

TWMM

TISSUE WORLD MAGAZINE

The independent news
provider for the global
tissue business

JAPAN: COUNTRY REPORT

TISSUE LIFTS OFF IN ASIA'S LEADING CONSUMER

Plus ...

TW Digital Days

"Our world is being disrupted -
let's embrace it."

Annual Review: 2020 into 2021

New priorities in a year of crisis...
leading figures give their verdict

Focus On: Pulp

Eucalyptus – nine years of research
goes on stream in Brazil

US Environment

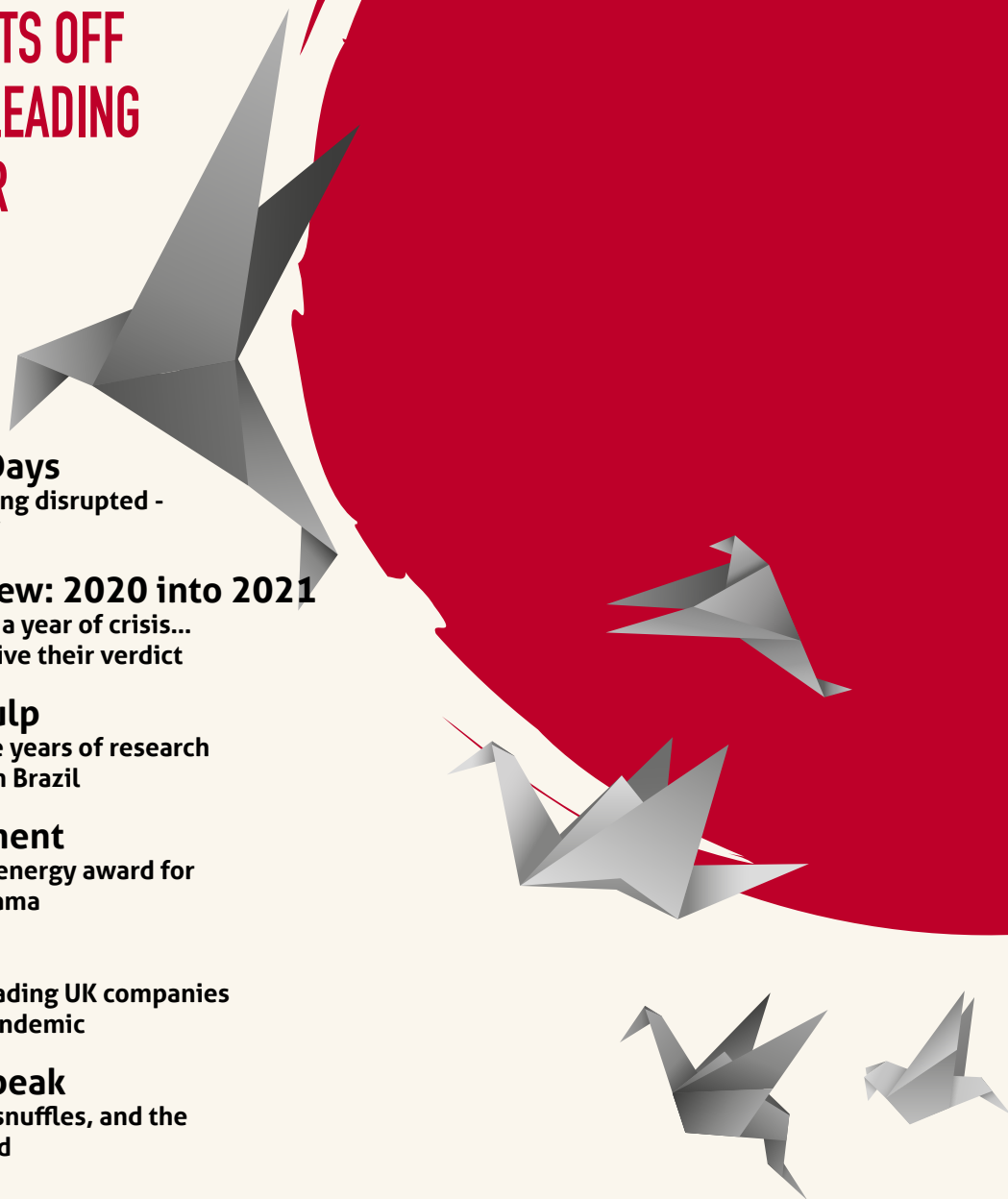
Second national energy award for
Resolute in Alabama

Exit Issues

Inside view of leading UK companies
responding to pandemic

ConsumerSpeak

Spills, tears and snuffles, and the
'lifesaver' at hand



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In this issue...

