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TWM

TISSUE WORLD MAGAZINE

COLOMBIA

Tissue toughs it out as the recovering economy takes a hit

COUNTRY REPORT

MARKETISSUES

Global tissue growth beats expectations at 4%
How the regions performed

PLUS

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CMPC discusses creating a costs virtue out of an energy necessity in ExitIssues.

Right: TWM visits Papeles Nacionales for the Colombia Country Report.



TWM

TISSUE WORLD MAGAZINE

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Colombians like what they see with tissue

Before the recent setback, Colombia had ranked as high as 34th in the World Bank's "Doing Business" index, up from 53rd in 2013. That is above larger economies such as Brazil and Mexico – and above Belgium and Italy.

While it is placed at 54th place this year, in the Americas the country's reputation as a gateway to the south and launch pad to the north is becoming cemented. The stereotype of a country ridden by drugs, cartels, kidnapping and violence is finally starting to fade.

The number of middle-class households has reached 3.2 million, the equivalent of 24.2% of all households. The poverty rate – defined by the World Bank as anyone living on less than \$1.25 (81p) a day – has fallen from almost 50% to 34%.

Last year saw a drop in its economic performance, but it is widely expected to be just a blip. The peso's value has dropped in some accounts of up to 30% and inflationary pressure has put up prices. Further up the supply and prices chain, energy costs for manufacturers have almost doubled, and rainfall and supply levels are dramatically low.

The good news for tissue is that loyalty established during the better times remains strong. Affluent consumers have stayed with good-quality tissue products.

While we may be slightly wary of the longevity of acronyms, given that the last major one should perhaps have been RIC rather than BRIC, given Brazil's recent performance, it comes with little surprise that Colombia finds itself leading one. The CIVETS - Colombia, Indonesia, Vietnam, Egypt, Turkey and South Africa – are six key countries for the future global growth of the tissue market.

Our Country Report confirms the general optimism, and points to an encouraging future. There is significant unmet potential in retail consumer tissue, estimated to be in excess of 140,000 tonnes, representing a good platform for further category development and growth.

Plus, unlike much of the rest of the world, Colombians have not as yet come to the discovery of being unable to conduct life without the multi-use kitchen towel. Sales growth has slowed to a relatively low 4% from a low base, partly due to the traditional popularity of the trapo de cocina, or kitchen cloth.

Innovative manufacturers are on the case, developing a hybrid ... a more durable kitchen towel that can be used several times. That's the mood in Colombia these days.

A surprisingly good year

Global tissue consumption reached approximately 34.8 million tonnes in



Helen Morris

*Editor,
Tissue World magazine*

2015, up more than 1.3 million tonnes on 2014. That means worldwide growth beat expectations at 4%.

A breakdown of the regions suggests widely fluctuating markets: steady in the US, Canada flat, decline in South America, Russia down, and Western Europe steady with tissue in troubled southern nations recovering quickly.

The big drivers have been China with growth better than forecast at 10.5%, Turkey at 14%, Africa's new capacity in the north prompting consumption growth close to 6%, and Iran enjoying regional growth close to 10% ... TWM's next Country Report will come from Iran.

Full report in *MarketIssues*.

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"Exceptionally strong growth" at 4% for the global tissue industry in 2015

Last year was "above-average" for the global tissue business with worldwide tissue consumption growing to 34.8 million tonnes, up by more than 1.3 million tonnes from 2014. TWM hears from RISI's principal, tissue, Esko Uutela

Although the statistics for last year are not yet available for all countries in the world, 2015 was an above-average year for the global tissue business and industry. Based on our current estimates, worldwide tissue consumption grew to approximately 34.8 million tonnes in 2015, up more than 1.3 million tonnes from 2014.

According to the current data and estimates for countries which have not yet published their final statistics, the global growth rate of tissue consumption was 4.0% in 2015. This is an exceptionally strong growth compared to recent years as the global growth rate was not more than 3.2% in both 2014 and 2013, 3.5% in 2012 and 3.6% in 2011. This growth also exceeded our expectations, since the RISI forecast was 3.7% for global tissue market growth in 2015.

One could ask what the reason for this sudden acceleration of growth in tissue consumption was. Although the global economy continued to grow, real global GDP growth for 2015 was not more than around 3% and was actually below the growth in previous years, mainly because of negative growth in some major economies, such as Russia and Brazil, and also due to slowing

growth in China. There is no single reason, but rather a number of positive developments in different regions, which will be briefly discussed below, that positively contributed to global tissue consumption growth.

In North America, the US economy was relatively strong, which helped AfH tissue demand in particular, the growth rate of which exceeded 3%. Total tissue consumption grew by 2.2% in the USA, while the Canadian market was rather flat. North American growth exceeded 2% in 2015 after growing 1.3% in 2014 and 1.4% in 2013. The region continues to have the largest tissue consumption worldwide, and so this acceleration of more than 50% in the growth rate made a major contribution to the global growth rate.

Western Europe was another positive surprise. The region had suffered from the consequences of the 2009 Great Recession for years, particularly due to problematic developments in Southern Europe. In 2015 the Southern European economies started to recover, and tissue consumption reacted rapidly, especially AfH tissue consumption, which picked up quickly. Total Western European consumption recorded a growth rate of 2.2-2.3%, and while some revisions may still occur, this was clearly more than in previous years (1.2% in 2013



Esko Uutela

Principal,
Tissue, RISI

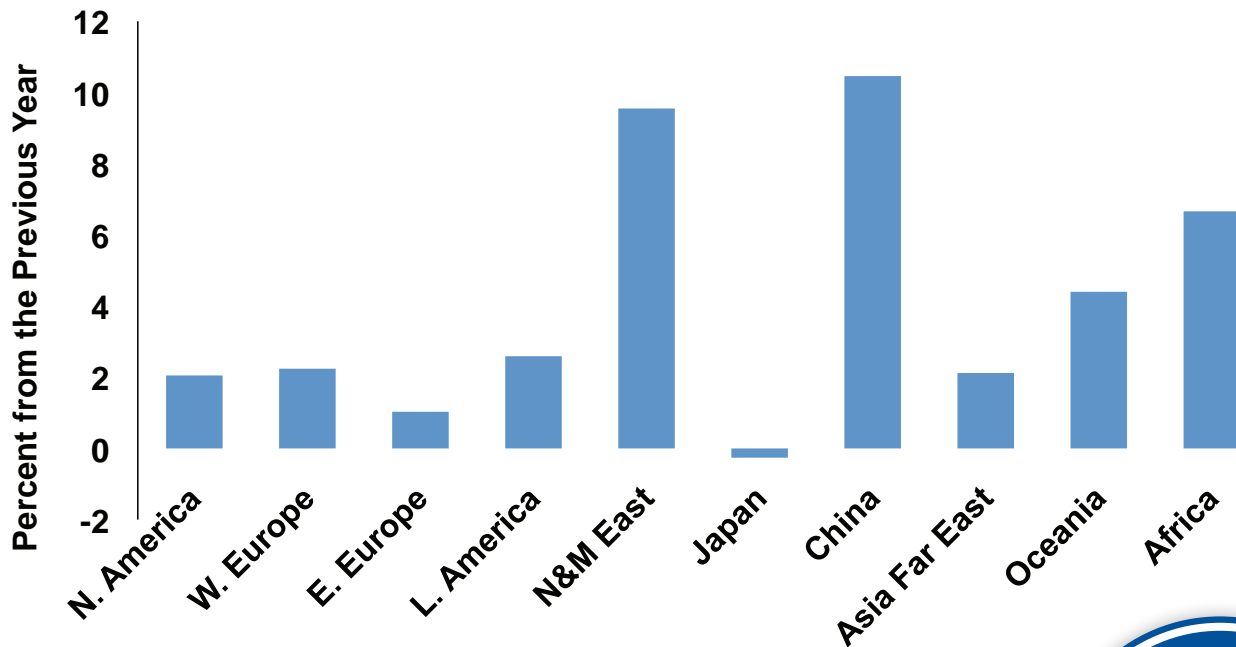
and only 0.4% in 2014). Our forecast for 2015 was 2.0%, only slightly lower than the actual outcome.

Eastern Europe and Latin America experienced rather disappointing developments. In Eastern Europe, the main factor was the conflict between Russia and Ukraine, which resulted in Western sanctions against Russia and threw the economies of both countries into a deep recession. Some other countries, such as Belarus, which is a major trading partner with Russia, were also negatively affected. Russian tissue consumption continued to grow despite the recession, but at a low rate of about 3% instead of the 9-10% recorded before the crisis. Total Eastern European tissue consumption did not grow by more than about 1% in 2015, according to our current data.

In Latin America, several economies were struggling, led by Brazil with a major GDP decline (3.8%) and Venezuela (almost 10% decline). Growth also slowed in many other countries, with a few exceptions such as Mexico, a few other Central American countries benefitting from US growth, and Peru. Argentina's economic growth, although slow, improved from 2014. Tissue

"In North America, the US economy was relatively strong, which helped AfH tissue demand in particular, the growth rate of which exceeded 3%. Total tissue consumption grew by 2.2% in the USA, while the Canadian market was rather flat. North American growth exceeded 2% in 2015 after growing 1.3% in 2014 and 1.4% in 2013. The region continues to have the largest tissue consumption worldwide, and so this acceleration of more than 50% in the growth rate made a major contribution to the global growth rate."

Figure 1
Estimated Growth Rates of Tissue Consumption
by World Region, 2015*



* Preliminary estimates

consumption declined in Brazil and Venezuela (according to our estimate as no reliable statistics are available for production). Latin American tissue consumption grew by about 2.6% based on our (still preliminary) data, with only a couple of positive surprises, such as Argentina.

The Near and Middle East continued to grow rapidly as usual. We do not have all the figures confirmed yet, but the largest market, Turkey, showed a very respectable growth rate of 14% in 2015. Iran is another market which showed good growth. We believe that regional growth was very close to 10% in 2015.

In the Asia-Pacific region, the Chinese growth rate of 10.5% in 2015 clearly exceeded our expectations. The Japanese market recorded a small decline, and the Asia Far East region recorded rather weak growth (our current figure is only 2.1%), mainly because South Korean consumption was down by more than 6% in 2015 after a major 10% growth rate in 2014. We think there is some statistical discrepancy in

the South Korean statistics (production) and that the 2014 consumption figure was erroneous. Oceania showed a good growth of more than 4% in 2015.

Africa has benefitted from the new capacity recently started up in North Africa, which has had a push effect on tissue consumption in this sub-region. Most actual import figures for non-

4%

Global growth rate of tissue consumption in 2015

2.2-2.3%

Total Western European consumption growth rate

"The Near and Middle East continued to grow rapidly as usual. We do not have all the figures confirmed yet, but the largest market, Turkey, showed a very respectable growth rate of 14% in 2015. Iran is another market which showed good growth. We believe that regional growth was very close to 10% in 2015."

3%

Russian tissue consumption growth rate

producers are still missing, so our figures are partly estimates, but it appears that consumption may have grown by more than 6%. The South African tissue business is again picking up and new investments are underway there as well, which will likely mean a new growth phase in the country again.



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America: St. Croix Tissue's start-up staff; it is the first time the Hong Kong-owned mill has produced tissue.

AMERICA

St. Croix Tissue starts-up first PM at Baileyville

St. Croix Tissue has successfully started up the first of its two Andritz-supplied PrimeLine™ W8 tissue machines with Steel Yankees at its Baileyville, Maine-based site.

It is the first time the mill - which is owned by Hong Kong-based International Grand Investment Corp (IGIC) - has produced tissue.

The first machine made saleable tissue on 16 March and has been in ramp up operation since that date.

It is one of two lines invested in by the business in a \$120m investment, with the second line expected to be up and running in summer.

The machine has a design speed of 2,000m/min and a width of 5.6m. The Yankee is manufactured entirely of steel and has a diameter of 18ft.

Preparations are underway for start-up of the second Andritz tissue machine, which is scheduled for end of July 2016. Both machines have an aggregate capacity of 126,000tpy for the production of hygienic papers and napkin tissues.

St. Croix Tissue's new, state of the art tissue paper manufacturing facility is located next to sister company Woodland Pulp. IGIC acquired the plant from Domtar in 2010.

St. Croix Tissue will produce paper napkins, paper towels, bathroom tissue

and facial tissue for local tissue markets.

Little Rapids Corp to invest \$40m in crescent forming tissue PM

Little Rapids Corporation will invest \$40 million to install state-of-the-art tissue making technology at its Shawano paper mill in Shawano, Wisconsin.

The new crescent forming tissue machine will replace the existing tissue machine and increase the mill's tissue output by about 40%. It will also expand the mill's range of capabilities for product weight, fibre content, and pastel and deep dye colours.

the autumn of 2017.

Little Rapids Corporation manufactures and markets products for the healthcare, beauty, packaging, and specialty paper markets.

The family-owned business is headquartered in Green Bay, Wisconsin, and has facilities in Green Bay and Shawano.

SPAIN

SCA to shut up shop at Mediona tissue mill in Spain

SCA is set to close its tissue mill in Sant Joan de Mediona, Barcelona.

St. Croix Tissue's new, state of the art tissue paper manufacturing facility is located next to sister company Woodland Pulp. IGIC acquired the plant from Domtar in 2010.

Chief executive Kirk Ryan said: "This is a very positive, strategic expansion of capacity as we look to the future.

"This investment demonstrates Little Rapids' commitment to providing high quality solutions for the medical, beauty, personal care and party goods markets," Ryan added. "This will also enhance the long-term viability of our Shawano Mill and provide stability for employment at this facility."

Project construction will begin this summer, with completion expected in

In future, the production of mother reels in Spain will be concentrated at SCA's sites in Allo, Navarra and Valls, Tarragona. Research suggests the mill in Sant Joan de Mediona can produce some 45,000tpy of tissue on two machines.

SCA said it announced its intention to close the Mediona facility on 4 May.

In a statement the company said: "Despite comprehensive measures taken by SCA, the factory is no longer competitive in this market.

"Mother reel production, which is the

only activity in the Mediona factory, will be carried out from SCA's other Spanish factories in Allo and Valls with higher efficiency."

The group added that it has initiated the consultation process with the worker representatives.

since 2012 and in the past two years in particular, citing the startup of two diaper production lines in Valls and the expansion of the Allo facility with additional production lines and the construction of a new international distribution centre.

"We understand that the decision to close the Mediona facility is a consequence of the realisation of the strategic plan that the Swedish company started three years ago, boosting the two large production centres in Tarragona and Navarra, which were taken over in connection with the Georgia-Pacific acquisition, to the detriment of the Mediona facility."

UGT Catalunya

SCA is reportedly discussing a social plan that contains measures like the relocation of the maximum number of impacted employees to the Allo and Valls production centres.

"With this measure, the company aims to keep and create sustainable employment in the country," SCA added. According to the trade union UGT Catalunya, 72 employees would be affected by the closure of the Mediona site. The negotiating parties reportedly have until 24 June to come to an agreement.

"The negotiation process is following a positive evolution and we have received positive input from the works council so far in order to reach the best possible solution for the impacted employees," an SCA spokesperson said.

The group added that SCA has been investing heavily in the Spanish market

UGT Catalunya voiced its disappointment with the planned Mediona closure in a statement.

"We understand that the decision to close the Mediona facility is a consequence of the realisation of the strategic plan that the Swedish company started three years ago, boosting the two large production centres in Tarragona and Navarra, which were taken over in connection with the Georgia-Pacific acquisition, to the detriment of the Mediona facility," UGT Catalunya said.

According to the union, the first consequence of the strategic plan was the transfer of the converting activities carried out at the Mediona mill to the Allo facility, which affected 134 employees back in 2013.

"This transfer of activity left the Mediona plant only with the operation of paper machines and created a more

delicate situation for the 72 remaining workers who were producing only as back-up for other factories in Europe during maintenance shutdowns and the start-up phase of the Navarra site," UGT Catalunya noted.

"The [Mediona] staff feel cheated because in 2013 the management made them believe that it was betting on a new market, jumbo reels, which would safeguard production at the site. In reality, however, the plant has been doomed for three years. The job cuts in 2013 were only a preliminary step on the way to the complete closure of the mill," the trade union added.

News from www.risiinfo.com

TURKEY

Essel boosts production with rebuild

Essel Cellulose and Paper Industry Trade has boosted its capacity after finalising the rebuild of a Steel Yankee tissue machine.

The A.Celli-supplied rebuild has taken place at the tissue manufacturer's Caycuma site, where it produces 30,000tpy that is then converted into over 600 different types of tissue products.

