at a competitive level and to gain a 60% share of a 13,000mt market of toilet tissue on a short-term basis."

**TWM/4 : Is your target market Haiti, do you plan to export also?**

"Our present target market is Haiti, on a national basis, with distribution in urban and rural communities. We foresee the company scaling from 1.5m to outreach 9m local consumers in all income sectors, with a variety in quality and price, to later respond to export requests from Cuba, Venezuela, Aruba, Curacao, and the CARICOM Countries."

**TWM/5 : What tissue trends are you seeing in the Haiti market?**

"As there is no tissue mill in Haiti and all materials are imported from abroad, the growth situation in Haiti for At-Home products is tremendous. Only 60% of the population presently has access to tissue hygiene products. Some 90% of tissue paper products in the Haitian market is now being imported from the United States, the Dominican Republic, China and other surrounding countries. The impressive number of foreign products marketed in Haiti confirms the potential of this sector. Despite imported products, the Haitian market is still untapped in terms of personal care paper products. Local production is presently insufficient to curb market dependence on imports. Our present plan is to increase our production capacity of existing products, toilet paper and napkins to effectively satisfy growing demand, while offsetting massive imports. At the same time, introduce to the market additional tissue hygiene lines of products to satisfy low, medium and premium quality segment."

"Haiti is a country at a stage of moderate demographic transition with moderate growth population, and young age structure. With such a trend, the Haitian population is expected to reach over 16m inhabitants in 2050 against 11,400,000 today - an increase of 40%. This analysis confirms the growth potential of the tissue sectors. The national consumption of toilet tissues is today estimated at 13,000tpy for a number of 6.6m consumers, or just 60% of the population. Improvement in consumer hygiene awareness will further drive the growth of tissue and hygiene in Haiti. Tissue hygiene products being imported at 90% leaves local production much room for growth. The dynamics that stimulate consumer demand in retail tissue in Haiti will welcome an offer of an assortment of paper weights at a variety of affordable prices, suitable to various income levels. This dynamic is not necessarily possible with imported products. Glory Industries' operations will be more cost effective by lowering production costs, subsequently selling prices with the economy of scale. Revenue, profit and income will increase, and our products will be more competitive and become substitutes for imports. The imports of brands from the United States, China, Colombia, Mexico, Costa Rica and the Dominican Republic into the Haitian market is estimated at an annual statistic of 30,000 tonnes, all products combined, toilet paper, napkins, tissues, baby diapers and incontinence products."

**TWM/6 : What trends are you seeing in terms of private label growth, AfH, etc?**

"With planned reinforced border control, higher tariffs on imported tissue paper goods and import quotas, we foresee great opportunities for local production. As a result, a number of imported established brands with considerable market share and established distribution in the Haitian market's pipeline will resort to subcontract the production of their brands to local producers. AfH is not presently strong in the Haitian market."

**TWM/7 : What are the key challenges?**

"Our main key challenge is access to growth capital. The political challenge of Haiti minimises the opportunities of foreign investments, causing a hindrance to the industrial development of the country."

**TWM/8 : And the key opportunities?**

"With total estimated hygiene tissue paper consumption of 30,000mt, and 90% of imports, Haiti offers tremendous opportunities for local production. Our company, beneficiary of the tax exemption law, is poised to gain a lead in the competitive position in the Haitian market as well as in the export market, to reach, upon expansion, a targeted 8,000mt yearly in toilet tissues rolls and 20,000mt in overall hygiene tissue products. Once local production capacity proves to sustain the population's needs, a change in legislation may impose tissue paper imports quotas or higher customs tariffs on imported goods, to protect local investments. The geographic position of Haiti, with imports of 90% of its tissue consumption, offers a wealth of opportunities to emerging markets investors."