FrontIssues TWM reveals the resilience and commitment of our industry.	3
MarketIssues Tissue World Digital Days brings the global industry together. Three day online platform examined key trends across Asia, Yankee Dryer developments, the emerging dynamic in the Turkey region, Latin America and the US market ... all seeking new business models under the ongoing pandemic.	4
Country Report: Japan Fisher International: The economy shows an upturn in Asia's leading tissue consumer. Decades of low growth, population decline, and now a leading trend towards automated paper-free toilets ... yet Japan, through continuing long-term renewal of its tissue industry assets, still registers increased, albeit slow, demand.	10
Euromonitor International Updated forecast puts Japan tissue growth at 6% in value and 5% in volume. All-industry model assumes third pandemic wave in 2021 and up to 7.5% decline in global GDP before an anticipated recovery to set in in 2022.	14
Operations Report: Japan Nippon Paper Crecia Co. President Mr. Kazufumi Yamasaki outlines his focus on product development to meet the challenges of a rapidly changing market and the possibility of a third wave of the virus.	15
Marutomi Group targets unique product development in drive towards 20% home market share. TWM spoke to its President, Mr. Takeo Sano.	
ConsumerSpeak Truly multi-functional – mopping up and smoothing out the spills and thrills of a hectic life at home and at the office. Mum-of-two Louise Stemp charts the spills, tears and snuffles, and the 'lifesaver' at hand.	18
Special Feature: Annual Review An exceptionally challenging year for economies, societies ... and tissue. As the first year of Covid-19 draws to a close, TWM asks leading figures across the industry's global supply chain for their retrospectives on 2020 ... and predictions for 2021.	20
Technical Theme: Environment A \$4m investment at Alabama mill takes Resolute Forest Products to second national energy award. Case study: The modernisation of Coosa Pines, Alabama Pulp Mill - by David Marshall, Project Manager, Sustainability & Public Affairs, Resolute Forest Products.	25
Focus On: Pulp After nine years of research into reducing the consumption of wood per tonne of pulp, Suzano has launched industrial scale production at its Três Lagoas mill in Brazil. Heloisa Ramires, Suzano Research and Development Manager for Market Pulp, reports.	27
ExitIssues The surge in tissue consumption meant an intense focus on operating efficiencies, increasing control of entire supply chains, generational software updates, a catalyst for major investment, and innovation which included creating a healthcare division manufacturing quality approved facemasks. Report by freelance journalist Simon Creasey.	28
Ad Index	30



▲ Japan: Country Report

Mr. Takeo Sano, President Marutomi Seishi Co., aims to reach a 20% share of the Japanese tissue market in the near future. TWM spoke to him to understand his vision.

Page 16

FI	FrontIssues	3
MI	MarketIssues	4
CR	Country Report	10
OR	Operations Report	15
CS	ConsumerSpeak	18
TT	Technical Theme	25
FO	Focus On: Pulp	27
EI	Exit Issues	28

Cover: An upturn in the Japanese economy offers growth opportunities for the country's tissue industry. Image by Contrast Creative, Manchester, UK



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TWM REVEALS THE RESILIENCE AND COMMITMENT OF OUR INDUSTRY

Helen Morris

Senior Editor, Tissue World Magazine



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If you are looking for a rallying call during this bleak pandemic you should look no further than the words of Kim Underhill.

“Our world is being disrupted – let’s embrace it!” she says. “The pandemic has given us a gift to challenge inventory. Not without risk. But it has been a big social experiment; I wish we hadn’t needed to go through it, but it has given us a very different frame on how to run our business in the future.”

Kim Underhill is Kimberly-Clark North America Group President, and she goes on to speak with similar directness in her analysis of tissue’s response to Covid-19 in a three day webinar drawn together by Tissue World. Many of the changes forced on and embraced by the industry are here to stay. The way we shop has changed “for the good.” 50% of the people who started to shop online this year had never shopped online before. Retail is being redefined, accelerated by three to five years.

“Finding growth – and profitable growth – through innovation. Consumers will pay for value-added innovation, but innovation must be more than just product. 70% of spending will be focused on service by 2025. The global supply chain, Millennials, value-added innovation, trusted brand loyalty, a swing away from private label, hygiene’s importance: “It is a wonderful time to be in the tissue industry. The question is: How do you create profitability in an industry that could easily become commoditised very quickly?”

MarketIssues examines the trends – page 4.

How strong is the momentum swinging from West to East?

The US tissue market is now the second largest in the world. China’s 1.3bn population means that in retail volume terms that country now leads. And there are other fundamental currents gathering across globalisation. In Europe, the second wave has been worse than the outbreak phase in March-April, while in North America the pandemic has continued raging and recently reached the new record of 200,000 daily new cases (at the time of publication). China, according to current knowledge, has been saved from a second wave and has announced very few cases per day across its huge population. The tissue world is globalising more and more, and parent rolls are moving further. Looking at the US, imports have been increasing by more than 4% per year. Some brands haven’t been available, so products, finished products, are coming in.

At the same time, as of 15 November after eight years of negotiations, fifteen Asia-Pacific countries have agreed the world’s biggest free trade deal. The Regional Comprehensive Economic Partnership (RCEP) will encompass a free trade zone spanning a third of the global economy, close to half of global economic output and more than half the world’s population. Significantly, it is the first free trade deal agreed by the three big players China, Japan and South Korea. The RCEP agreement is seen as a huge coup for China in extending its influence and is viewed as a Chinese-led alternative to a now-defunct Washington trade initiative.