Rebuilding is aimed at improving formation and energy consumption and entails the supply of a 12-foot Steel Yankee and a new headbox.

Essel was founded in 2005 in Zonguldak Çaycuma and it also has a second plant in Osmaniye.

The company produces a variety of tissue products, roll and folded,



Turkey: Rebuilding is aimed at improving formation and energy consumption and entails the supply of a 12-foot Steel Yankee and a new headbox.

exclusively in pure cellulose in different grammages.

CHINA

Lee & Man advances tissue plans

Despite being a latecomer to the Chinese tissue paper industry, Lee & Man Paper Manufacturing aims to become one of its top producers.

It is targeting a total capacity of over half a million tpy of the grade, and looks set to achieve that goal before July next year.

The leading Chinese recycled containerboard producer diversified into the hygiene product segment in 2014.

It began with the commissioning of two medium-sized Kawanoe Zoki tissue machines with a combined capacity of 30,000tpy at its Chongqing mill in the southwest of the country.

Last year, the plant brought two large units on stream, each having a capacity of 60,000tpy.

One was supplied by Voith, and the other by Valmet.

Output on the larger TMs are facial

packaging products at HK\$429/tonne.

The green-label tissue products are currently sold only in the southwestern region, but the company plans to introduce them to the Hong Kong market and to distribute them overseas next year.

To meet growing demand in inland China, Lee & Man is erecting four 60,000tpy Valmet TMs at the Chongqing site.

A company spokesman said the first unit out of the four will commence production in August and the rest are slated to come online before the end of this year.

These four TMs will bring the firm's total tissue capacity to 390,000tpy when they start up.

Its expansion has not stopped there. Lee & Man has ordered a pair of 60,000tpy TMs from Voith for its Jiujiang mill in the inland province of Jiangxi, and signed up Valmet to provide another pair of 60,000tpy units for the Hongmei facility in Guangdong province, which borders Hong Kong.

The contact pointed out that the Voith pair are expected to come on stream before May next year, while the Valmet units will be commissioned before June 2017.

With that formula, the machine will be capable of producing 75,000tpy.

The firm possesses a cost advantage by partially integrating the bamboo pulp line and the tissue machines at the Chongqing facility.

The spokesman said it will seek synergy in making tissue products at the Jiujiang and Hongmei plants through harnessing power, steam and the infrastructure at those two existing recycled containerboard mills.

He pointed out that yet more tissue machines are being planned by the company, but he did not elaborate.

According to the environmental impact assessments it submitted to local governments in 2013, the firm planned to build three TMs at the Hongmei site with a combined capacity of 200,000tpy, and at Jiujiang, it aims to erect five TMs that will have a total capacity of 300,000tpy.

Vietnam BM set to start up: Farther afield in Vietnam, Lee & Man is gearing up to start trial runs on a 400,000tpy recycled containerboard machine at a greenfield mill in Hau Giang province at the end of June.

Commercial production on the BM is expected to kick off in July or August.

News from www.risiinfo.com

The leading Chinese recycled containerboard producer diversified into the hygiene product segment in 2014. It began with the commissioning of two medium-sized Kawanoe Zoki tissue machines with a combined capacity of 30,000tpy at its Chongqing mill in the southwest of the country.

and bath tissue products furnished with a mix of bleached kraft pulp sourced from the market and bamboo fibre manufactured in-house on a 165,000tpy bleached bamboo pulp line at the Chongqing facility.

Lee & Man sold 48,000 tonnes of tissue products last year.

Some 90% of them were parent rolls or private label goods, which means they were manufactured under other companies' brands.

However, the remaining 10% were sold under Lee & Man's own brand, which was established last year.

The firm claims that as the products are more environmentally friendly than many on the market, they are well received by Chinese consumers despite being priced higher.

According to the company, net profit generated from its tissue sales reached HK\$683/tonne (\$88/tonne), higher than

These four new TMs will add another 240,000tpy to the company, bringing its total tissue capacity to 630,000tpy.

However, the company has given a more modest capacity figure after the expansion, saying only that it will be well above 500,000tpy.

Nonetheless, the actual capacity of these large units could be bigger than 60,000tpy each.

According to Valmet, all the TMs that Lee & Man ordered belong to the Advantage DCT 200HS type, which has a width of 5.6 m and a design speed of 2,000 m/min, featuring a 16 or 18 feet cast alloy Yankee Cylinder.

The Finnish supplier said the TM will have a daily production rate of 222 tonnes when making output at 18g/m² and a 20% crepe ratio.

The industry usually uses 340 days of production per year when it comes to calculating a TM's annual capacity.

Vinda continues expansion across Chinese tissue market

Vinda has signed an agreement with Futura for the supply of multiple high-performance converting lines for tissue roll products.

The Chinese tissue giant has made the investment in the Andromeda Concept solutions response to customer demand for tissue products, and also to improve its competitive position.

The first complete lines ordered are scheduled to start up in 2017.

Guizhou Chitianhua Paper Industry boosts rewinder capacity

Guizhou Chitianhua Paper Industry has signed an agreement with A.Celli Paper for the supply of three tissue rewinders and an additional agreement for a further nine rewinders.

Part of the Taison Group since the beginning of 2016, the Chinese company said the first three rewinders will be delivered to its Chishui facilities in the Chinese province of Guizhou.

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Start-up is scheduled for January 2017. The additional six rewinders are scheduled for the second half of next year, while the remaining three will be delivered at the end of 2017.

The rewinders are all Model AC882 shaftless and for tissue production, with grammages ranging between 13 to 42g/m²; they are all in a 5,600mm format and can run up to 1,000 m/min.

The 12 plants are part of the ambitious development plans that the Chinese Group has set for its tissue division.

Sun Paper moves ahead with hygiene production; expands into diaper market

Sun Paper is moving ahead with its incursion into the hygiene product market in partnership with Nippon Paper Industries subsidiary Crecia.

The partnership will see Sun Paper market baby diaper product brand Suyappy across China through its existing sales channels.

Although the brand will be sold exclusively in China, the diapers will be manufactured in Japan, which a contact close to the deal believes will appeal to middle-class consumers.

The company is considering starting to manufacture both child and adult incontinence products in China in a few years time, if market indications are favourable.

Like its recent expansion into the tissue market, Sun Paper expects challenges from entering the hygiene product market, but a spokesperson appeared confident any obstacles would be overcome.

In 2014, Sun Paper diversified into the tissue market by starting up a new 60,000tpy tissue PM at its mill in Yanzhou city, Shandong province.

It has since increased its tissue capacity to 120,000tpy.

Link to US mill: When it comes to diapers and other hygiene products, China has long been dependent on imports of fluff pulp.

Meanwhile, the country's aging population, the termination of the one-child policy and improving living standards are expected to boost the consumption of disposable healthcare products.

The recently proposed US fluff pulp mill that Sun Paper has signed to build in Arkansas is believed to be linked to its expansion into hygiene products.

Sun Paper's chairman Li Hongxin and Arkansas governor Asa Hutchinson

Like its recent expansion into the tissue market, Sun Paper expects challenges from entering the hygiene product market, but a spokesperson appeared confident any obstacles would be overcome. In 2014, Sun Paper diversified into the tissue market by starting up a new 60,000tpy tissue PM at its mill in Yanzhou city, Shandong province. It has since increased its tissue capacity to 120,000tpy.

signed a memorandum of understanding over the new facility in June.

The greenfield mill will involve a total investment of up to \$1.3bn and will be able to produce 700,000tpy of fluff pulp. It is estimated that construction will take 30 months, although neither the state of Arkansas nor Sun Paper officially gave a timeline.

Local media reported that building work will begin in the first half of next year.

Elsewhere, the company has said it will expand into the diaper segment and is to begin marketing products domestically in May.

In March, the firm signed an agreement with Japanese Nippon Paper Industries (NPI) subsidiary Crecia to cooperate in the sector.

Crecia has a strong background in diaper production, and has developed a new baby diaper product branded as Suyappy.

According to the agreement, Sun Paper will be responsible for the marketing and sales of Suyappy products in China. To improve its performance, Sun Paper has been committed to enriching its product portfolio in recent years.

The firm's current strategy is that paper and board products contribute some 40% of its profits.

In 2015, Sun Paper started up a 350,000tpy DP line at a greenfield mill in Zoucheng city, Shandong province, raising its DP capacity to around

550,000tpy.

Its first DP line, with a capacity of 200,000tpy, commenced production in late 2011.

The firm soon after developed high-margin products such as xylose, xylitol and related derivatives from DP.

In 2014, Sun Paper diversified into the tissue market by starting up a new 60,000tpy tissue PM at its mill in Yanzhou city, Shandong province.

Thereafter it increased its tissue capacity to 120,000tpy.

The firm's expansion in the personal care and hygiene products industry is ongoing.

Prior to its move into the diaper sector, Sun Paper announced a plan to build a 700,000tpy fluff pulp plant in the USA, although the project is at a very preliminary stage.

The possible investment is believed to be in support of the firm's aggressive expansion into the disposable healthcare products segment.

China has long been dependent on imports of fluff pulp, which is the main raw material to make diapers and other hygiene products.

Meanwhile, the aging population, the termination of the one-child policy and improving living standards will greatly drive the consumption of disposable healthcare products.

News from www.risiinfo.com

FRANCE

Workers stage 24 hour strike at SCA's Saint-Etienne du Rouvray tissue plant

Employees at SCA's Saint-Etienne du Rouvray tissue plant in France downed tools for 24 hours on May 12, stopping production at the factory.

The employees were protesting against SCA's redundancy plan which will affect its Saint-Etienne-du-Rouvray and Hondouville factories.

Production at the Hondouville plant was not affected by the strike.

The company announced in March that it plans to cut 130 jobs in Saint-Etienne-du-Rouvray and 70 jobs in Hondouville in order to improve the sites' competitiveness, an SCA spokesperson told RISI.

Negotiations between the management and the workers' representatives are ongoing.

News from www.risiinfo.com



Lars Idermark, Södra president and chief executive: "While sales and production volumes remained stable, exchange rates and price trends ... were less favourable."

SWEDEN

Södra Group reports operating profit of SEK 334 million

Södra Group has reported operating profit for the first four months of the year of SEK 334 million, compared with SEK 941 million the same time a year earlier.

The group said the decline was mainly due to a weaker price and currency trend. The preceding year's result included a nonrecurring item of SEK 133 million related to divestment of the shares in Södra Cell Tofte AS.

Group sales amounted to SEK 6,239 million (6,243) and the operating margin was 5%.

Lars Idermark, president and chief executive, said: "During the first four-month period, the forest economy was slightly weaker year-on-year, particularly in the sawn timber market."

"While sales and production volumes remained stable, exchange rates and price trends – which contributed to Södra's historically high operating profit in 2015 – were less favourable."

"2016 is a year of transition for Södra, since the effects of the investment programme at the Värö pulp mill will not be fully realised until 2017."

Operating profit for the Södra Skog business area totalled SEK 33 million (41) while operating loss for Södra Wood totalled SEK -107 million (profit: 22).

The company said the negative result was due to weaker prices for sawn timber and less favourable exchange rates, and added that steps are being taken to improve profitability.

Operating profit for Södra Cell totalled SEK 466 million (968) due to "unfavourable price and currency trends".

MEXICO

KCM announces capex for 2016-2017 at \$400m; to invest in new tissue PM with startup in 2017

Kimberly-Clark de México (KCM), a subsidiary of Kimberly-Clark Corporation, has announced its 2016-2017 capex at \$400m.

KCM chief executive Pablo González said: "We're aggressively raising our

investment plan over the next two years. This will include capacity additions, with a new tissue manufacturing facility – tissue paper machine (PM) and converting line – to start up next year."

The company did not disclose the location of the new facility or its production capacity.

A KCM spokesperson added: "We usually invest in a new tissue PM every three or four years, based on market growth projections. This market has been increasing significantly in Mexico and thus we decided to anticipate this

"We usually invest in a new tissue PM every three or four years, based on market growth projections. This market has been increasing significantly in Mexico and thus we decided to anticipate this investment. Our last PM started up in the middle of 2014, and this new one should begin operation in the second half of 2017. Also, every year we invest in conversion, by improving the existing lines or by adding new ones."

KCM spokesperson

investment. Our last PM started up in the middle of 2014, and this new one should begin operation in the second half of 2017. Also, every year we invest in conversion, by improving the existing lines or by adding new ones."

Currently, KCM has six tissue paper mills in Mexico with a total capacity of over 700,000tpy.

According to González, the new capex also involves investments in technology and new products, as well as innovation and M&A. He said: "We will see any other opportunities going forward for M&A like Escudo."

Late in February, KCM announced the purchase of the Escudo soap brand in Mexico and other Latin American countries from Procter & Gamble.

In January-March 2016, KCM's net revenues totalled peso 8.7bn, 12.4% higher than the first quarter of 2015.

The company's EBITDA rose 18% to peso 2.5bn and net profit increased 11% to peso 1.1bn.

AUSTRIA

Norske Skog and Roto-cart sever tissue ties; project to produce tissue at Bruck publication paper mill continues

Norske Skog and Italy's Roto-cart are no longer partnering on the project to replace the newsprint PM at Norske Skog's Bruck mill in Austria with a tissue line.

Norske Skog still remains committed to the conversion and is on the lookout for

a new partner.

It announced in July last year that it was planning to enter the tissue market through a joint venture with Roto-cart.

The partners planned to spend some Euro 80 million on replacing the Bruck mill's 128,000tpy newsprint PM 3 with a tissue line.

The line was to produce some 70,000tpy of tissue from both recycled and virgin fibre and was scheduled to come on stream in early 2017.

In its results statement for the first quarter Norske Skog revealed that the joint venture with Roto-cart no longer exists.

It said: "The tissue project, a conversion of the [Bruck] newsprint site, has progressed well with all permits in place and ground work completed.

"The partnership with Roto-cart has however not developed as intended and has been terminated."

The company is currently in discussions with alternative partners.

"The Bruck mill is ideally located close to key markets and has synergies with

large-scale paper production.

"The timeline [for the tissue project] is extended from spring 2017 to year-end 2017."

The group added that upon completion of the project, the newsprint machine will be closed, while the 265,000tpy lightweight coated paper line, which is also housed at the Bruck mill, will continue production.

News from www.risiinfo.com

POLAND

ICT's Kostrzyn mill boosts capacity

ICT Poland has started up a Valmet-supplied Advantage DCT 200HS tissue line at its Kostrzyn-based plant.

The new line will add 70,000tpy of high-quality toilet and towel grades for the European market. The raw material will be 100% virgin fibre.

Scope of delivery included a complete

tissue production line featuring a stock preparation system and an Advantage DCT 200HS tissue machine with the latest technology.

ICT was established in 1957 and entered the tissue industry in 1978.

It operates 10 tissue lines in four European countries; five machines in Italy, one in Spain, three in Poland and one in France.

The global production capacity of the ICT group amounts to more than 500,000tpy of top quality toilet, kitchen, facial and napkin tissue.

EBRD might back tissue investment of Poland's Velvet Care

The European Bank for Reconstruction and Development (EBRD) is considering the provision of a long-term loan of up to Euro 20 million to the Polish tissue specialist Velvet Care.

The loan would be used to finance the company's capital expenditure, including a new tissue machine and related infrastructure.

Velvet Care announced last year that it was planning to spend some PLN 200 million over the next two to three years on the Klucze mill in southern Poland. The company said the investment would raise its tissue capacity and broaden its product range.

The Klucze paper mill was established in 1897 and is still one of the leading manufacturers of paper products in Poland.

Tissue production at the site was launched in 1976 with the installation of a Voith machine.

Twenty years later the mill became part of International Paper and launched the Velvet brand in 1997.

In 2003, the Klucze mill became a part of Kimberly-Clark. Ten years after that, senior managers together with the investment fund Avalon MBO II took over the mill and started to operate it under the name Velvet Care, based on the firm's flagship product.

Last year, the company generated sales of PLN 264 million, according to the EBRD. The target date for the decision on the loan for Velvet Care is May 25.

News from www.risiinfo.com



RUSSIA

Syassky Pulp and Paper Mill increases capacity

Syassky Pulp and Paper Mill has started up a 45,000tpy Toscotec-supplied AHEAD tissue machine (above) at its Syasstroy mill in Russia. The AHEAD-1.5M tissue line came on stream on 29 April. The site employs over 2,000 people and manufactures 110,000tpy.