# Events Calendar

Event	Date	Location	Website
ISSA/INTERCLEAN North America	29 Oct - 1 Nov 2018	Dallas, TX, USA	<a href="http://www.issa.com/trade-shows/issainterclean-dallas-2018.html">www.issa.com/trade-shows/issainterclean-dallas-2018.html</a>
PAP-FOR	13 - 16 Nov 2018	St. Petersburg, Russia	<a href="http://www.papfor.com">www.papfor.com</a>
Paperex South India 2018	15 - 18 Nov 2018	Chennai, India	<a href="http://www.southindia.paperex.in">www.southindia.paperex.in</a>
Labelexpo India 2018	22 - 25 Nov 2018	Greater Noida, India	<a href="http://www.labelexpo-india.com">www.labelexpo-india.com</a>
Paper One	28 - 30 Jan 2018	Beirut, Lebanon	<a href="http://www.paperoneshow.net">www.paperoneshow.net</a>
Paperweek Canada	4 - 7 Feb 2019	Montreal, Canada	<a href="http://www.paperweekcanada.ca">www.paperweekcanada.ca</a>
Tissue World Milan 2019	25 - 27 Mar 2019	Milan, Italy	<a href="http://www.tissueworld.com/milan">www.tissueworld.com/milan</a>
Papercon	5 - 8 May 2019	Indianapolis, USA	<a href="http://www.papercon.org">www.papercon.org</a>
International Pulp Week	5 - 7 May 2019	Vancouver, Canada	<a href="http://www.internationalpulpweek.com">www.internationalpulpweek.com</a>
Paper Vietnam 2019	26 - 29 Jun 2019	Ho Chi Minh, Vietnam	<a href="http://www.paper-vietnam.com/">www.paper-vietnam.com/</a>
Int. Paper Chemicals Tech Expo China	4 - 6 Jun 2019	Guangzhou, China	<a href="http://www.paperexpo.com.cn/">www.paperexpo.com.cn/</a>
P&P Robots & Intelligent Equip. Expo	4 - 6 Jun 2019	Guangzhou, China	<a href="http://www.paperexpo.com.cn/">www.paperexpo.com.cn/</a>
Int. Pulp and Paper Industry Expo-China	4 - 6 Jun 2019	Guangzhou, China	<a href="http://www.paperexpo.com.cn/">www.paperexpo.com.cn/</a>
Zellcheming-EXPO	25 - 27 Jun 2019	Frankfurt, Germany	<a href="http://www.mesago.de/en/ZEX2019/home">www.mesago.de/en/ZEX2019/home</a>
PackPrint 2019	18 - 21 Sep 2019	Bangkok, Thailand	<a href="http://www.pack-print.de">www.pack-print.de</a>
Tissue World Sao Paulo	22 - 24 Oct 2019	Sao Paulo, Brazil	<a href="http://www.tissueworld.com/saopaulo">www.tissueworld.com/saopaulo</a>
Paperex 2019	3 - 6 Dec 2019	New Delhi, India	<a href="http://india.paperex-expo.com/Home">http://india.paperex-expo.com/Home</a>
Tissue World Miami 2020	25 - 27 Mar 2020	Miami, USA	<a href="http://www.tissueworld.com/miami">www.tissueworld.com/miami</a>
Asian Paper and TW Bangkok 2020	3 - 5 Jun 2020	Bangkok, Thailand	<a href="http://www.tissueworld.com/bangkok">www.tissueworld.com/bangkok</a>
Tissue World Istanbul 2020	13 - 15 Sep 2020	Istanbul, Turkey	<a href="http://www.tissueworld.com/istanbul">www.tissueworld.com/istanbul</a>





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**What is your company's primary field of business (tick all that apply):**

### A. INTEGRATED TISSUE PRODUCTS MAKER

**Primary business making paper and producing:**

- ☐ Consumer (At Home) Finished products  
☐ Away-from-Home (AFH) Finished products  
☐ Other Tissue Grades, please specify: .....

### B. JUMBO ROLL SUPPLIER

- ☐ Jumbo Roll Maker, for sale to converters

### E. SUPPLIER TO THE TISSUE INDUSTRY Please check all that apply:

- ☐ Paper making machinery  
☐ Fabrics, felts, clothing  
☐ Drying technologies  
☐ Process automation and control  
☐ Water treatment, environmental and effluent control  
☐ Dust control and air treatment systems  
☐ Doctors and creping blades
- ☐ Deinking  
☐ Stock preparation, fiber processing and pulping equipment  
☐ Fibers: Market pulp and recycled fiber  
☐ Chemicals and chemical technologies
- ☐ Converting machinery and supplies  
☐ Printing machinery and supplies  
☐ Inks, glues and dyes  
☐ Embossing rolls

### C. TISSUE CONVERTER

**Primary business is converting jumbos and producing:**

- ☐ Consumer Finished products  
☐ Away from Home (AFH) Finished products  
☐ Other Tissue Grades, please specify: .....

### D. RETAILING AND DISTRIBUTION

- ☐ Retailer  
☐ Broker  
☐ Distributor
- ☐ Knives and blades  
☐ Folders/interfolders  
☐ Cores and coreboard  
☐ Wrapping/Packaging equipment and supplies  
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25 - 27 MARCH

# MARK YOUR DIARY

**Join the World's Largest Dedicated Tissue Industry Event**  
Tissue World Milan is set to return from 25 - 27 March 2019  
at the Fieramilanocity, Milan, Italy.

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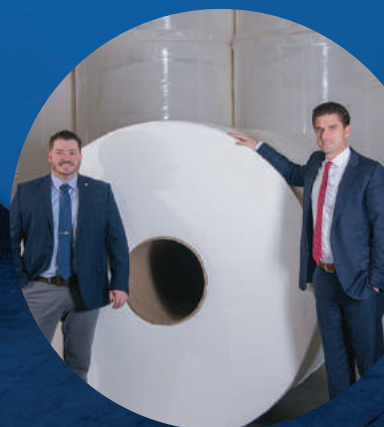
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