Japanese tissue sees lifestyle changes set to become routine

TWM’s Country Report assesses Japan, the world’s third largest economy, and Asia’s leading per capita tissue consumer. Nippon paper Crexia Co. President Mr. Kazufumi Yamasaki sees hygiene habits and awareness changed throughout society to adopt the “new lifestyle,” and manufacturers focussed on product development to meet the challenges of a rapidly changing market. Consumer choices, especially among the young, will in some degree become routine.

Mr. Takeo Sano is president of five of the six companies in the Marutomi Group, and chairman of the sixth. It is a major player in Japanese tissue with a market share in 2020 of 15% and recent investment in machinery and ‘unique product’ development helping the drive toward 20%. In another shift from tradition, its six companies with facilities across the country are abandoning tissue recycling for more virgin pulp as next-step innovation.

TWM spoke to them both.

TISSUE WORLD DIGITAL DAYS BRINGS THE GLOBAL INDUSTRY TOGETHER

Three day online platform examined key trends across Asia, Yankee Dryer developments, the emerging dynamic in the Turkey region, Latin America and the US market . . . all seeking new business models under the ongoing pandemic.

Tissue World Digital Days - held online between 11 - 13 November 2020 - was the first truly global event that brought the world's tissue industry together, digitally, during times of Covid-19.

The three-day event brought you a live online platform to keep you informed of all things tissue, until we can meet you again on Tissue World's show floors.

The sessions offered an entirely new experience of content, analysis and deal-making, connecting the world's tissue regions with peers around the world looking to discuss new solutions, innovative technology, market outlooks and insight in consumer trends.

Five focused live panel discussions and webinars took place with a deep and broad programme and pre-recorded sessions, featuring 44 speakers, moderators and panellists.

The five session themes were:

- Asia in the Spotlight: Managing in Crisis, Planning for the Future;
- Yankee Dryer Workshop: Troubleshooting and Problem Solving;
- Turkey: Your Gateway to Key Markets - Developments and Outlook for this Dynamic Region;
- Latin America's Prospects - Drivers for Sustainable Success;
- Senior Management Symposium, North America: Market models for a new reality. The keynote address was followed by a live interview between Kimberly-Clark North America Group President Kim Underhill and Fastmarkets RISI's Esko Uutela.

A live Q&A in the Senior Management Symposium session included questions such as what the future is for the AfH market, and whether North American tissue paper brands will be impacted in the same way it happens in Europe and in Latin

America.

Tissue World is the world's leading exhibition and conference organiser for the global tissue market with events in Düsseldorf, Miami, Bangkok, Istanbul and São Paulo.

It is supported in print and online by Tissue World Magazine (TWM), the tissue industry's leading independent trade magazine and website.

Tissue World Düsseldorf is now scheduled for 21-23 September 2021, Tissue World Bangkok is scheduled for 16-18 June 2021, and Tissue World Miami is slated for 16-18 March 2022.

Our events in Istanbul and São Paulo are pending.

Below, TWM summarise some of the key points raised during the webinar.

ASIA IN THE SPOTLIGHT: MANAGING IN CRISIS, PLANNING FOR THE FUTURE

Panel Moderator: Andy Chua, Event Sales Manager, Tissue World, Informa, Singapore

Panelists:

- Ray Somnath, Principal, AFRY Management Consulting, Indonesia;
- Danny Kristono, Marketing General Manager, PT. Sun Paper Source, Indonesia;
- Tim Woods, Managing Director, Industry Edge, Australia;
- Ronaldo Parucker, Sr. VP, Strategic Technical Mgr Tissue, Voith Paper, Germany.

Keynote Presentation: Ray Somnath, Principal, AFRY Management Consulting, Indonesia

The region saw an increased demand in the consumer segment driven by hoarding and people staying at home. There was a

severe drop in AfH. In the first quarter of the year, panic buying also impacted South East Asia (SEA), although local suppliers in Thailand, Malaysia and Indonesia managed hoarding better, whilst regions without local suppliers such as Singapore and Hong Kong experienced temporary shortages.

Stringent lockdown measures in several SEA countries impacted tissue consumption positively in the consumer segment, with people staying at home more it negatively impacted the AfH segment.

Covid-19 has changed consumer habits; some of the changes will continue to reshape the markets after the breakout is controlled. The new Covid-19 consumer increasingly practices social distancing and

working from home, has less disposable income, has increased hygienic awareness and is increasingly ordering online.

We have seen an economic rebound in SEA, driven by China's regrowth. We expect that AfH will be negatively impacted for a long time and to see the continued growth of e-commerce, larger tissue package sizes and one-time purchases. Innovations in tissue will consist of new, multi-task categories.

The new "work from anywhere" model will benefit the consumer segment at the expense of AfH.