Irina Mozhaeva, chairman of the board of directors of Syassky, said: "The line is designed to produce high quality tissue from dry and slush pulps, entailing a real reduction of the mill's energy cost.

"That is important not only for us but also for our customers who realise the importance of sustainable industrial production."

Toscotec's scope of supply for PM3 included an AHEAD-1.5M crescent former tissue machine with a single layer headbox, single press configuration with suction pressure roll TT SPR1045, a 12 FT diameter Steel Yankee Dryer TT SYD-12FT and a reel section TT Reel-P.

Syassky was established in 1928 and targets the domestic market.

The line is the third order in two years: Toscotec reconfigured the existing Fourdrinier machine PM2 with the installation of the TT DOES package (Drying Optimisation for Energy Saving) which started up in 2015.

ARGENTINA

Celupaper boosts presence with PM investment

Celupaper has continued to increase its South American market share after it signed for a MODULO-PLUS tissue line to be installed at its site in Papelera Nicaragua.

Supplied by Toscotec, the new line will produce high quality tissue products with a gross daily production of 65 tonnes. It is expected to be start-up by the end of 2017.

The tissue machine is equipped with single layer headbox, one press configuration, TT SYD-3200MM, TT Milltech-MYH Monosystem Hood fed by natural gas and steam and condensate removal system.

Mario Speranza, chief executive of Celupaper, said: "With these series of investments we continue to play an important role in the South American market."

"Today, the group has already three manufacturing plants (Jose Juan Yapur, Celupaper and Papelera Nicaragua), one pulp manufacturing plant (Celulosa Alto Vale) and many distribution centres located in Santa Fe, Córdoba, Bahia Blanca and Buenos Aires employing more than 700 people."

The line is the third order in two years: Toscotec reconfigured the existing Fourdrinier machine PM2 with the installation of the TT DOES package (Drying Optimisation for Energy Saving) which started up in 2015.

The company has also supplied a new PM3 MODULO line that was due for start up in May.

Celupaper is part of Grupo Vual, a South American regional player that produces high quality tissue products.

COLOMBIA

SCA's Productos Familia guilty in anti-trust inquiry

Productos Familia has been found guilty in an anti-trust inquiry related to tissue products conducted by the Colombian competition authority.

The inquiry targeted Familia and four

other companies in the Colombian market and pertains to activities that took place up until 2013.

Familia – of which SCA owns 50% of the shares – will be fined approximately SEK170m.

SCA made a provision of approximately SEK100m related to the Colombian competition authority's ongoing review of Familia; the amount was reported as an item affecting comparability in the first quarter of 2016.

SCA will make an additional provision of approximately SEK 70m related to the tissue category.

"We are deeply sorry for these actions of some of the employees and are fully aware of the disappointment this situation causes among those who have given us their trust and loyalty."

Grupo Familia

The amount will be reported as an item affecting comparability in the second quarter of 2016.

The investigation in Colombia regarding the baby diapers category is still ongoing and no provision has been made for this. In a statement, SCA said it takes the matter seriously: "Since 2013, SCA has supported the company to revise its Code of Conduct based on a European model."

"Familia's Code of Conduct now complies with all new legislation and the UN framework for business and human rights."

In a statement, Grupo Familia said it wished to express its "sincere regret for its involvement".

"In light of the report, Grupo Familia fully acknowledges and accepts responsibility for the past errors of part of the management team and other employees."

"Those errors do not in any way reflect on the company's origins or the legitimate achievements the company has made over the past five decades."

"We are deeply sorry for these actions of some of the employees and are fully aware of the disappointment this situation causes among those who have given us their trust and loyalty."

It added that earlier in the investigation

two employees were dismissed. And in April the company's chief executive Dario Rey Mora was placed on indefinite leave of absence.

Grupo Familia's manufacturing manager Andres Felipe Gomez Salazar has been appointed as interim chief executive.

The Colombian competition authorities (SIC) had previously confirmed tissue paper collusion involving four producers in the country, excluding CMPC.

They are Kimberly-Clark (K-C), Productos Familia, Papeles Nacionales and Papeles de Risaralda.

SIC has recommended to the Colombian Ministry of Trade and Industry to apply fines of around \$23 million to the four companies and of \$460,000 to the individuals involved in the so-called "Confort cartel" case.

The four companies involved are

accused of fixing prices for toilet papers, napkins, kitchen towels and facial tissues in Colombia between the years 2000 and 2013.

At the time of going to print, the final decision on the fine application was expected to take place by no later than early June.

GLOBAL

Solenis boosts global presence with acquisitions

Speciality chemicals supplier Solenis is to acquire the shares in Lostris International and Wester Blend, privately-held companies focused on supplying specialty chemicals to the pulp, tissue and towel markets.

The transaction is expected to close in the second quarter 2016 following receipt of customary regulatory approvals in Germany.

John Panichella, president and chief executive of Solenis, said: "Lostris' and Wester Blend's capabilities complement the current Solenis offerings in the global pulp, tissue and towel markets."

"In addition to a strong channel-to-market, Lostris produces unique defoamer formulations, pitch dispersants, and scale control chemistries for the pulp market."

"It also provides complementary crepe and release products that will further bolster our tissue and towel product range."

GP PRO launches Dixie Ultra Interfold 2-Ply napkin

Georgia-Pacific division GP PRO has targeted the food services industry with the launch of the Dixie Ultra Interfold

2-Ply napkin.

The soft, large, strong and absorbent napkin is the latest in the Dixie brand and is available "for a cost comparable to a 1-Ply napkin", according to the manufacturer.

It is also part of a system that includes one-at-a-time style dispensers, which GP PRO said reduce waste and are easy to fill and maintain.

Nate Medina, napkin category director, GP PRO, said: "Customers are demanding

a higher quality dining experience from trending ingredients to branded condiments, so it is important that providers send a cohesive, quality message to patrons at every dining touch point."

Dixie Ultra Interfold 2-Ply Napkin is the latest addition to GP PRO's EcoSmart products.

Made from 100% recycled fibre, the napkin also has the Green Seal. The dispensers also feature space for menu marketing.

ITALY

Lucart Group acquires Bokk Paper

Lucart Group has acquired the total capital of Bokk Paper, the main independent Hungarian player in the AfH tissue products market.

The name of the company has already been changed to Lucart.

Massimo Pasquini, chief executive of the Lucart Group, said: "We have had a good business relationship with Bokk Paper for over 10 years and thanks to its geographical location, market reputation and marketing strategy which align perfectly with our goals, it was the ideal acquisition for the expansion of our company in Central Eastern Europe. "We believe that with the acquisition and integration of Bokk Paper into the Lucart Group will strengthen our presence in the Central Eastern European AfH markets by offering the best services and products to all current and potential new customers."

Zsolt Király, one of the former owners of Bokk Paper, and business partner József Orlovits will remain as managing directors of the company.

Lucart is a Hungarian company located in Esztergom, 50 kilometres north of Budapest, operating in the tissue paper converting products sector, in the AfH market.

It employs 55 people and has a turnover of 7.5 million euros. More than one third of the turnover is in export sales to neighbouring countries.

Around 80% of the sales are from Bokk Paper branded products.

The Lucart Group has a production capacity of 310,000 tpy of tissue, airlaid and MG paper.

Sofidel targets tissue supply chain with sustainability award

Sofidel has launched the 'Sofidel Suppliers Sustainability Award', an annual award that aims to motivate its national and international suppliers to promote high sustainable standards.

Celebrating its 50th anniversary, the award will also represent the tissue giant's own commitment to promote responsible and long-lasting growth.

It will promote best practice and recognise improved social and environmental responsibility actions.

The award is focused on the "TenP – Sustainable Supply Chain Self-Assessment Platform", created and promoted by the Global Compact Network Italy Foundation (GCNI Foundation), of which Sofidel is a founding member.

The self-assessment platform analyses environmental performance and was created by following the Ten Principles of the United Nations' Global Compact, a voluntary initiative based on chief executive commitments to implement universal sustainability principles.

Compact Network Italy Foundation, Sodalitas Foundation, SGS and WWF Italy are the technical committee that will evaluate the projects.

The platform considers the most relevant and up-to-date international standards and agreements regarding sustainability, human rights, employment, environment and anti-corruption.

Its target is to identify challenges and common solutions to improve sustainability within the supply chain. Three awards will be assigned:

- The Best Supplier: businesses reaching the best score on the TenP platform.
- The Best Improver: businesses that have sensibly increased

their result by adopting focused social/environmental sustainable procedures.

- The Best Sustainable Project: businesses that have carried out particularly effective social and/or environmental sustainable initiatives.

Andrea Piazzolla, chief purchasing officer at Sofidel Group, said: "Sofidel has identified sustainability as a strategic lever for cultural and competitive development as well as a fundamental approach in communication and cooperation.

"This award is also a useful free self-assessment tool for suppliers participating in the initiative as it allows them to assess their sustainability management and to compare it with other companies in the platform."

In 2015, Sofidel renewed its commitment to WWF's international Climate Savers programme.

Between 2008-2012, the group increased its production capacity by over 45% and requires further and more far reaching reduction objectives to be implemented.

In addition to cutting specific emissions and indirect emissions, the use of renewable energy is also being targeted. Piazzolla adds: "By 2020, greenhouse gases from suppliers, packaging, transportation of raw materials and the end product will be reduced by 13% compared to levels in 2010, per tonne of paper produced.

"To achieve this goal, Sofidel is involving its main suppliers and carefully analysing emissions related to materials and services that will have to be either replaced or improved."

Sofidel has four levels of partners: global partners Södra, Henkel, Fabio Perini and Eletric80; Premium Partners SAP, Industria Cartaria Pieretti, Pulsar and Foedus; Official Partner: Treedom, and Media Partner Tissue World Magazine.

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 **SÖDRA**

Colombia – sluggish T&T market tied to adverse conditions



Bill Burns

Senior consultant,
Fisher International

Colombia, the second most populous country in South America (with $\frac{1}{4}$ the population of Brazil), has been in the midst of a demographic transition with steady declines in its population growth. Over the past several decades, the birth rate has fallen significantly to just above replacement level today. At the same time, forced internal displacement of millions, due to ongoing conflicts between paramilitary groups and the Colombian government, is prevalent and disruptive to economic progress. But despite such adverse circumstances, industrial growth clocked in at a respectable 4% in 2015.

Paper, in general, is an underdeveloped commodity with Colombia being a net importer of paper products. Colombia's towel and tissue (T&T) business, the focus of this article, holds a somewhat small market share of 10%, in relative parity with several other like-sized South American countries, but very small compared to the market leader, Brazil (Figure 1).



Figure 1 South American T&T Market Share

Within Colombia, the paper industry is focused on three major grades of paper: packaging, T&T, and printing and writing. Packaging represents about 50% of the industry while T&T and printing and writing represent about 25% each (Figure 2). The growth trend suggests that packaging, the most important paper grade for the country, has been increasing at a cumulative average growth rate of 4.15% since 2007. Announced new

Colombian Paper Market

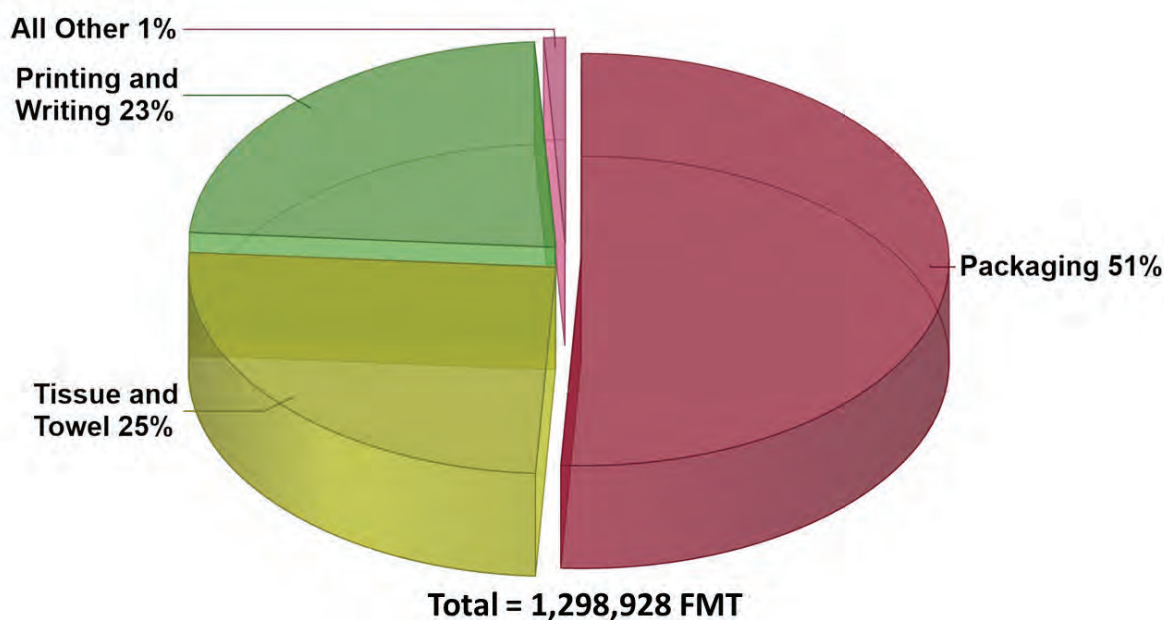


Figure 2 Colombian Paper Market

capacity will maintain that rate for the next couple of years. T&T growth rate was on the same trajectory early in the period, flattening out in recent years (Figure 3).

Looking in more detail, there were 12 T&T machines operating in 2007 with some up and down fluctuations over the subsequent years - the shutdown of K-C Guarne in 2008 and the addition of two lines in 2010 and 2012 bringing the total number of lines to 13 today (Figure 4). Currently, there are no announced new machines in the works. As expected, the distribution of T&T mills by country favours Brazil with 47 mills and 92 paper machines. Argentina is second in the number of mills (and market share) with 12, as well as number of machines with 19. Colombia follows third with 9 mills and 13 machines (Figure 5).

The fibre base throughout South American T&T mills is moderately biased toward recycled with tissue producing countries favouring virgin fibre. Colombia is more heavily invested in recycled averaging in excess of 60% (Figure 6).

T&T machines in Colombia are a mixed bag with regard to technical age (actual age adjusted for upgrades). Nineteen sixties- and seventies-era machines have undergone only modest upgrades resulting in average technical ages (50 and 36 years, respectively) that are roughly the same as their actual ages (Figure 7). This absence of upgrading is somewhat surprising. Average speed, trim and production rates are modest (Figure 7) and characteristic of locally focused operations.

Interestingly, mill ownership indicates significant international investment by companies like SCA, K-C and Kruger (Figure 8). In fact, foreign ownership represents nearly 2/3 of the operations. Swedish and USA companies have two mills each while Chilean and Canadian companies have one each (Figure 8).