Despite low AfH, an increased consumer segment demand and low pulp prices have boosted most tissue companies, which have

reported strong economic results during the pandemic:

- NTPM reported declining sales. However, decreased raw material costs offset sales decline and helped the group restore its EBITDA margin to 19% level. The company is actively seeking ways to widen its customer base and expand distribution channels;
- APP reported sales surge due to panic buying, followed by steadier growth driven especially by demand in the Chinese market. The company was able to increase and arrange supply to meet the demand and is temporarily re-tasking some production lines;
- Berli Jucker reported increased consumer goods sales in Q1-20, partly attributed to tissue consumption. It announced a one million THB project to increase production by 50%. It also launched a new multi-purpose category of tissue paper.

The Southeast Asian tissue market is expected to grow by 5.2% per annum through 2025 despite the headwind in

the AfH segment. Consumption in SEA totalled 1.1 Mt in 2019, corresponding to a per capita consumption of around 1.7kg/a. The consumption per capita is very low compared to, e.g. Western Europe, at over 15kg/a, indicating good potential for growth in SEA. Increased consumer segment demand and hygiene awareness are expected to compensate for the experienced drop and continuing headwinds in AfH.

Overall, economic and population growth continue to be the main growth drivers when Covid-19 settles. Indonesia is the main country driving the growth in the region; good growth rates are expected also in many other countries, such as Vietnam and the Philippines.

PULP MARKET DRIVERS

- Rapid fall of graphic papers due to Covid-19, causing decline in pulp;
- High demand from tissue;
- Paying capability of Chinese buyers improving after first wave;
- Limited supply increase; thin project pipeline in 2020/2021.

PULP PRICE DEVELOPMENTS

- Upward price pressure experienced before Covid-19 faded as a consequence of weak demand;
- High producer inventories do not support price increases;
- Stronger USD puts downward pressure on prices;
- Strong tissue demand has hindered BHKP price drop;
- Economic recovery expected for 2021, which can pull up prices.

Projects are expected to go forward without major obstacles despite COVID-19. As demand continues healthily, the investments are expected to continue as planned, despite the regional overcapacity.

Limited access to site for foreign machine suppliers may have caused some delay in ongoing projects. Investment activity continues strong driven by APP's massive expansion plans in OKI and Perawang mill. In addition to shown plans, even further investments are considered.

YANKEE DRYER WORKSHOP: TROUBLESHOOTING AND PROBLEM SOLVING

Presentations:

- Overview of Yankee Diagnostics, John Holton, Technical Support, Toscotec NA, USA;
- Steel Yankee Dryer Lifetime Management, Franz Harrer, Product Mgr, Andritz AG, Austria;
- Crepe Blade Wear Modelling, Ian Padley, Global Solutions Team Mgr, Tissue, BTG, Switzerland;
- Troubleshooting Thermocompressors, Mike Soucy, President, Kadant Johnson Systems, USA;
- Tissue Machine Vibrations, Manfred Jaeger, MD, Jaeger, Germany.

TURKEY: YOUR GATEWAY TO KEY MARKETS – DEVELOPMENTS AND OUTLOOK FOR THIS DYNAMIC REGION

Panel Moderator: Jonathan Roberts, Industry Consultant and Conference Chair, Tissue World

Panellists:

- Alp Ögücü, CEO, LILA Group, Turkey;
- Lütfi Aydın, Global Tissue Production Director, Hayat Kimya, Turkey;
- Ahmet Seğmen, Chief Sales Officer, Eczacıbaşı Tüketim Ürünleri, Turkey.

Alp Ögücü: "We have never experienced anything like the speed of digitalisation that we have in the past few months. Adaptability has never been more important.

"Our strategy has adjusted. Now it is all about risk management. All of us have thought about our supply chain, and increasing the number of suppliers was a key issue of risk management. It became a must to maintain production 24/7.

"E-trade will continue to be very important, particularly important if hygiene is also here to stay. Spending more time at home with family and friends could also be a continuous trend which could see an increase in tonnage for hospitals and

airports ... more time at home will also have an effect on the tissue industry. We hope we continue to see more consumer tissue at home!"

Lütfi Aydın: "Despite pandemic, we are happy to be on track with our new Russian and Turkish investments. In Russia, with the additional 70,000tpy, we will become Russia's largest tissue producer, and in Turkey, with the new 70,000tpy capacity, we will maintain our leadership as the largest tissue producer.

"We have taken decisions quickly, and been transparent to everyone about the steps we have taken.

"Sustainability is one of the main principles for our company and it will continue to be a key strategy for us both during and after the pandemic."

Ahmet Seğmen: "We have experienced the safety net of being in an industry that helps people. Because consumer products serve

basic needs, we have seen smaller jumps in these times of economic crisis than other industries. The tissue industry has actually been positively impacted because of an increased hygiene awareness from consumers; the consumer products industry has proved itself to be a safe bet and it's a good place to be. The tissue industry is resilient!

"No one could have been ready for this pandemic. Awareness for hygiene has

increased and digitalisation – especially e-commerce - will continue to grow even faster. Shoppers are shopping more purposefully for brands that are sustainable and consumers have started to respect the world and the environment more. The biggest trend is that some of these trends will go away after the end of the pandemic, and some will stay, so we need to figure out which will stay. This is a big challenge for the whole of the industry."

LATIN AMERICA'S PROSPECTS – DRIVERS FOR SUSTAINABLE SUCCESS

Panel Moderator: Lairton Leonardi, Managing Director, Solvocon Business Consulting, Brazil

Panelists:

- Nestor de Castro Neto, Executive Advisor, ABTCP, Brazil;
- Daniel Signori, Technical Director, Mili SA, Brazil;
- David Mackinson, Research Manager, Euromonitor, Chile;
- Marcello Moraes, Commercial Director, Softys Brazil.

Keynote Presentation: Nestor de Castro Neto, Executive Advisor, ABTCP, Brazil

Outlook of Covid-19 influence in the Latin America tissue market and supply chain

Key challenges: keep production running! Reduce maintenance shut downs, postponing them as much as possible and developing further digital connections for maintenance and auditing; learn how to work with remote office; social distance for people classified

as risk area, and how to respond to impacted distribution and management.

Challenges: Innovation is necessary. Connectivity technology between people is available in all markets; a new mind-set is needed; Covid brought a sense of urgency that is accelerating the digital process.

Tissue factories have learned to protect their workforce and production, ensuring the supply of the product that was considered first need; restrictions on access to factories motivated the use of technologies, such as virtual presence technology, mainly by maintenance, inspection; pre-Covid digital products have been amplified with the pandemic.

There has been a boom in consumption: somewhat irrational for two months during the early Covid-19. Global tissue demand growth (excluding China) normalised in July but still at high levels at 4% YTD. According

to PPPC, global tissue demand growth was stable (-0.5% y/y) which we believe reflects signs of consumption normalisation following the buying frenzy at the peak of the COVID-19 crisis. Change in hygienic and healthy habits came to stay, and this will have a permanent impact in tissue consumption.

In the third quarter of 2020, Softys Tissue reported volumes normalising, but personal care remains solid. CMPC highlighted that consumer tissue volumes are normalising, but AfH recovery is still slow. On the positive side, personal care has remained solid, and that's a market where returns are better. No guidance on sustainable margins has been given due to macro uncertainties.

The fiscal stimulus in Brazil was exaggerated high (USD 217bn), causing market misbalance, started creating inflation (0.81% only in October), also influenced by Real devaluation.



Kim Underhill,
Kimberly-Clark
North America Group President

SENIOR MANAGEMENT SYMPOSIUM, NORTH AMERICA: MARKET MODELS FOR A NEW REALITY

Retail is being redefined and has been accelerated by three to five years

Keynote address: Delivering Growth Through Disruption
Kim Underhill, Kimberly-Clark North America Group President

"Our world is being disrupted - let's embrace it! It has created lots of new

opportunities for us in tissue and many of these changes are here to stay. The way we shop has changed for the good; 50% of the people who started to shop online this year had never shopped online before.

"Finding profitable growth is going to be



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“RETAIL IS BEING REDEFINED AND, OVERNIGHT, HAS BEEN ACCELERATED BY THREE TO FIVE YEARS. THE WORLD HAS SHIFTED TO ONLINE. CONSUMERS WANT MORE PERSONALISED EXPERIENCED, BUT ALSO WANT THESE PRODUCTS SHOWING UP ON THEIR DOORSTEP.”

an important innovation. Consumers are willing to pay premium prices for premium products.

“Retail is being redefined and, overnight, has been accelerated by three to five years. The world has shifted to online. Consumers want more personalised experienced, but also want these products showing up on their doorstep.

“In a matter of days, we had a massive surge of volume in March/April. The surge couldn't be handled in many ways and we have had to re-think our supply chain.

“New competition is challenging retailers; growth will come from online and discounters, scale is being redefined through direct-to-consumer brands. Supply chain cost will become a more significant pinch point.

“All of us are getting more comfortable to purchase products from our phones or tablets and 67% of shoppers now use technology to simplify their life. Amazon has set the pace in terms of next day deliveries. Expectations of “frictionless” shopping will grow, and same day delivery will reach 25% market share by 2025. “However, I still think many of these shoppers will want to go back into the store. I believe that same-day delivery will reach 25% market share by 2025.

“Finding growth - and profitable growth - through innovation. Consumers will pay for value-added innovation, but innovation must be more than just product. 70% of spending will be focused on service by 2025.

“The tissue industry's supply chain is more global than ever; 74% of Millennials say it is important companies are clear about their values and purpose. Sustainability is no longer an after-thought. We are looking at lots of exciting new ideas for the use of different raw materials to make tissue. In our lifetimes we will make a significant difference to sustainability. The question for the tissue industry is: How do you create profitability in an industry that could easily become commoditised very quickly?