Colombian T&T has a solid competitive cost position within South America with an advantage of nearly US\$100 per metric ton against the top producer, Brazil, and near parity to Argentina and Chile, the next biggest shareholders (Figure 9). Raw materials, fibre and pulp combined account for much of the cost advantage versus Brazil. Carbon emissions is often considered along with cost as an indicator of potential future capital and operating mitigation costs that could impact overall cost position. Brazil and Uruguay have a clear carbon advantage over Colombia and other South

Colombian Paper Market Growth Trend

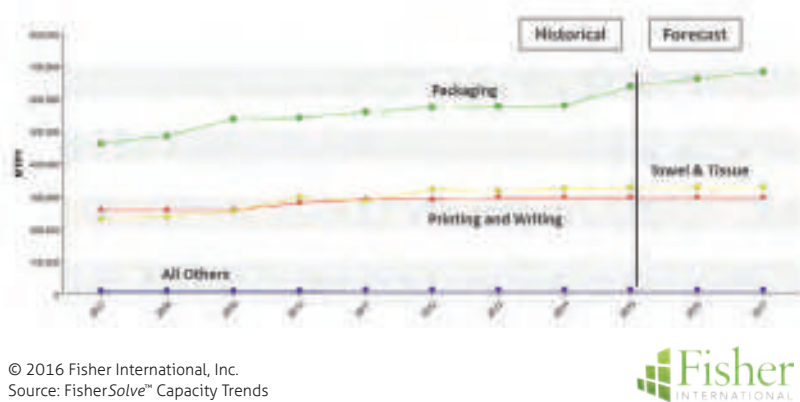


Figure 3 Colombian Paper Market Growth Trend

Colombian T&T Machine Lines Trend

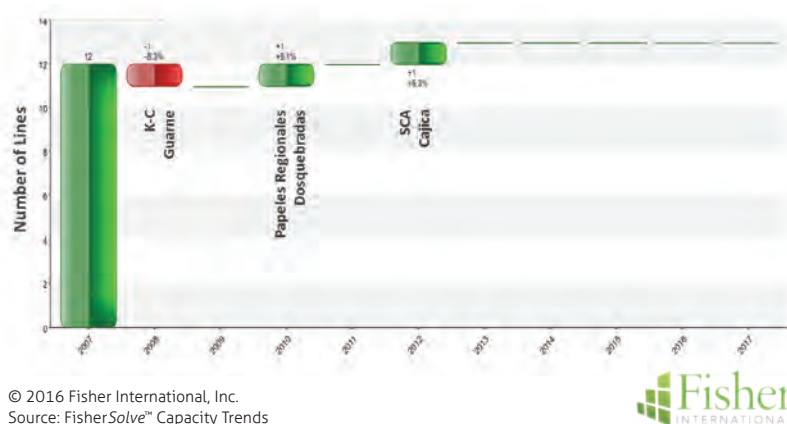


Figure 4 Colombian T&T Machine Lines Trend

South American T&T Mill and Machine Distribution

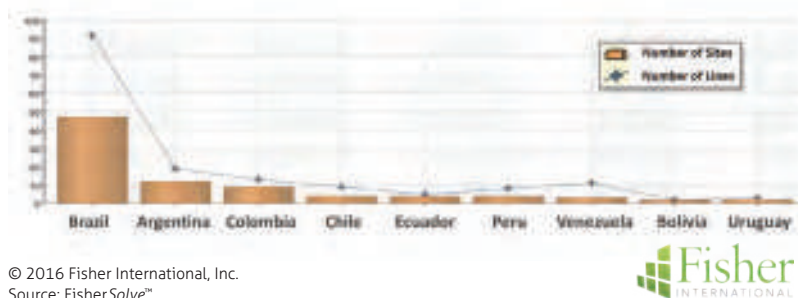


Figure 5 South American T&T Mill and Machine Distribution

American T&T producing countries (Figure 10). Fossil fuel use (including about 15% coal) and purchased power account for most of Colombia's disadvantage. Nevertheless, Colombia has a favourable competitive emission position against most South American producers.

The source for market data and analysis in this article is FisherSolve™. Data tables behind Figures 1 - 10 can be obtained from Fisher International. E-mail requests to info@fisher.com.

South American T&T Fibre Base

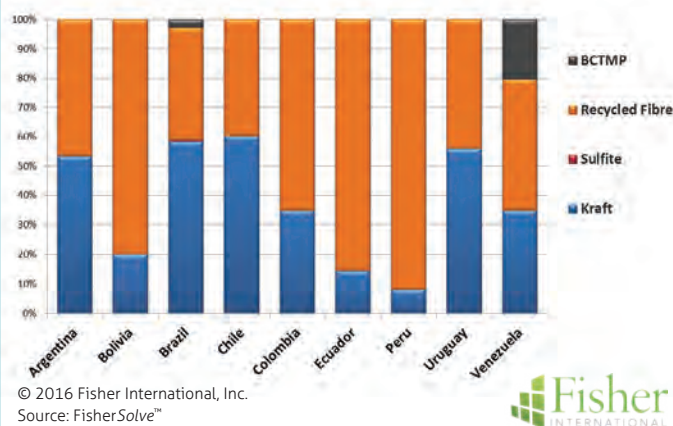


Figure 6 South American T&T Fibre Base

Colombian T&T Machine Age and Size Metrics by Year Installed

Year Installed	Average Technical Age	Average Speed (mpm)	Average Trim (cm)	Average TPD per Trim Width (MTPD/cm)
1960 - 1969	50.50	460	360	0.08
1970 - 1979	36.38	875	264	0.22
1980 - 1989	---	---	---	---
1990 - 1999	18.42	1,300	328	0.22
2000 - 2009	12.50	2,000	410	0.32
2010 - 2020	5.13	2,000	295	0.29

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Source: FisherSolve™



Figure 7 Colombian T&T Machine Age and Size Metrics by Year Installed

Colombian T&T Mill Ownership

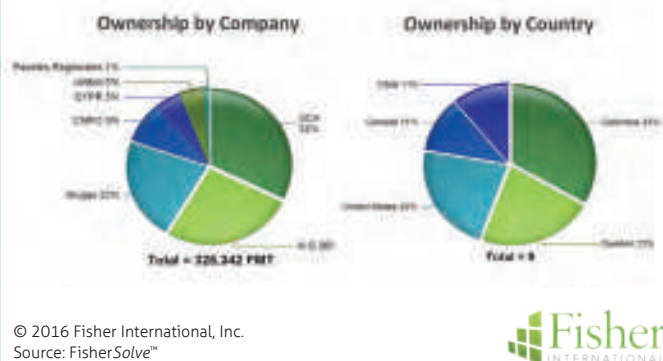


Figure 8 Colombian T&T Mill Ownership

South American T&T Carbon Emission Curve

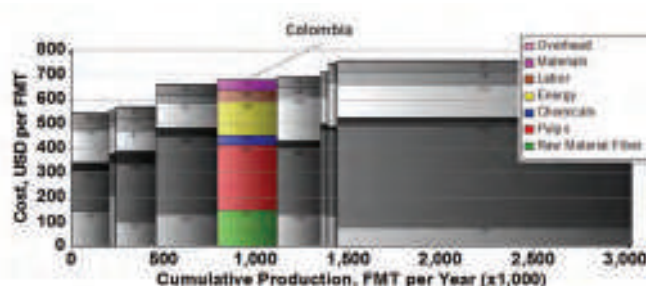


Figure 9 South American T&T Carbon Emission Curve

South American T&T Carbon Emission Curve

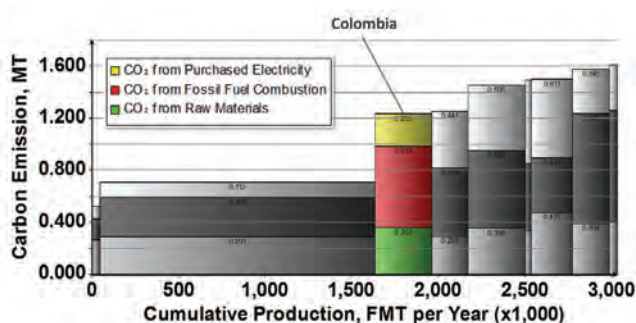


Figure 10 South American T&T Carbon Emission Curve

Colombian T&T Mill Locations



Figure 11 Colombian T&T Mill Locations

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Colombia: Middle class rise prompts growth even as economy slows

Colombia was one of the fastest-growing economies in Latin America over 2005-2014, resulting in rising disposable incomes and expansion of the middle class. By 2015, the number of middle-class households in the country had reached 3.2 million, or 24.2% of the total households. As in other developing markets, the growth of the middle class has led to changes in consumption patterns in the country. Reduced violence and increases in foreign direct investment led to further improvements in employment as well as real estate and infrastructure development.

At 3.6kg per capita, Colombia's retail tissue consumption still falls behind that of North America and Western Europe as well as more developed Latin American markets like Chile. Coupled with the improved economic and political situation, its low per capita rate was among the factors behind a positive trajectory in retail tissue sales across product categories over 2005-2014. In 2015, despite slowing economic performance, the demand for consumer tissue continued to see an overall positive trend in volume terms, although growth was more modest compared to the earlier years.

High quality as a driver of sales in consumer tissue

In 2015, retail sales of consumer tissue grew by 2% in volume terms to reach 179,000 tonnes, which represented

a slower pace of growth compared to the earlier years due to the weaker economy and price increases.

Toilet paper continues to dominate retail tissue in the country, accounting for nearly 90% of overall consumer

tissue sales. Demand for softer multi-ply toilet paper has been on the rise over the past several years, and the reduced prices and improved affordability of the higher-quality products helped to support demand among even lower-income groups. While the inflationary pressures of 2015 posed challenges, many Colombians were not willing to trade down from good-quality toilet paper. This trend is also being supported by the improved quality of tissue products in the value segment. Three-ply toilet paper – the most common format in Colombia – is now found across premium and value brands. The premium



Svetlana Uduslivaia



Euromonitor International's
head of tissue & hygiene industry

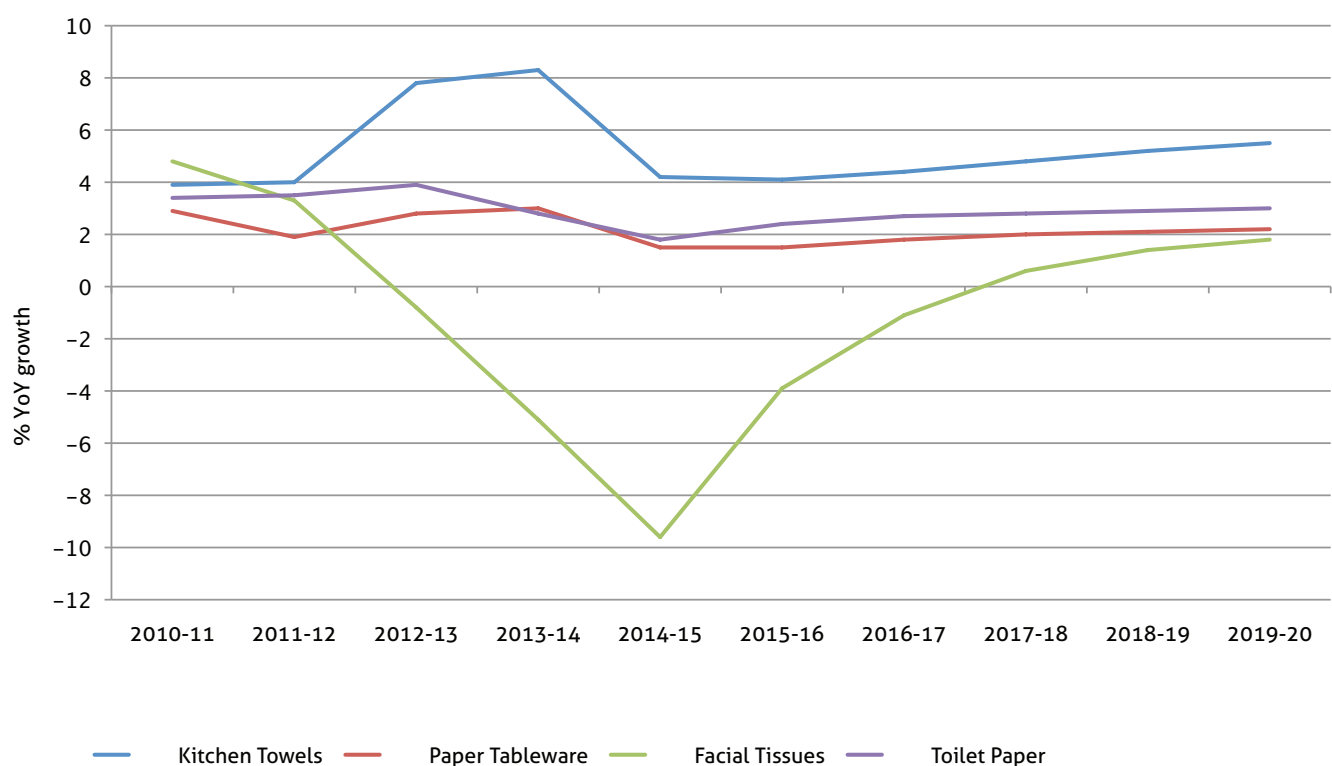


Table 1: Colombia, retail sales of consumer tissue by category, % year-on-year growth, '000 tonnes

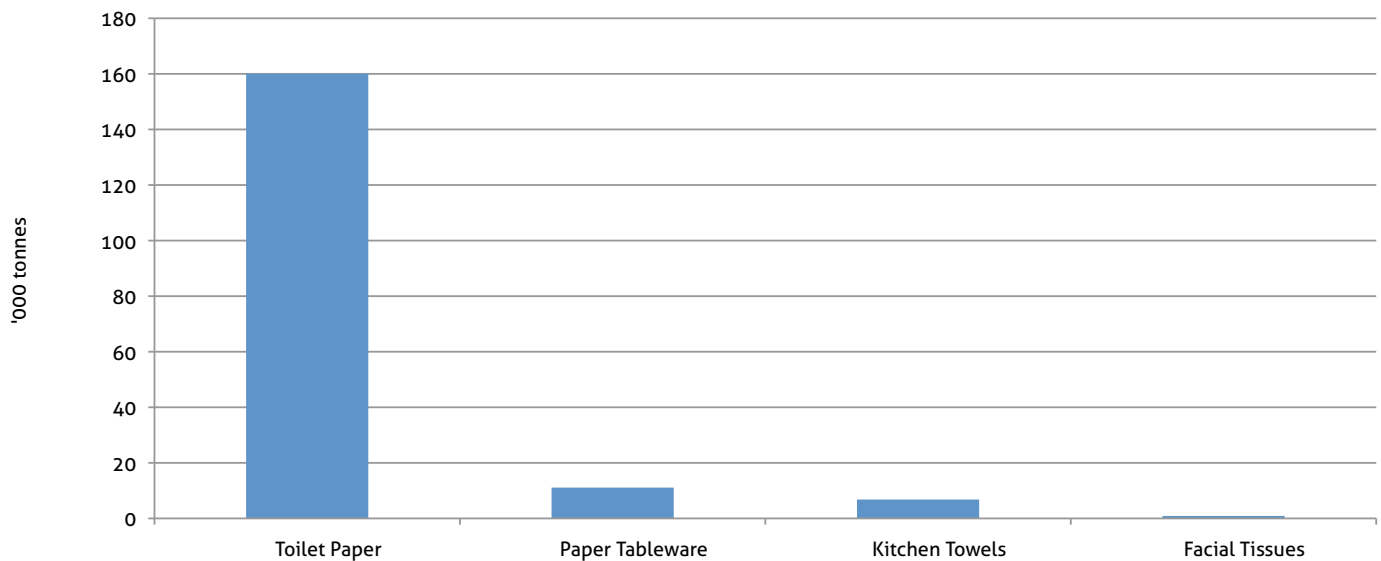


Table 2: Colombia, retail volume of consumer tissue by category, 2015, '000 tonnes

segment is represented by brands like Suave Gold, Familia Ultra Suave and Elite Premium as well as limited editions with softer and thicker tissue as well as coloured toilet paper and other value-added features.

While slowing down significantly in 2015, kitchen towels still registered a healthy 4% increase in retail volume sales. The category has seen a significant evolution in terms of quality, featuring more absorbent and stronger tissue. Promotional and advertising efforts behind kitchen towels position the products as a good alternative to the more traditional trapo de cocina (kitchen cloth), which remains popular. To encourage the shift, manufacturers have been promoting more durable kitchen towels that can be used several times, thereby offering good value for money.

In paper tableware, the tablecloths category remained negligible at the consumer level, with the usage mainly coming from the away-from-home channel. Paper napkins, on the other hand, saw a modest increase in retail volume. Higher-quality napkins, featuring designs, colours and thicker textures, are usually reserved for special occasions. Basic white napkins, on the other hand, are preferred for more regular use. To encourage more regular

use of paper napkins, some brands developed small-sized products called "cafeteria type", giving consumers a sense of economy and savings. At 0.2kg per capita in retail, compared to 0.6-0.7kg in the developed markets, the paper napkins category still offers room for growth.

Economic slowdown, coupled with bulk purchases in the previous years on the back of significant promotional activity, resulted in consumer destocking and slower demand for facial tissue in retail in 2015. The category remains small, and per capita consumption falls considerably behind more developed markets, leaving room for growth across the economy and premium segments. In fact, even with economic slowdown and weaker consumer confidence, the category continued to see innovation in value-added products, such as Frescura Extrema by Productos Familia Sancela – the country's leader in consumer tissue, owned by SCA. The new product range includes tissue with a menthol infusion to provide an extra sense of freshness.

Significant unmet potential a basis for future growth

Colombia's unmet potential in retail consumer tissue is estimated to be in excess of 140,000 tonnes, representing a good platform for further category development and growth.

The inflationary outbreak and increase in prices in 2015 did not discourage the more affluent consumers from purchasing good-quality tissue products, a tendency expected to continue in the coming years. On a cautionary note, less financially secure consumers in the lower-income brackets will remain cautious, at least in the short term, especially when it comes to higher-priced tissue and products that are not seen as a necessity, such as kitchen towels, facial tissue and napkins.