“Innovation can be much bigger than the product itself. We will seek innovation in packaging, innovation in the supply chain. How do we move product quicker, how do we move it cheaper? We know that consumers will pay for value-added innovation. As the pandemic has settled in, the idea of wet wiping products has seen great growth. Also what is new at this time is that private label hasn't really taken off. We haven't seen a surge here. We have actually seen more consumers move to trusted brands. That is promising and it gives us hope.

“Walmart has really flourished in the ‘Click and Collect’ model. So we have seen a real shift in how we think about this vital component of the supply chain. We have a lot of work to do to ensure that the service is there.

“As for the tissue industry, the supply chain is now more global than ever. The surge in demand has been much greater than the supply can be in the US. In some cases we have also brought in finished products from outside of the US. This creates a whole lot more opportunities.

“We're also learning much more about the next generation. Millennials want to buy products from companies that have clear purpose and transparency. Sustainability is our responsibility.

“It is a wonderful time to be in the tissue industry. It's one of the most exciting times for us, not only in the US. What we saw in many parts of the world was a significant up-tick, and we need to embrace a mind-set change.”

“The things that made us successful in the past will not make us successful in the future. Every step of the supply chain will now be important to manage speed and cost.

“The pandemic has given us a gift to challenge inventory. Not without risk. But it has been a big social experiment; I wish we hadn't needed to go through it, but it has given us a very different frame on how to run our business in the future.”



Esko Uutela, Principal
Fastmarkets RISI

QUALITY SHIFTS AND CAPACITY LIMITS CHANGING NORTH AMERICAN TISSUE SUPPLY PATTERNS

Esko Uutela, Principal, Tissue, Fastmarkets RISI

What does COVID-19 mean for the tissue business?

- Panic buying quickly emptied tissue aisles;
- Hoarding of tissue products happened in different regions, but North America, Europe and Australia were hit the hardest as capacities were already in high use. In

- China, overcapacity helped to produce more despite the fact that many mills were out of action for six to eight weeks or even longer, especially in Hubei;
- Tissue is one of the daily necessities needed in a modern society and during the coronavirus pandemic this has become very clear;
- Violence also erupted with customers

fighting for the last pack of toilet paper;

- Tissue mills turned out to be strategic assets! Tissue deliveries were hijacked in Hong Kong and Germany.

"Toilet tissue sales skyrocketed but then went back to normal, the second wave caused a new peak again. In calendar week 12 of 2020, German toilet paper sales were more than three times the normal range, but this high season only lasted about five weeks and sales suffered in weeks 14-16 as mills were not able to fulfil all requests by retailers due to empty mill stocks.

"Tissue mills were running at full capacity and often added additional shifts for converting to produce the maximum volume at practically every mill. But the AfH tissue business collapsed, and AfH mills began to produce some parent rolls and/or SKUs that were able to be sold through distributors to households.

"The second wave caused another sales peak in week 43 (cumulatively, 2020 up by 15%).

"Effects on tissue are likely to be more positive than negative. In the short term, the impact is definitely positive for the consumer tissue business but negative for the AfH business. US shipments for consumer tissue rose by 37.4% in March, 28.1% in April, 23.5% in May, 15.4% in June, 9.9% in July, 12.2% in August and 10.7% in September.

On the other side, AfH shipments started to contract in April (-14.0%) and this continued in May (-19.0%), June (-13.1%), July (-13.9%), August (-14.7) and September (-13.4%). The trend in Europe has been very similar, while life in China has more or less normalised, and the effect of the pandemic was weaker than in North America or Europe.

"Consumer tissue will reach higher-than-average growth rates in most regions. Households are likely to maintain higher stocks at home than they had been—reports

"TOILET TISSUE SALES SKYROCKETED BUT THEN WENT BACK TO NORMAL, THE SECOND WAVE CAUSED A NEW PEAK AGAIN. IN CALENDAR WEEK 12 OF 2020, GERMAN TOILET PAPER SALES WERE MORE THAN THREE TIMES THE NORMAL RANGE, BUT THIS HIGH SEASON ONLY LASTED ABOUT FIVE WEEKS AND SALES SUFFERED IN WEEKS 14-16 AS MILLS WERE NOT ABLE TO FULFIL ALL REQUESTS BY RETAILERS DUE TO EMPTY MILL STOCKS."

are saying at least two weeks' worth instead of one. And folded hand towels are also being found in households for hand drying. Globally, the general awareness of the importance of good hygiene for protecting health is expected to have positive effects for tissue, and the number of tissue users will likely grow in countries with no tradition in tissue use."

North American tissue consumption, 2019: Market is well developed but still growing.

"The US tissue market is now the second largest in the world as China passed it in size in 2018. Canada accounts for less than 10% of North American tissue consumption but largely follows US patterns in quality developments. Total consumption: 9.7m tonnes (2019): USA 91.5%, Canada 8.5%.

"The North American tissue market has been strong recently. The AfH sector in particular benefitted from the robust economy boosting all outside activities in recent years. However, in 2020 the outcome will be totally different: good At-Home tissue growth but the AfH sector nosediving.