Nonetheless, the mid-to-long-term positive economic outlook for the country is also expected to manifest itself in a positive trajectory for retail tissue demand in the coming years, with a stronger uptake from 2018 onwards. Overall, retail sales of consumer tissue are expected to see a 3% CAGR in volume terms over 2015-2020, with positive demand across toilet paper, kitchen towels and paper napkins as well as gradual recovery in demand for facial tissue. As consumer demand will continue to evolve, innovation and product differentiation will become increasingly important in the changing and increasingly competitive marketplace. Additionally, balancing quality and price will remain important to encourage wider product adoption across all income groups.



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By Tissue World magazine editor Helen Morris

Hard discounting is reshaping the Colombian market

Growth in low price own label products has meant a strategy rethink for value added producers. Tissue World editor Helen Morris reports.



César Augusto Solano Velandia, the general manager for Papeles Nacionales, is a very busy man. The company's site is based in the outskirts of Cartago, and when TWM arrives we are immediately greeted by scorching temperatures - in which even the local Colombians are struggling - and Solano, who is welcoming and charming, and very apologetic. He has unplanned back-to-back meetings; would it be possible if we had our interview in a couple of hours?

There's no lack of things to explore and people to speak to in the interim, and TWM is given an in-depth tour of the company's impressive site. Set in Valle del Cauca, Cartago is a town in southwestern Colombia 190 miles west of Bogotá. The mill is surrounded by a stunning landscape made up of rolling and vibrant green valleys and lakes. Founded in 1960 by a group of manufacturers from Risaralda in Colombia and Canadian fine paper businessman Gene Kruger, it started production in 1962. The facility now produces a wide range of products including bath tissues, paper napkins, industrial

Set in Valle del Cauca, Cartago is a town in southwestern Colombia 190 miles west of Bogotá. The mill is surrounded by a stunning landscape made up of rolling and vibrant green valleys and lakes

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Helen Morris

Editor,
Tissue World magazine

and kitchen paper towels, facial tissues and diapers, and it has two modern plants for deinking and bleaching, producing 65,000tpy of high quality tissue products.

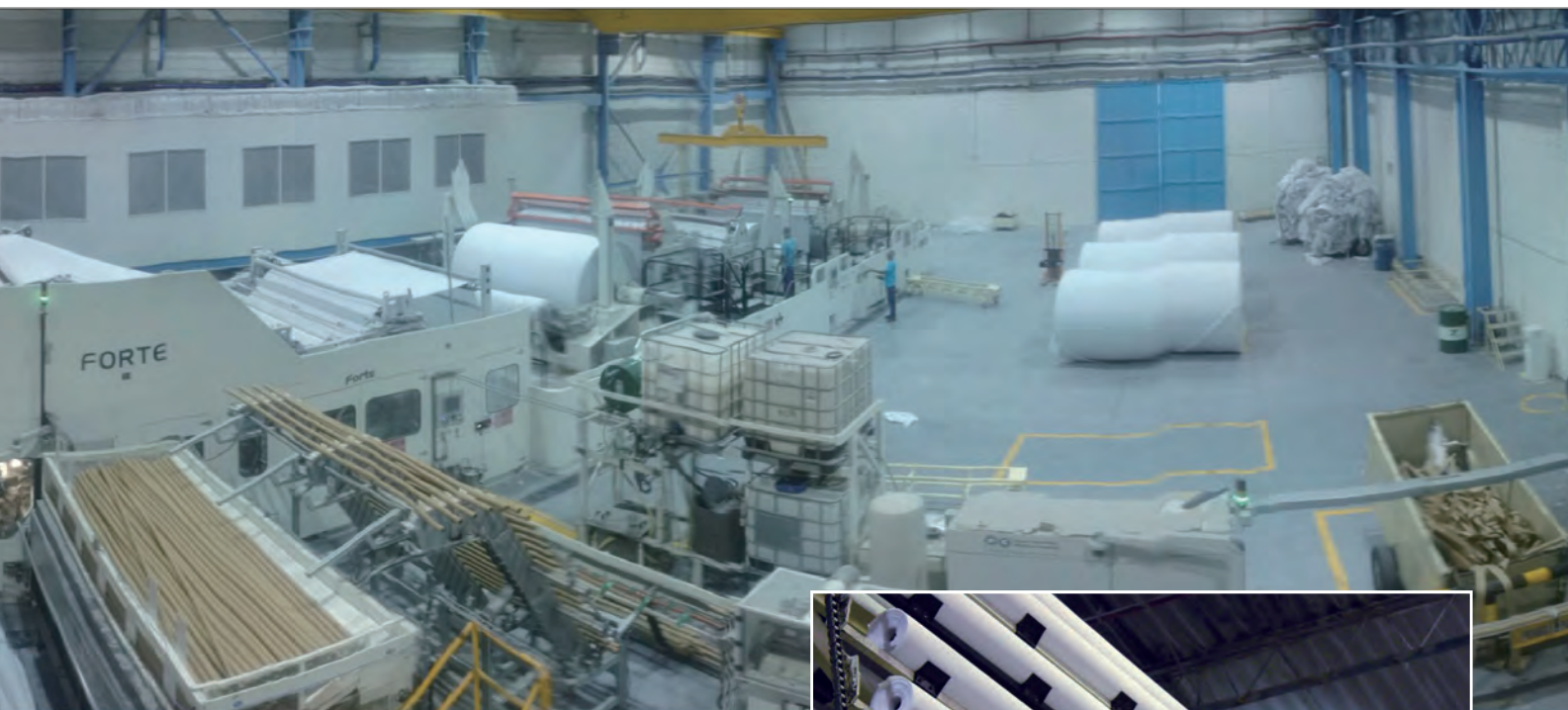
Following a tour of the site, Solano is ready to discuss the company's developments.

TWM/1 What's the priority for Papeles Nacionales in the next couple of years? Are you seeing an increase in tissue demand in Colombia?

"We will continue to expand our capacity in Colombia with the goal of following the growth of our clients.

"In the case of toilet paper, penetration of this category is almost at 100% in Colombia. This growth is associated with an increase in that demographic. However, our growth is related to the growth of our customers. This is represented in the increase of hard discounter stores which generally have their own-

"The growth of the Hard Discounter format (represented by clients like D1, Ara, Jeronimo Martins, and Justo y Bueno among others) has accelerated the growth of the private market. The economic situation in Colombia has not improved and these retail environments have become more attractive to the consumer. In the case of AfH, which has been impacted on by the effect of the peso's devaluation, the tourism sector has generated a strong resurgence in AfH with the consequent rise in consumption in the category."



Above: Papeles Nacionales is present in all segments of tissue; its sales correspond to 90% for consumer tissue and 10% in AfH.

label; these types of customers have demonstrated disruptive behaviour to the market and have grown exponentially in the past couple of years.

"Other categories like napkins and kitchen towels have a high growth potential but thus far their penetration of the market has been very low.

"In the case of AfH, the effect of the devaluation of the Colombian peso has had a positive effect on the growth of tourism, domestic and foreign. We are closely watching the accelerated growth in AfH products sold.

"We also have plans in the medium term to invest further in machinery but I can't elaborate more on that at the moment."



market. The economic situation in Colombia has not improved and these retail environments have become more attractive to the consumer.

"In the case of AfH, which has been impacted on by the effect of the peso's devaluation, the tourism sector has generated a strong resurgence in AfH with the consequent rise in consumption in the category."

TWM/2 What tissue product sectors are you active in in Colombia?

"Papeles Nacionales participates in all segments of tissue. Our sales correspond to a 90% increase to the consumer and approximately 10% in AfH.

"The growth of the Hard Discounter format (represented by clients like D1, Ara, Jeronimo Martins, and Justo y Bueno among others) has accelerated the growth of the private

TWM/3 Which tissue sectors are seeing the most growth in Colombia?

"The largest private brands in Colombia have the hard discounter store format with the brand Rendy. Other relevant brands are in supermarket chains with the brand Exito, JBO and Olimpica



Above: Set in Valle del Cauca, Cartago, the plant produces bath tissues, paper napkins, industrial and kitchen paper towels, facial tissues and diapers.

among others. In the Club format the brand member selection and in the cash and carry format the brands Alkosto and Aro among others which represent around 22% of the market.

"AfH has a high potential to continue growing in terms of market penetration."

TWM/4 How is the economy affecting the Colombian tissue market?

"Changes in the economy have affected the shopping habits of our customers. The growth of low price formats has obligated us to rethink our value proposition to the shoppers."

TWM/5 Are you seeing much demand for environmentally-friendly tissue products?

"So far there hasn't been an increase in awareness regarding eco-friendly products but gradually we are starting to see changes. The use of recycled material in the category is quite high."



Above: A small amount of production is exported to neighbouring countries.

"With the exponential growth of the low price formats and private brands it is very difficult to continue building our brand. It is difficult for a shopper who values the price/proximity equation that the new formats grant them to understand the value our brands add."

TWM/6 Are you exporting any products?

"We export a small amount to Ecuador and other countries in the Andean Region. Opportunities exist to reinvigorate exports mostly due to the peso's devaluation, but in the export category it needs to be understood that the logistics involving exports are quite high."

TWM/7 What key trends are you seeing in the Colombian tissue market and what are the main opportunities for you?

"The economic conditions of the country have not permitted better innovation initiatives. On the contrary we have seen regressive initiatives put in place. For example, we've found products with less measurement, that have the aim of making the shopper 'out of pocket'."

TWM/8 And what are the main challenges?

"With the exponential growth of the low price formats and private brands it is very difficult to continue building our brand. It is difficult for a shopper who values the price/proximity equation that the new formats grant them to understand the value our brands add."

Quality and speed supports business and product innovation at Productos Familia

An El Nino of change has hit the Colombian economy ... the peso's value down 30%, energy costs almost doubled, dramatically low rainfall. TWM visit's the Cajicá site - at 2,640 metres above sea level fittingly the top producer of consumer tissue - and discovers why innovation, quality and speed to market are working.



Above: Surrounded by rolling hills and countryside, the 60,000tpy produced at the site makes Productos Familia Colombia's number one consumer tissue producer.

Grupo Familia's site is a whirlwind hour and a half's drive starting at the centre of the bustling and car-logged streets of Bogotá. TWM passes road after road of local Colombians doing business, past busy shopping centres, churches, art museums and graffiti decorated streets. We drive higher and higher - at 2,640 metres above sea level, it is the third highest capital in South America, and "lowlanders" are advised to take a couple of days to adapt to the altitude - up over hills dotted with sky rise towers to emerge in the picturesque municipality and town of Cajicá.

The mill has been based there since September 2005 and while it is largely surrounded by rolling hills and countryside, its location also means it can easily access the massive consumer potential of nearby thriving Bogotá, which at last count in 2014 had an estimated population of between eight and 11 million.

TWM is greeted enthusiastically by Javier Mauricio Quintero España, the plant manager for the Group Familia-owned mill. Speaking easily in English, España is engaging and friendly, and keen to talk about his operations at the impressive facility.

He was previously plant manager at the company's Rionegro site in Colombia, running the feminine protection business, and came to his present position two years ago as Productos Familia looks to a new era.

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Helen Morris

Editor,
Tissue World magazine

The company's guilty verdict in the recent Colombian anti-trust inquiry conducted by the competition authority regarding tissue product price fixing covered a period which ended in 2013.

The site produces high-quality consumer tissue products such as toilet paper, kitchen towels. He adds the site has only the latest and most innovative technologies: PM6 was started up in 2005, PM7 in 2012, and the site also has three tissue converting lines. An automated warehouse currently in expansion is the first of its kind in South America. The site's 60,000tpy means it is the number one producer for consumer tissue products in Colombia. Another tissue PM is also on the cards.

The site is owned by Grupo Familia, which European tissue giant SCA has a 50% share in while the remaining 50% is owned by local investors. Familia has a tissue plants across Colombian and Ecuador. "We have a big business unit here in Colombia as well as a very strong trademark and across the countries we export to Ecuador and Dominican Republic, Puerto Rico, Panama and Haiti," España says. With point of-sale with leading brands across

Colombia and beyond, distribution throughout the site's home country is generally through local stores such as Mamas & Papas.

His market strategy is clear: "We want to be more and more efficient, and we want to lead the way in terms of innovation," he says. "We have a strong innovative spirit and we want to continue to make good use of that."

This is especially relevant with the current state of the economy, the effect of which on the country's tissue market España likens to an El Nino ... the dramatic climate changing event which originates off the Pacific coast of South America.

"The economy and the exchange rate of US dollars against Colombian peso has meant that the pesos has lost 30% of its value. The price of oil, which remains Colombia's top export product, is a priority of the government but it is very low at the moment. Inflation and oil, both have hit Colombia's economy very hard which has resulted in a lot of changes."

Crucially, there has also been very little rain: "Dam levels are very low, down by around 25%. There's been no rain in the

With the current state of the economy, the effect of which on the country's tissue market España likens to an El Nino ... the dramatic climate changing event which originates off the Pacific coast of South America.

whole of this territory, which has meant that energy prices have increased." He adds that producing gas with coal isn't as cost effective because of the exchange rate, energy and lack of rain: "Because the agricultural business is very low, costs for us are continuously increasing. And Colombia's economy has directly hit the cost of our raw materials. Energy costs have almost doubled in the last few years."

Opportunity is still readily available however, and the company targets the hygiene and well-being markets in Colombia and in export countries: "These sectors are key opportunities for us," he says. "It's where most of the growth potential is and certainly where a lot of the Colombian tissue market's future lies."

Currently the site manufactures four pack rolls, as well as kitchen towels in premium and 3ply: "70% of people here are on lower incomes, so we're not seeing any relevant demand for 4 ply products." The market is similar to that

in Mexico, and key trends are evident through both, not least the route-to-market which is through traditional channels such as Mamas & Papas outlets: "Consumers here buy regularly at the local corner shop because they don't have enough money to buy a big pack. As a country, we're definitely seeing more people moving from the Class E to the Class D and so we're seeing an increasing number of people buying more and more commodity products like smart phones and TV players ... and of course tissue products."

"To keep the number one position, we need to keep moving ahead of the market. It's all about product supply, not just manufacturing. It's quality and speed to market so that we can support our business and product innovations. We want to be a tool, and cost competition is the main issue. Because we are market orientated, not production orientated, it really makes a difference."



Above: Staff at the Cajicá-based tissue plant, which manufactures four pack rolls as well as kitchen towels in premium and 3ply.

Tomas is shocked to discover that he's a big tissue user after all

Originally from the Czech Republic, Tomáš Tvrz, 28, has lived and worked for several years in the UK and also in Canada. He talks to TWM about his tissue buying preferences.

"When I first thought about this I couldn't come up with any answers apart from toilet paper and paper towel, but after giving it some thought I realised that there are many other tissue products that I use on a daily basis and don't even notice. Besides using toilet paper and paper towel, I also use a lot of facial tissue, kitchen surface wipes, stain removers and hand towels, and also kitchen towel as a shoe polisher.

"I've seen my parents using these products when I was a kid and now I just go to the grocery store and buy them almost by instinct, they're such a big part of day-to-day life. Of course they are also very convenient. And while I'm sure I could live without shoe polishers, I still buy them every time.

"Whether a tissue product is a brand or private label product doesn't factor much into my buying decisions. When it comes to facial tissue I might get a bit more picky but in general I just buy cheap but reliable products.

"Even though I've always thought it was important to buy environmentally friendly products, when I'm actually grocery shopping I generally forget or just don't buy them because of the difference in price."

With regards to buying in bulk, at first I didn't, but now that I live with more people in the house I find that it's more convenient and economical to bulk-buy.

"Unfortunately, even though I've always thought it was important to buy environmentally friendly products, when I'm actually grocery shopping I generally forget or just don't buy them because of the difference in price. I still think it is extremely important to support our environment, but the economy sometimes won't allow that. If I happen to find an environmentally friendly product that adjusts to my budget then I'd happily buy it, but in the meantime I do prefer cheap and cheerful products.

"I don't think there's a particular cultural use, but at the same time, everything is culturally-biased, so I guess at some point my answer would be yes. I might say it's more in my family's habits and preferences than cultural though. My family uses a wide variety of tissue products, but I'm not sure that's how it works for every family back where I'm from in the Czech Republic.

"I've had the chance to travel and live in Canada for two years now, and while I've not found any big differences in terms of the availability or consumption patterns of tissue products, what I have noticed is that there's more variety in brands and prices. However, I can still find the same kind of tissue products I use back where I come from, all I had to do was to look for the right one (language and brands can be tricky sometimes)."

PIX Pulp indices 31.5.2016

NBSK pulp Europe

Producer country statistics from PPPC were not very good in April in terms of delivery volumes. But substantial losses of production in both BSKP and BHKP grades led to a decrease in producer stocks. European consumer stocks and port stocks came down as well. Total market pulp shipments (PPPC) were up globally by 0.6% year-on-year in April. The cumulative gain stood at 3.1%. In BSKP, shipments were down by 0.8% in April against April 2015. Cumulatively, the advance was bigger at 2.9%.

Data on European shipments was weak. Total shipments to Europe were down by 3.2% in April year-on-year, and down also cumulatively by 0.2%. Softwood pulp deliveries to Europe were down by 3.3% in April and by 2.2% cumulatively. BSKP producer stocks came down, seasonally adjusted, by one day to 28 days, and were below the long-term average. Our PIX NBSK index headed further up but this time only by 39 cents, or by 0.05%, and closed at 796.34 USD per tonne.

"North American printing and writing paper statistics from PPPC over the activity in April show that in terms of total shipments, April was a slightly better month than the Q1 average with the total printing and writing paper shipments (excluding newsprint) declining by 3.5% while the cumulative retreat over the first four months stood at 4.3%."

BHK pulp Europe

In BHKP, April was a stronger delivery month than in softwood but also here below the early 2016 average. Total BHKP shipments from PPPC member countries were up by 2.0% in April and now up by 3.0% cumulatively. Shipments to Western Europe were down by 3.3% in April year-on-year and up by only 0.6% in the first four months.

With substantial losses in actual production volumes, producer inventories headed down, seasonally adjusted by two days. At 46 days they were still clearly above the level at the end of April 2015 and also above the long-term average. Most of the 35,000 tonne decrease recorded in the European port stocks was in hardwood grade in Italy. Our BHKP benchmark slid slightly further down, this time by 17 cents, or by 0.02%, and closed at 685.61 USD per tonne.

Lars Halén

Senior manager,
FOEX Indexes

Timo Teräs

Managing director,
FOEX Indexes

Paper industry

North American printing and writing paper statistics from PPPC over the activity in April show that in terms of total shipments, April was a slightly better month than the Q1 average with the total printing and writing paper shipments (excluding newsprint) declining by 3.5% while the cumulative retreat over the first four months stood at 4.3%. On the other hand, after cleaning out the net impact of imports versus exports, the regional demand fell in April by as much as 4.9%. This, in turn was a bigger drop than the cumulative 3.5% reduction over January-April 2015. Uncoated free sheet continued to do better than the publication paper grades.

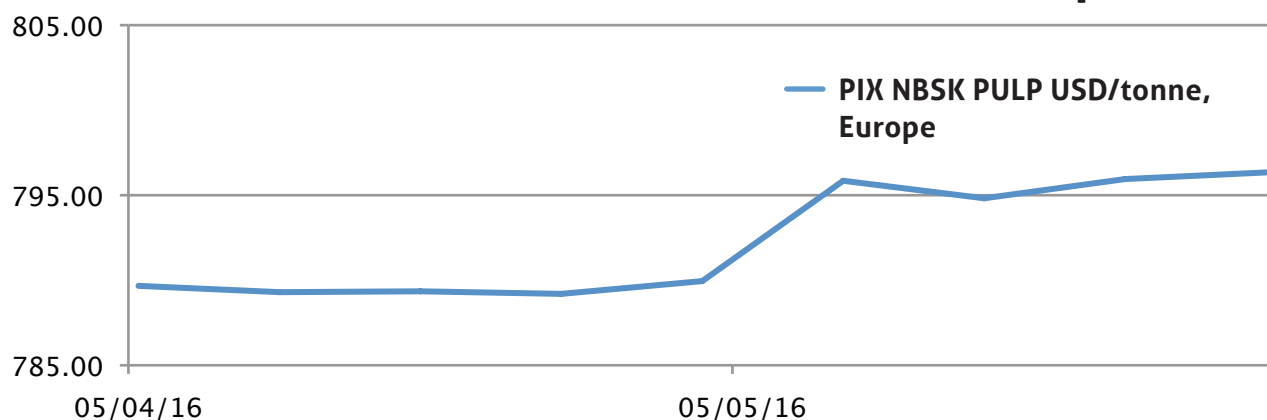
The financial results of the first quarter from the public companies around the world show that although the price of pulp fell substantially during the first quarter, helping pulp buyers and hurting pulp producing companies, the firms with a high share of pulp in their turnover numbers did, on average, better than the paper companies.

The benefits of the weak producer country currencies and rising production volumes continued to outweigh the ill effects of the price decline. Among the paper producing companies, packaging and tissue producers did, on average, better than the printing and writing paper producers. Many of the latter were either writing off the closures or investing into converting their printing and writing grade machines into other grades. Also, the shipment-to-capacity ratios remained higher in packaging grades than in graphic papers.

Source: FOEX Indexes



PIX NBSK PULP USD/tonne, Europe



FOEX Indexes Ltd produces audited and trade-mark registered PIX price indices for certain pulp, paper packaging board, recovered paper and wood based bioenergy/biomass grades. The PIX price indices serve the market in a number of ways. They function as independent market reference prices, showing the price trend of the products in question. FOEX sells the right to banks and financial institutions to use the PIX indices for commercial purposes, while RISI Inc. has the exclusive re-selling rights for subscriptions to the PIX data and market information. Please enquire for subscriptions at foexsubs@risi.com or via the following link www.foex.fi/subscribe/.

Tissue papers are produced either from virgin fibre, recovered fibre and various mixes of both, depending on the end product. High quality hygiene tissue products like medical tissue products, facial tissues, table napkins or other such household and sanitary products are often made exclusively or almost exclusively from virgin fibre pulp, whereas the share of recovered fibre typically increases in tissue products for a variety of end uses outside personal hygiene, such as kitchen towels or towels for garages or other such industrial production facilities etc. Providing PIX pulp price indices gives the paper producer and buyer insight in the price trends with a weekly frequency. PIX indices are used as market reference prices e.g.

- by banks or exchanges that offer price risk management services for pulp buyers and sellers
- by buyers and sellers of pulp or paper in their normal supply contracts
- companies who want to employ an independent market reference price for internal pricing (e.g. pulp mill – paper/paperboard mill, paperboard mill – box plant) through licensing the commercial use from FOEX.

In addition, our price indices are widely used in financial analysis, market research and other such needs by all kinds of parties linked directly or indirectly to forest product or wood-based bio-energy industries.

This way the companies have better tools to budget their cost or income structure and profitability, and may concentrate on their core businesses with less time spent on price negotiations, which tend to increase in these days as the planning span narrows in the wake of the short, quarterly business cycles and, nowadays, in most cases, monthly raw material pricing decisions.

Tissue colour safety standards have got tougher ... and will get tougher still

Only a rapid and flexible response to the increasing safety concerns of legislators and consumers will succeed. Here, Simon Boyd, global product manager colourants, Paper Solutions Business, Archroma, offers one company's priority in setting up essential best practice.



In future tissue colourants will need to meet ever-higher compliance standards as more stringent legislation and increasing consumer awareness are becoming key drivers in the industry for safer and more sustainable solutions. Global colour and specialty chemicals producer Archroma recently launched its latest food contact approved colourants specifically designed for deep dyed napkins. The move shows the direction in which the company believes the tissue and paper industries are increasingly heading: in the long term, only those able to adapt quickly to customer requirements and changes in legislation will be successful.

Sustainability is a popular topic these days. While tissue makers are primarily looking for energy, water and

carbon dioxide savings to make their production more efficient, consumers on the other hand are primarily concerned about the safety of the end products – napkins, tissue or towelling. For tissue producers, this is where eco-labels, food contact approval and REACH (Registration, Evaluation and Authorization of Chemicals) readiness play a very important role.

Increasing importance of eco-labels

As consumers are becoming more conscious about safety and sustainability, eco-labels are a great tool to demonstrate product compliance against certain safety standards and communicate it to the customers. While

Simon Boyd



Global product manager,
Paper Solutions Business

the benefits of using an eco-label on products is obvious for the retailer, obtaining it as a producer can be complicated as all ingredients need to be checked and confirmed.



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Archroma regularly checks the conformity of each of its products with the requirements of the three major eco-labels. Additionally, considerable research and development effort over recent years has further enhanced products. Based on the most recent product portfolio assessment, 175 colourants, optical brightening agents and paper chemicals now fulfil the requirements of the EU Ecolabel with up to three certificates per product due to different requirements, e.g. for copy and printing papers or tissue paper. Some 128 Archroma colourants, optical brightening agents and paper chemicals fulfil the requirements of Nordic Swan (up to 12 certificates per product due to different requirements, e.g. for copy and printing papers or tissue paper, sanitary paper, recycled cardboard) and 75 Archroma products are approved for Nordic Swan, with another 90 products awaiting review.

Changing legislation in Europe for food contact applications

Food contact approval is another main element in highlighting the safety of a product – an element that is actually vital in many end-use applications such as tissue and packaging. Paper colourant suppliers mandate independent safety test laboratories to assess products with regard to their compliance with well-known food contact standards (like Food & Drug Administration FDA or the German Federal Institute for Risk Assessment BfR). As tissue consumers are becoming more sceptical about chemical ingredients and new – safer – products are coming onto the market, the bar of safety requirements continues to rise.

Changing legislation is a challenge for the whole value chain, starting from the colourant supplier to the paper mill and to the retailer. One example of such a change is the new European regulation on extremely low limitations for Diethanolamine (DEA) and Triethanolamine (TEA and also called TAN) contents in paper and board intended for food contact applications.

DEA and TEA have been used in the past to help maintain storage stability of liquid dyes and to prevent deposits forming over time. However,

Changing legislation is a challenge for the whole value chain, starting from the colourant supplier to the paper mill and to the retailer. One example of such a change is the new European regulation on extremely low limitations for Diethanolamine (DEA) and Triethanolamine (TEA).

these amines are under scrutiny as they are potentially mutagenic. Likely these dyes could be no longer considered suitable for food contact applications such as deep dyed napkins.

Following an intensive research programme, Archroma has developed new food compliant grades in order to comply with this European regulation* which has recently come into force. In June 2015, we introduced a new palette of safer grades that will help tissue makers create the exciting colours that the consumers are longing for. An additional benefit to the customer resulting from these dye reformulations is that the C.O.D. (Chemical Oxygen Demand) and nitrogen content is also reduced, helping reduce effluent treatment costs and improving the ecological performance. In March 2016, this range was extended further and will continue to see further additions.

REACH – THE prerequisite for any chemical in the European Union

European chemicals legislation REACH aims to improve the protection of human health and the environment through the better and earlier identification of the intrinsic properties of chemical substances. This legislation entered into force in the year 2007 and by end of May 2018 all substances used in EU markets will need to be REACH-registered – irrespective of whether they are being produced in the European Union or if they are being imported.

The deadline for the registration of substances depends on the volumes brought on the market. Phase 1 and Phase 2 ended in December 2010 and June 2013, and Archroma has completed both phases. We are confident to finish the last two phases well before the deadline in 2018.

Market outlook and conclusion

For the whole tissue industry, customer requirements and legislation in particular will continue to evolve – and safety standards will become even stricter and more widely applicable. With regard to the sustainability of the industry and of the wellbeing of future generations, this trend is to be welcomed. In this dynamic environment, the successful suppliers to the tissue industry will be able to quickly respond to changes in the market or to even anticipate upcoming changes in legislation within their innovation pipeline.

*See recommendation XXXVI of German Federal Institute for Risk Assessment (BfR) and specific migration limits in application of Directive 2002/61/EC

This article was written by Simon Boyd, global product manager colourants, Paper Solutions Business, Archroma.



Just how committed are consumers – and the industry – to eco-friendly products?

The strongest motivations fade when set against the cost. Pirkko Petäjä, principal, Pöyry Management Consulting, explains the hard-nosed reality behind the environmental issue.

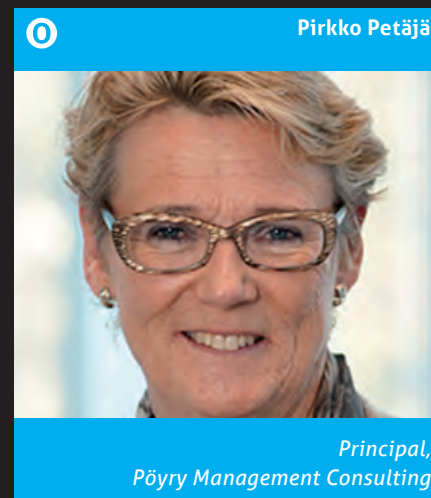
Corporate social and environmental responsibility is commonly claimed to be a factor in the decision making when buying a consumer product. In fact, according to surveys only some 16% of consumers are totally indifferent regarding environmental issues, while 84% claim that they at least somehow consider social and environmental responsibility in their purchasing decisions.

Many consumers say that they prefer the eco-friendly products, but in reality a large number of consumers actually pass this preference and buy the cheapest product. Some studies show that slightly over 60% of consumers have bought a product with social or environmental benefit during the last year and slightly under 60% would purchase a product with lower quality or efficiency if it were more socially or environmentally responsible.

The estimates of what share of consumers actually would be willing to pay more due to environmental reasons varies depending on the study, the geographic area, type of business and especially of the size of the green premium, i.e. the additional charge paid for having a green product.

The biggest differentiator is the size of the green premium. With a premium lower than 10%, more than half of consumers in all branches are willing to pay it, but when the premium goes to over 25% only a single digit percentage of consumers are willing to pay a premium.

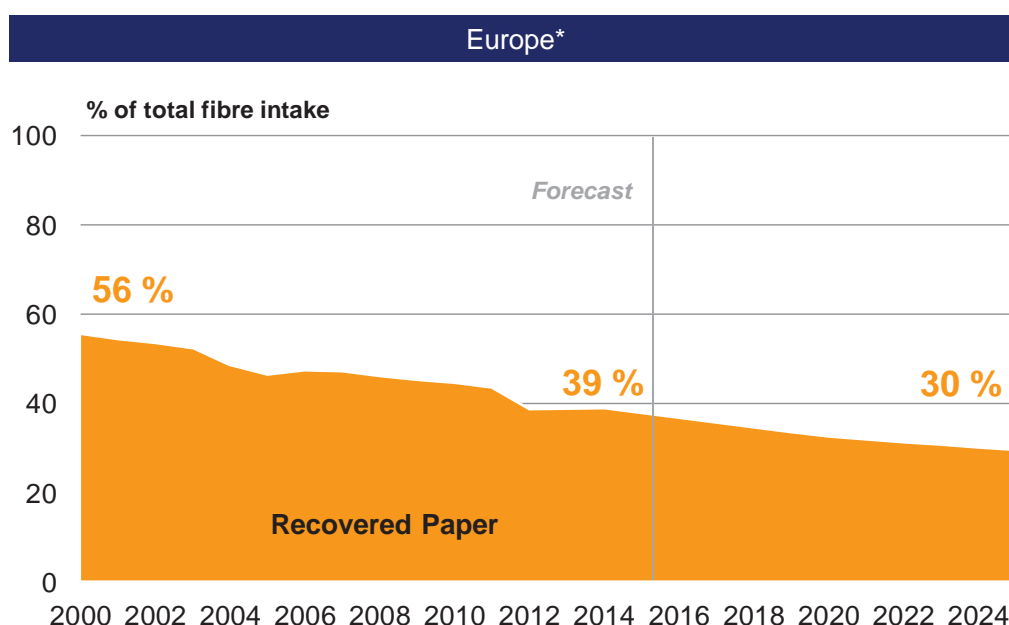
Paying extra for environmentally friendly products varies, but for any really significant premiums actually only a few percentages are ready to pay. The share of hard-core environmentalists from total consumers is estimated to be only some 1-2%. These consumers drive the market for the most ecological



niche in all product groups, including tissue. They would not compromise their choices regardless of price and alternatives. These types of consumers make always an environmental choice, also in tissue. However, such consumers are a very small minority.