"Pre-Covid-19, converted AfH tissue product shipments showed growth rates double or even greater than those in consumer tissue, which grew rather steadily with only small monthly variations.

"The first half of 2020 was a very busy time in the US At-Home tissue sector. Shipment volume grew by 18%, a record in US tissue history! However, the AfH sector began to

suffer in April, and the first half showed a decline of 6% in AfH tissue shipments. In the second half of 2020, At-Home demand growth will stay high as the pandemic continues to rage, while AfH will continue to struggle. Total volume of shipments in 2020 will record very good growth of around 7%.

"This year will be very positive for the North American tissue industry, and substantial growth of around 8% can be expected despite the decline in the AfH sector. It is likely that the AfH sector will not fully recover even in 2021 as working from home will continue to some degree and other public traffic will remain lower than in past years. This will reduce total growth, while At-Home growth will be good.

"US tissue imports show a growth trend of about 4.2% per year, while exports have recorded much lower growth of 1.2% per year on average. In the past few years, exports have stagnated.

"In the US bathroom tissue business, ultra and premium qualities have increased their combined share from 50% in 2008 to 75% in 2020. The main loser in this development is the value category. The economy category has slightly increased its share due to the popularity of dollar stores, who mainly sell economy category bathroom tissue.

"New products from tissue machines using new non-TAD, higher quality technologies cause confusion regarding where they should be classified in the quality range. In principle, they should be seen as an additional, intermediate quality category, but so far there is no good name for the new baby. Names used by new quality suppliers, such as Premium Plus, Ultra Premium or similar derivations are not very definitive.

"So the game is on... who can come up with a smart name for these new products?"

"CONSUMER TISSUE WILL REACH HIGHER-THAN-AVERAGE GROWTH RATES IN MOST REGIONS. HOUSEHOLDS ARE LIKELY TO MAINTAIN HIGHER STOCKS AT HOME THAN THEY HAD BEEN—REPORTS ARE SAYING AT LEAST TWO WEEKS' WORTH INSTEAD OF ONE. AND FOLDED HAND TOWELS ARE ALSO BEING FOUND IN HOUSEHOLDS FOR HAND DRYING. GLOBALLY, THE GENERAL AWARENESS OF THE IMPORTANCE OF GOOD HYGIENE FOR PROTECTING HEALTH IS EXPECTED TO HAVE POSITIVE EFFECTS FOR TISSUE, AND THE NUMBER OF TISSUE USERS WILL LIKELY GROW IN COUNTRIES WITH NO TRADITION IN TISSUE USE."

TISSUE WORLD JAPAN, 2020: THE ECONOMY SHOWS AN UPTURN IN ASIA'S LEADING TISSUE CONSUMER

Decades of low growth, population decline, and now a leading trend towards automated paper-free toilets . . . yet Japan through continuing long-term renewal of its tissue industry assets still registers increased, albeit slow, demand.

At 17kg consumed yearly per person, Japan's tissue consumption rate leads all of Asia and is more like that of Western Europe and North America. Paradoxically, Japan also leads the world with the development and consumer acceptance of automated toilets that replace the need for toilet paper for cleaning. These appliances have become routine in upscale hotels and homes. It is possible that the Japanese tissue consumption rate could be even higher without the automated toilet systems.

Japan's Tissue Mills range across its territory as shown in Figure 1. The growth of new capacity is shown in Figure 2 as the total count of tissue machines operating, under construction, or announced. The period from 2015 through 2018 saw an increase of over 70% of new tissue machines added as tissue companies in Japan built capacity to replace a portion of the tissue imports required to support consumption. More capacity is announced and under construction.

Japan's economy has been suffering from low growth for decades, but it has recently improved. The blue bars in Figure 3 show the population slowly decreasing from 2007 to 2019. The population loss and overall aging has reduced consumer consumption, resulting in slower economic growth and lower total tissue demand.

However, the plotted line shows strong growth in GDP per capita since 2009 that supports the ability of Japanese consumers to spend on tissue products such as paper towels.

Inflation has been very low overall with some historic deflation as shown in the blue bars in Figure 4. More importantly, the plotted line in Figure 4 shows a large drop in unemployment since 2010. Taken together, these economic indicators support continued, but very slow, increases in tissue demand. This contrasts with the rapid buildup of new tissue machines seen in Figure 2. An examination of import and export volumes can shed further light on this matter. Figure 5 shows that Japan has relatively low exports versus the main customer countries. South Korea is the largest tissue customer. Other key customers include China, Philippines, Indonesia, and Hong Kong.

Figure 6 shows Japan's tissue imports



Bruce Janda
Senior consultant, Fisher International

growing up to 2016 when the latest round of Japanese tissue capacity came online. Key tissue suppliers to Japan include China, Indonesia, Vietnam, and the United States.

Tissue imports are now outpacing exports by about 12X. Japan's tissue companies have room to expand if their domestic production is competitive with these imports.