TISSUE FURNISH IN EUROPE UP TO 2025

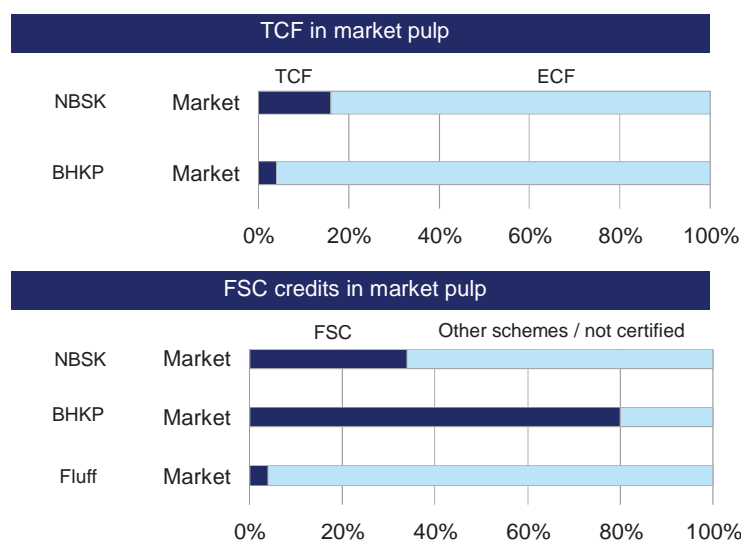
Recycled content in total tissue fibre furnish continues to decline, as quality trends are favouring virgin fibre and recovered fibre costs are picking up



* Europe excl. Russia and CIS

ENVIRONMENTAL REQUIREMENTS – TISSUE IN EUROPE

Preferences are typically a combination of TCF/FSC



Note: The estimates on certified fibre availability are indicative

Climate change continues to be the environmental issue with the highest attention generally, as also seen in the tissue industry

Climate change is the environmental topic currently with the highest attention everywhere, including in the tissue industry. Another issue with high general attention is resource efficiency that in tissue refers to water and energy efficiency which partially also relates to the greenhouse gas emissions, i.e. the climate change issues.

Illegal logging, fibre certification, RCF usage are all issues that are clearly less topical than the climate change. Toxicity has relatively high general attention and interest is increasing currently somewhat in tissue and hygiene. Biodiversity and clearcutting are currently not very hot environmental topics.

Does recovered fibre based mean the same as environmentally friendly?

The general perception is that recovered fibre usage in tissue is more environmentally friendly than virgin fibre. Also NGOs such as WWF and Greenpeace promote the usage of recovered fibre for instance over the usage of certified fibre.

The European Commission's Circular Economy Package drives reduction of waste and recycling. It has no direct reference or impact on recovered fibre usage in tissue but it puts recycling and resource efficiency in to the top of environmental discussion.

Some governmental entities and companies have published environmental targets that may include usage of recovered fibre. For instance the UK government buying standards state that 'tissue paper must have 100% recycled content'.

This is the general perception, yet it has not led to the increasing usage of recovered fibre though the environmental awareness is increasing and quite common. The environmental awareness recognises facts and therefore the 100% recovered fibre content is not very typically requested from tissue.

Why is this? This is simply because other factors that work against increasing the share of recovered fibre content overcome the drivers for the increase. What is considered better is in some cases due to some realities not considered important enough or possible to follow in practice. Cost advantage of RCP against virgin fibre is clearly the key driver for using recovered fibre in tissue. As the cost advantage deteriorates due to tightening availability of white recovered fibre combined with lowering yield especially in tissue, the recovered

fibre share in tissue continues to decline regardless of the limited share of demand that is environmentally motivated and requesting recovered fibre content. When the cost advantage of recovered fibre disappears, most of the environmental motivation fades away.

The EU Green Public Procurement Policy and the European Commission Circular Economy Package give guidelines requiring 100% recovered fibre content in copy and graphic papers but do not include tissue.

Recovered fibre usage in tissue is declining

Despite the environmental issues tissue manufacturing is shifting towards virgin fibre. In Europe the RCF share of fibre intake is slightly below 40% compared to 56% some 15 years ago. The share is expected to further decline, reaching some 30% in the next ten years.

Declining share of recovered fibre through the 2000s has mainly been driven by the new capacity utilising virgin fibre. DIP capacity is foreseen to remain stable also in the future with no major DIP investment coming to tissue mills, though tissue capacity is increasing. The relative share of RCP based tissue declines.

This is the situation in Europe in general, but the same principles apply globally; the cost pressure on RCP due to tightening availability will impact in the interest to invest on additional de-inking capacity in tissue mills. There are pockets in Europe where the RCP balance is still better, such areas include for instance large parts of Eastern Europe.

Globally there are emerging markets where the general quality requirements make it easier to operate with recovered fibre creating an economic benefit; price level can be so low that virgin fibre based tissue cannot compete.

Environmental requirements in virgin fibre based tissue

However, environmental requirements especially in selected geographic regions are important also for virgin fibre based tissue. In the 1990s the TCF issue was the

number one item on the environmental agenda of the NGOs and the industry and a large number of pulp mills were trying to produce TCF without being technically designed to do so. After the demand cooled off many such mills stopped producing TCF and the number of mills producing TCF today is clearly lower than 1994 when the mills not suited for the TCF production were forced to do so, (also rapid decline of sulphite capacity has here an impact.) Several mills that have some kind of possibility to produce TCF have not done so for over 10 years. The TCF capacity is still more than the actual production.

In the 2010s the 'true demand' of TCF has grown again on fluff and tissue paper sectors in both Europe and the US. TCF demand has always concentrated on German speaking Europe. Nordics also have some TCF demand (as many of the products target the German markets). Most of the TCF pulp used outside these regions goes into products related into either food production or hygiene (UK, US).

TCF kraft market pulp production

represents some 10% of the market BSKP demand and slightly over 2% of total market BHKP demand. Sulphite pulp mills typically do not use chlorine compounds in bleaching and most of the sulphite pulps in the market are therefore automatically TCF. However, sulphite capacity has declined rapidly over the last few years and that has reduced TCF offering, when in fact the kraft demand has increased.

Part of the TCF demand is supply driven, as some important especially market pulp producers (as for instance Södra) have TCF pulp available. In BHKP market pulp, the volumes are smaller (some, especially Iberian Euca and some Birch pulp from Södra).

Typically the preference is combination of TCF and FSC certification over the other options. This is because it is the same clients that often have both requirements, and once you have to worry about a requirement it is easiest to do it all at the same time.

However, a limited number of market pulp producers have capabilities to

meet both these preferences at the same time. It is more common for BSKP where also the TCF capacity is higher, but in tissue hardwood has a higher share and TCF bleached FSC certified market pulp has a limited supply while the demand is increasing.

Summary

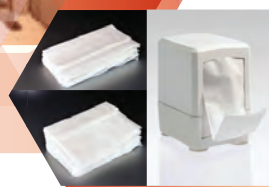
- Environmental issues are important, but a limited number of consumers will pay a green premium.
- Climate change is the environmental issue that has the highest attention.
- Recovered fibre content is generally perceived as environmentally friendly.
- Recovered fibre content is declining in tissue due to availability and cost issues.
- TCF bleaching and FSC certification from virgin fibre are requested at the same time.
- Pulp suppliers providing the combination especially for BHKP are only few while the demand is increasing.

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The Barometer Issue – one year on – you report back on your progress

In 2015, TWM visited a number of mills from around the world including Romania, France, Chile, Kazakhstan, Greece and South Africa for our in-depth Country Reports. Here, we revisit a selection to report on progress.

ROMANIA

Big retail channels rapidly changing the market place

When TWM visited Petrocart's historic snow-laden tissue mill in Piatra Neamt in eastern Romania, the site was just eight months into production on a new Toscotec-supplied tissue machine.

Since then, the company has continued to operate successfully and the speed of the PM has grown to 1,500m/min.

At the time, director general Adrian Vais talked of a fast occurring consumer shift from standard to economy tissue products, as well as underdeveloped tissue categories and

regions throughout Romania. Tissue was, he says, "largely recession-proof", and the company had witnessed fast changing conditions resulting in the rapid introduction of big retail channels – Metro, Carrefour, several German supermarkets as well as French and Belgian – which were substantially changing the face of the marketplace.

Their arrival had also heralded an increase in private label products which continue to change the face of retail tissue. They continue to dominate 70% of the market, although Vais says he believed that in the future this would decrease to 50%. He expected this drop to be a result of other players increasing their expertise and efficiencies and the company itself will continue to fight back with its own brands.

Helen Morris

*Editor,
Tissue World magazine*

Petrocart's strategy is to continue to upgrade its machinery; the first big step for this was the investment in the Toscotec-supplied line in May 2014. Converting lines are also on the cards.

A "big difference" between Romanian consumption and western European consumption continues to mean there's a lot of potential in the country for its tissue mills. When Vais started to produce tissue 25-30 years ago, consumption was two to three kilos per capita, whereas in the USA it was 17. Today in Romania it's six to eight,



Above: Petrocart's PM has reached speeds of 1,500m/min as Romanian tissue consumption continues to create opportunities for the country's players

The Romanian tissue market – primed for investment and innovation – is predicted to register a 4% constant value CAGR to reach US\$190 million in 2018.

while in Italy it's 20 per capita. Overall, the distinctive Romanian tissue market – made up primarily of local tissue players – had a total production in 2015 of 140,000tpy. Export amounted to 40-50,000tpy and the country also imports the same amount.

Focus on brands, energy reduction and on costs optimisation

When TWM met Sofidel's Comceh, Calarasi-based tissue plant in south eastern Romania, the global tissue giant was fairly new to the country. The acquisition of Comceh had been completed through its Polish subsidiary Delitissue in 2010 and the site's immediate challenge was to support the introduction of the Volare brand and increase the Regina brand's awareness throughout the market.

For Sofidel, the purchase was in a key and strategic location – close to the Bulgarian border, it gained access to target markets in the south east of Europe.

Carlo Ferrero, the Italian-born country operations manager, was wary at the time that it "takes time to establish when you are new." However, when we met in 2015, he told TWM that the mill was "leading the Romanian tissue market" and had a 23.3% market share.

The site produces 37,000tpy of tissue paper reels and manufactures finished products for the consumer market, private label and AfH marketplace. A third converting line dedicated to the country's growing AfH market was started up in 2013 and the company sells specialties and new technologies into the AfH sector, offering different types of fibres in line with the sustainability policy of Sofidel.

The Romanian tissue market – primed for investment and innovation – is predicted to register a 4% constant value CAGR to reach US\$190 million in 2018.

An increasingly steady economy, rising disposable incomes and underdeveloped tissue categories continue to rapidly change the face of the market and provide further opportunities for the site.

Ferrero also noted the impact the changing demographics were having on the country's private label demand, and stores such as Metro, Carrefour, Kaufland were selling the site's branded and private label products.

"Sofidel's move into the Romanian marketplace through Comceh continues to be successful," Ferrero adds. "These past few years we've made a lot of changes with our workforce and we continue to hire new managers to get new blood and new ideas in. Over the next few years, brands are where our growth is. Our focus now is on energy reduction and on costs optimisation to guarantee a more sustainable business."

FRANCE

Dynamic trends helping manufacturers back to normal profitability

Arjowiggins Graphic's tissue mill founded in 1848 and located in Saint-Marsla-Brière in north-west France manufactures 100,000tpy of specialist tissue and graphic paper, selling to converters for use in table top products, printing and hygiene.

Chief executive Agnès Roger discussed how the site was targeting growth regions with strong economic development and a substantial 70% of the site's tissue production was already exported outside of France due to the local market growing at a moderate pace.

In growth geographical markets, table top tissue products are generally the last tissue product to be implemented within a market, creating a big opportunity for the company.

Additional opportunities included the hygiene market and industrial applications, and areas such as Africa were creating opportunities as new areas for development.

In June 2016, Roger says the site is still maintaining its machines at the highest level it can reach and in 2016 it changed the overall managing system of the eldest PM. "Our activity is less and less focused on France and more and more on EU businesses. Despite that and despite new capacities that have started up across western Europe, EU business as well as French business especially are quite dynamic. At the same time, trends should help tissue manufacturers to come back to normal profitability after a very difficult 2015."

Roger added that there have been no further merges as seen between Georgia-Pacific and SCA, which had impacted the business.

Roger added: "In terms of new products and technology, as special print tissue manufacturer we foresee a strong development for digital printing and we are already working on this."

Independent maintaining a 10% growth rate

Independent hygiene producer MP Hygiene had plans for a second PM when TWM visited the Annonay-based company and met president and chief executive Marc Miribel. With over 153 years of history, recently it had realigned itself with a strong focus on hygiene following the arrival of the euro, the abolition of border controls in 2003, as well as increases in demand for hygiene products due to the 2009 outbreak of the H1N1 flu virus.

Key markets were private label products for the AfH market and Miribel

The opportunities meant a dream of a second PM was also in reach, and quality and environmentally-friendly products were also a key opportunity for growth



Above: Family-owned, private label specialist WEPA Lille's Bousbecque-based site; despite recessionary climates, cleaning and hygiene continues to see stable growth in France

adds that the sector is seeing growth 2-3% per year despite the recession. "The hygiene sector continues to have lots of potential," he adds.

Its focus continues to be on France, with 90% of its production going into the market and just some tonnage being exported into the Benelux countries.

The opportunities meant a dream of a second PM was also in reach, and quality and environmentally-friendly products were also a key opportunity for growth.

Being fiercely family-owned also remains key, as is remaining flexible and

Being fiercely family-owned also remains key, as is remaining flexible and adaptable. "Our challenge is to maintain our growth. We've grown 10% year on year for the past three years and we still have a growth of 10% per year. We aim to achieve €100m within the next five years."

adaptable. "Our challenge is to maintain our growth. We've grown 10% year on year for the past three years and we still have a growth of 10% per year. We aim to achieve €100m within the next five years."

Additionally, the Miribel family has decided to buy back the 42% of the venture capital shareholders; consequently, the company will be owned 100% by the Miribel family.

Quality of private label products now equivalent to branded

TWM visited family-owned private label specialist WEPA Lille at the Bousbecque-based site at the beginning of 2015. For the Europe-wide WEPA Group, having a European outlook continues to be vital for the company, as the recent string of impressive paper machine start-ups shows.

All supplied by Toscotec, the Lille-based site started production on its AHEAD-2.0 crescent former tissue machine in August 2015, producing high quality tissue products and increasing capacity by 35,000tpy; the company's Giershagen mill in Germany boosted its capacity to produce high-quality super-soft toilet tissue by 32,000tpy

with the start-up of an AHEAD-2.0S tissue machine in October 2015; and an AHEAD-2.0S line will be installed at its Piechowice, Poland-based site, which will start production of high-quality super-soft toilet tissue in the first quarter of 2017, boosting capacity by 32,000tpy.

Despite recessionary climates, cleaning and hygiene continues to see stable growth in France, with higher and higher demands for quality from customers. Estimated growth for hygiene products in western Europe is approximately 100,000tpy, with demand drivers including population growth, new product specifications, higher quality standards and only limited substitution possibilities.

The estimated growth in eastern Europe is 135,000tpy, with demand drivers including GDP growth, increased urbanisation and the increasing penetration of Western European retailers. Yet the market remains volatile, and WEPA Lille's strategy continues to be to improve its technical efficiencies. For example, a new recovery boiler steam system was supplied to the site in February 2016, which now enables steam generation of 1,2t/h.

CHILE

Demand for more quality, bulk and absorption increasing fast

As start-ups go, Forestal y Papelera Concepcion's (FPC) new Valmet-supplied Advantage NTT tissue line was a significant one. The second only start-up of an NTT line in the world, it is also so far the widest installed Advantage NTT machine with a width of 5.5m.

The new line fulfils FPC's target of producing 100% textured tissue, differentiating the company's product offering, and producing high-quality tissue with low energy consumption. The company is also using 100% virgin pulp and now producing tissue products with very high bulk and softness.

When TWM met chief executive Guillermo Swett, he said the company – which delivers jumbo rolls and converted tissue products to the Latin and North American markets – aims to introduce high quality tissue products to Chilean consumers and "something completely different" to American.

The scale of achievement and ambition on show at the site on the west coast of Chile was impressive. Surrounded by mile after mile of source material forests and a stunning vista across the rolling waves out into the South Pacific Ocean, the proximity to the coast is one of the reasons why FPC's ambitions were never limited to Chile.

"Our strategy is to offer something different," Swett says. "We want to offer a different product from what you find in the rest of Chile, Argentina, Peru, etc. And crucially also offer the most valuable textured paper in the USA."

To put a different type of tissue machine into Chile would have been impossible: "In terms of efficiency it had to be NTT as we are looking to export 90% of our jumbo rolls into America and they need to be high quality. You can't go by yourself into a high level market. You must choose first class partners."

The company's strategy was to highlight product difference: "We want to put something into the USA market that can't already be found. It's a mature market there for premium products,

Surrounded by mile after mile of source material forests and a stunning vista across the rolling waves out into the South Pacific Ocean, the proximity to the coast is one of the reasons why FPC's ambitions were never limited to Chile.

70% of people that buy tissue products are women and we are targeting a certain demographic of Americans that want this type of product."

Some 10% of its production will be supplied to the premium market in Chile, which Swett says is growing faster than the total demand. "Per capita consumption here is increasing fast. Chileans are asking for more quality, bulky, absorption... these parameters are becoming increasingly key as disposable incomes continue to rise and the economy continues to see stable growth."

Converting consists of a new Futura line, Infinity Packaging, Elettric80 palletising and warehouse management which has the aim of becoming a world class facility.

GREECE

Located in Katerini, a town in Central Macedonia, Maxi mill manager Michael Vantsis says that following another round of tissue mill closes within the country, the company is now the biggest in Greece.

It produces private label, consumer and AfH products; some 45% of its annual production of 30,000tpy is toilet paper, kitchen towel makes up 38%, napkins 14% and the remaining 4% is other products. It exports 20% of its jumbo reels and finished consumer products to countries including Bulgaria, Albania, Macedonia (FYROM), Serbia, Romania and Kosovo.

Following Greece's unfavourable financial situation, Maxi has survived by adding a new pulp production factory and by improving its efforts of production, processing, standardisation and paper availability.

At the start of June, it installed a new industrial rolls line and later this year it is also planning on installing a new Perini Mile 5.1 converting line.

The company has already bought the land and is planning to install a new high-speed narrow paper machine on 2017. It has also launched some new product designs.

The Greek economic crisis remains an opportunity for the business. Vantsis says: "We hope to reclaim the possibilities that are given to us as much as we can in order to make Maxi not only the biggest Greek paper industry player but also one of the biggest in Europe. Crucially, there is very much under-capacity in the Greek tissue market. It seems that there is enough space for several new paper machines."

He continues to focus on looking to export its jumbo reels and finished consumer products more and more to countries such as Bulgaria, Albania, FYROM, Serbia, Romania, Kosovo, and it also exports to Cyprus.

Following Greece's unfavourable financial situation, Maxi has survived by adding a new pulp production factory and by improving its efforts of production, processing, standardisation and paper availability.

It has a Recard-supplied PM and one consumer products rewinder, one industrial rolls rewinder, napkins lines, three folded handtowels and facial tissue lines as well as three tissue tablecloth lines.

There are still plans to invest further in paper machines and converting lines as the business is not currently able to cover market demands.



Above: Following 10 years of operations in Kazakhstan, İpek Kağıt Central Asia aims to increase its exports to Russia.

KAZAKHSTAN

Extensive expansion continues in Central Asia

İpek Kağıt has marked its 10th anniversary in central Asia with a \$14m investment. İpek Kağıt Central Asia has opened its new plant in Astana to advance its goal of being the leader in Central Asia's tissue paper market. The Turkish-owned company entered Kazakhstan in 2006 with a manufacturing investment in Almaty and quickly proved to be a powerful contender in central Asia despite the presence of global brands.

Due to its broad portfolio of products, high quality and steady investment

in consistent brand communication, the company says its flagship Selpak brand is now the best known and most preferred brand in Kazakhstan's tissue paper market.

Following 10 years of operations in Kazakhstan, İpek Kağıt Central Asia aims to increase its exports to Russia and neighbouring countries while remaining a key player in central Asia. The company's new plant in Astana, a state-of-the-art facility with an area of 50,000 square meters – twice the size of its previous plant – will enable it to greatly expand its

sales in central Asia and exports to other regions in the long term.

Its high quality Selpak brand remains its key focus and İpek Kağıt Central Asia aims to maintain its leadership in central Asia and neighbouring countries in the decade ahead.

İpek Kağıt Central Asia produces bathroom tissue, kitchen towels, napkins, facial tissue and industrial tissue paper rolls for consumers and away-from-home customers under the Selpak, Solo, Silen, Servis, and Selpak Professional brands.

"Kazakhstan's retail channel continues to develop rapidly and the number of its chain stores increasing steadily. Accordingly, we plan to produce private label tissue products in the period ahead that would fit our strategy."

Hamdi Yazıcı



Above: The Turkish-owned company entered Kazakhstan in 2006.

Outlook for World Tissue Business

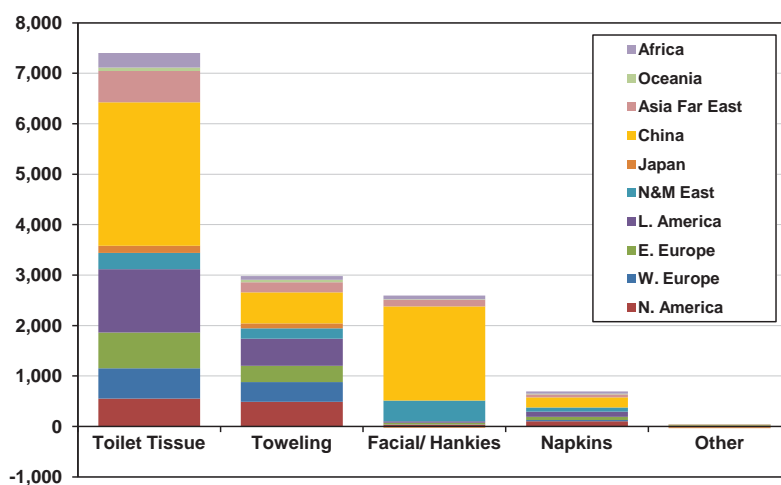
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The most comprehensive, unparalleled, compact data source and forecast for the global tissue market!

RISI's Outlook for World Tissue Business provides insight into recent changes and future growth prospects for the global tissue industry. The study provides details for each key region including key players, supply, demand and operating rates with forecasts up to 2023.

The global tissue industry has experienced strong growth since the global recession. Growth rates have returned to between 3.1-3.9%, after plummeting to 1.2% in 2009, and the global market continues to be in a strong expansion phase. China leads volume growth, followed by North America, Western Europe and Latin America. Over the forecast period, China is expected to continue to export tissue to other regions with a net export surplus growing from 820,000 tonnes annually in 2014 to about 960,000 tonnes by 2018.

Expected Volume Growth in Tissue Markets by Product and Region, 2013-2023
Thousand Tonnes



This study details:

- Driving forces for future demand – broken down by region
- When the tissue business will take – off in countries such as India
- Current and future growth rates and volumes by region
- How world tissue demand will develop – by region and by sector/product
- Global tissue consumption by product and by market segment
- Who the major suppliers and what their strategies are
- The new committed projects by region, and how these will affect operating rates
- The technology and retail trends that will shape the future



CMPC's financial results have so far successfully reflected the changes: results for the third quarter of 2015 showed EBITDA 34% higher compared to a year ago at \$337m, with growth driven by an increase in all business areas. It traded 707,700 tonnes of market pulp in the period, up 40% over the previous quarter and 28% higher year-on-year.

Left to right: Carlos Hirigoyen, corporate director of industrial development, CMPC Tissue; Felipe Harding De La Fuente, mill manager, Talagante



CMPC created a costs virtue out of an energy necessity

Cogeneration is the key to boost already impressive growth across Latin America for an innovative company which faced tough energy issues by building in efficiency at the design stage of its mill in Talagante, Chile. A TWM report.

CMPC has been repeatedly hitting the headlines over the past 12 months or so. The Chilean pulp and paper company has announced a series of new business strategies, not least with the changes made amongst its top executives: Luis Felipe Gazitúa has been hired as president, Gonzalo Darraidou is now chief executive, while Luis Llanos has taken over as CFO.

Its financial results have so far successfully reflected the changes: results for the third quarter of 2015 showed EBITDA 34% higher compared to a year ago at \$337 million, with growth driven by an increase in all business areas. It traded 707,700 tonnes of market pulp in the period, up 40% over the previous quarter and 28% higher year-on-year.

Over the past year it has also been involved – and since excluded – in accusations over promoting a tissue cartel together with SCA in Colombia, allegedly controlling prices in the country from 2000 to 2011 and together dominating 90% of the market. In May, CMPC was excluded from the allegations after competition authorities confirmed collusion by four other tissue producers.

Throughout its 22 tissue machines across Argentina, Brazil, Chile, Colombia, Mexico, Peru, Uruguay and Ecuador, it has an impressive total production capacity in excess of 600,000tpy. The business has also been busy announcing a series of investments across several of its sites: a \$139m tissue investment at its Cañete site in Peru was announced in August 2015, \$96m was implemented a month earlier with the start-up of a 50,000tpy tissue paper machine at Altamira, Mexico, and it has upgraded PM11 at its Caieiras, Brazil-based site.

Its products are now sold under brands such as Elite and Confort to customers across the whole of Latin American's consumer and AfH markets.

Since the game changing start-ups of its

two greenfield plants in Talagante, Chile, and Zarate, Argentina in 1995, CMPC Talagante mill manager Felipe Harding De La Fuente says the expansion "has been enormous" and is set to continue: "Depending on the country, CMPC tissue has had an annual growth between 5-15% over the last ten years."

The Talagante mill in particular has played a key role in the company's growth. Located 50km south west of

told TWM that the location of the mill is a strategic one: "We wanted a site close enough to the city of Santiago where the main consumption is. We also searched for good access of typical needs for a mill, such as energy, electricity, gas and workforce. And very importantly, we needed somewhere with enough capacity to grow, and so we purchased 100 hectares of farmland here in 1993."

The site has three tissue production

"We wanted a site close enough to the city of Santiago where the main consumption is. We also searched for good access of typical needs for a mill, such as energy, electricity, gas and workforce. And very importantly, we needed somewhere with enough capacity to grow, and so we purchased 100 hectares of farmland here in 1993."

Carlos Hirigoyen, corporate director of industrial development, CMPC Tissue

Santiago, Chile, it has received several large investments over the past few years. Surrounded in an open landscape close to vineyards and the Maipo River and producing 105,000tpy of tissue for the local market, it specialises in the production of high quality tissue products including napkins and other niche quality products.

Carlos Hirigoyen, corporate director of industrial development, CMPC Tissue,

lines and a number of converting lines for roll products, folded and unfolded products like napkins, facial and hankies for the AfH and the consumer market. Its own cogeneration system was started up in January 2016 and it has also invested in a state-of-the-art water effluent treatment plant.

Harding adds that the site's PM3, an Advantage DCT 200 machine, currently holds the highest tissue production



Above: CMPC's Talagante mill has played a key role in the company's growth.



Above: Having very energy efficient operations is key for the site and the company's business strategy.

capacity record in Chile. The 5.5m-wide, Valmet-supplied machine was started up in 2013 and has reached a maximum of 5,600 tonnes in a month with 89.7% efficiency. "In those figures nothing is discounted," he says. "We are counting 30 days a month and full time operation. Even in times of external energy shortage we haven't seen a lack of efficiency."

The cogeneration system has also made a big impact on production efficiency, and Hirigoyen says that having very energy efficient operations is key for the site and the company's business strategy: "Chile does not have oil or other conventional energy sources except for hydroelectricity, but many of the new hydroelectricity projects have been stopped due to environmental issues. In a few years the energy cost have escalated rapidly and today we probably have the highest energy prices in Latin America. So for us it is a must to be as energy efficient as possible."

The business has always tried to be one step ahead regarding environmental demands: "At the time when we were designing the mill, Chile didn't have a real environmental legislation but a law was being discussed in the parliament. We decided to work according to the proposed law so when it came into force we were already compliant with the new legislation."

TM3 is now 20-25% less energy consuming than the site's other machines when producing the same kind of grades. "From a business perspective it is very important to be environmental sustainable in a long term. The company has and continues to be pioneers in Chile," Hirigoyen adds.

Empresas CMPC Factfile

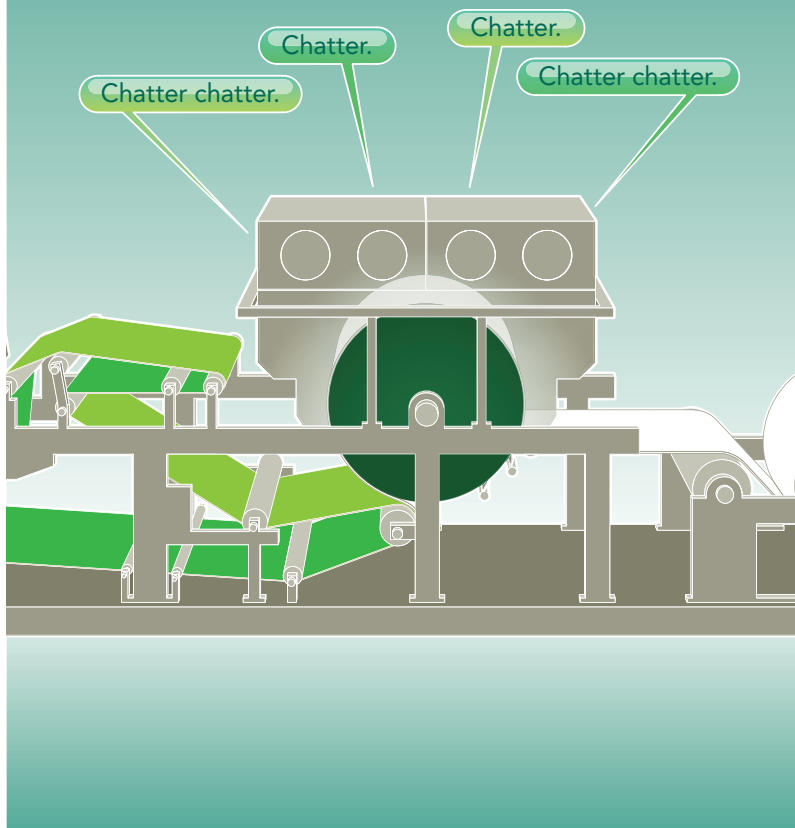
Products: pulp, tissue, forestry and paper and packaging products.

Location: Chile, Brazil, Argentina, Mexico, Peru, Colombia, Uruguay and Ecuador

Founded: in 1920 in Chile

Staff: 16,000

Customers: across 45 countries across the world.



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Events Calendar

Event	Date	Location	Website
ISSA/INTERCLEAN Istanbul	September 7 - 9, 2016	Istanbul, Turkey	www.tissueworld.com/Istanbul
Labelexpo Americas	September 13 - 15, 2016	Chicago, USA	www.labelexpo-americas.com
Tissue World Istanbul	September 27 - 29, 2016	Istanbul, Turkey	www.tissueworld.com/Istanbul
ISSA/INTERCLEAN North America	October 25 - 28, 2016	Illinois, USA	www.issainterclean.com/northamerica
Labelexpo India	November 17 - 20, 2016	Delhi NCR, India	www.labelexpo-india.com
Label Summit South China 2016	December 6 - 7, 2016	Guangzhou, China	www.labelsummit.com/southchina
ISSA/INTERCLEAN Latin America	February 22 - 24, 2017	Mexico City, Mexico	www.issainterclean.com
CIDPEX 2017	March 22 - 24, 2017	Hubei, China	www.cnhpia.org/en/shyz
Tissue World Milan	April 10 - 12, 2017	Milan, Italy	www.tissueworld.com/Milan
2017 PaperCon	April 22, 2017	Minneapolis, USA	www.tappi.org/events/event-calendar/2017-papercon
ISSA/INTERCLEAN CEE	April 26 - 28, 2017	Warsaw, Poland	www.issainterclean.com
Tissue World São Paulo	May 31 - June 2, 2017	São Paulo, Brazil	www.tissueworld.com/SaoPaulo
Labelexpo Europe 2017	September 25 - 28, 2017	Brussels, Belgium	www.labelexpo-europe.com/welcome-labelexpo-europe
Tissue World Miami	March 21 - 23, 2018	Florida, USA	www.tissueworld.com/miami
ISSA/INTERCLEAN Amsterdam	May 15 - 18, 2018	Amsterdam, Netherlands	www.issainterclean.com/en/amsterdam



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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
☐ Transport and logistics
- ☐ Energy and Power
- ☐ Testing machines
☐ Engineering
☐ Consulting services. Please specify field:
☐ Dispensers and dispenser systems
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☐ Used machinery
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