JAPAN LEADS THE WORLD WITH THE DEVELOPMENT AND CONSUMER ACCEPTANCE OF AUTOMATED TOILETS THAT REPLACE THE NEED FOR TOILET PAPER. THESE APPLIANCES HAVE BECOME ROUTINE IN UPSCALE HOTELS AND HOMES. IT IS POSSIBLE THAT THE JAPANESE TISSUE CONSUMPTION RATE COULD BE EVEN HIGHER WITHOUT THE AUTOMATED TOILET SYSTEMS.



Figure 1

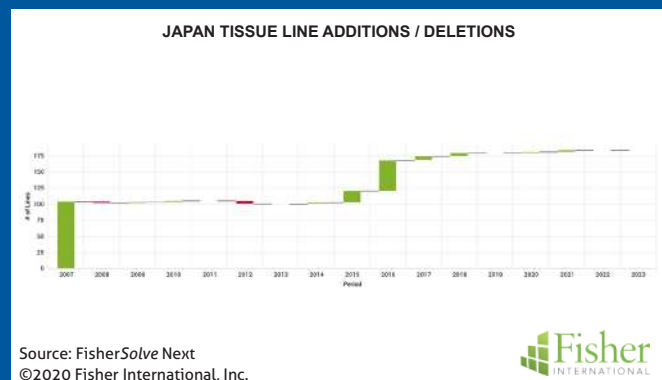


Figure 2

The country's domestic tissue production is focused on consumer tissue products as shown in Figure 7. Commercial or AfH products make up a small percent of the total production. This probably indicates that the aging population is focused on at-home products and the imports could be significantly comprised of commercial products.

A further breakdown of tissue production is shown in Figure 8 with the finished tissue products produced. Despite Japan's leadership in automated washing toilets, consumer bath tissue makes up most of its tissue production. Consumer facial tissue is the second most popular grade followed by consumer towels, indicating that Japan does not appear to have the consumer towel culture of North America.

Japan relies mostly on recovered paper for most of its tissue fibre as shown in Figure 9. Eucalyptus and Southern hardwood and softwood make up the rest of the fibre consumption. It produces no kraft pulp and a very small amount of sulfite pulp. Market recycled pulp is sold as bales and captive slurry systems.

Japanese tissue producers rely on mostly internally processed recycled fibre for the

SINCE MOST TISSUE PRODUCTION IS CONSUMER BATH, THIS CAN BE MISLEADING AS TO WHERE THE VOLUME OF IMPORTED FIBRE IS GOING VERSUS THE PERCENTAGE MAKEUP OF SMALLER PRODUCT TYPES.

major finished products such as consumer bath, facial, and towel. The chart in Figure 10 shows that consumer napkin, tissue wrap stock, and absorbent liner production use mostly purchased pulps. However, some of these market pulps are from domestic recycled fibre producers.

Since most tissue production is consumer bath, this can be misleading as to where the volume of imported fibre is going versus the percentage makeup of smaller product types.

Figure 11 provides a view of purchased fibre type and volume by finished product. This analysis completes the view in Figure 10 to provide a comprehensive picture. Consumer facial and bath use most of the imported eucalyptus pulp.

The import and export data in Figures 5 and 6 suggest a comparison set for benchmarking Japan's tissue manufacturing assets. China, Indonesia, Vietnam, South Korea, Turkey, and the United States

all have tissue industries with regional or global impacts and are in the Japan trade data set. Please note that all the benchmark exercises that follow are based on the average of each country's fleet of tissue machines. Some of the tissue fleets are very similar, while others have new and old assets.

Figure 12 shows Japan's average tissue machine against the benchmark set averages, differentiated by the technical age of the machines and speed of operation. The size of the bubbles represents the relative size of each country's tissue production. The United States and Japan have relatively old assets, and China, Indonesia, Turkey, and Vietnam are much newer. China, Vietnam, and Japan operate machines slower on average. Turkey, Indonesia, and the United States are in the top speed group. Another way of evaluating the tissue fleets would be a comparison on trim width. China would probably

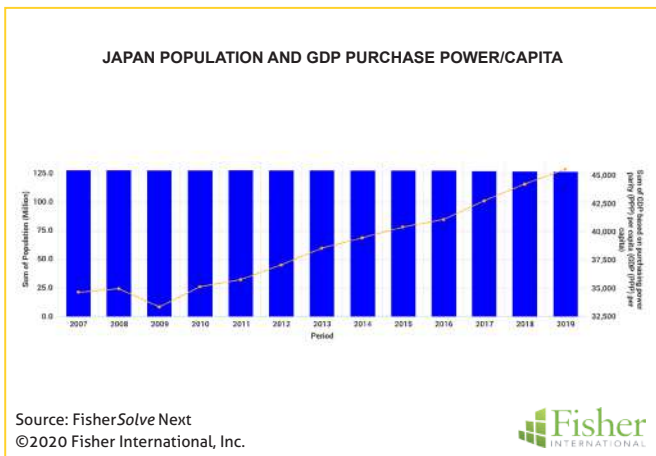


Figure 3

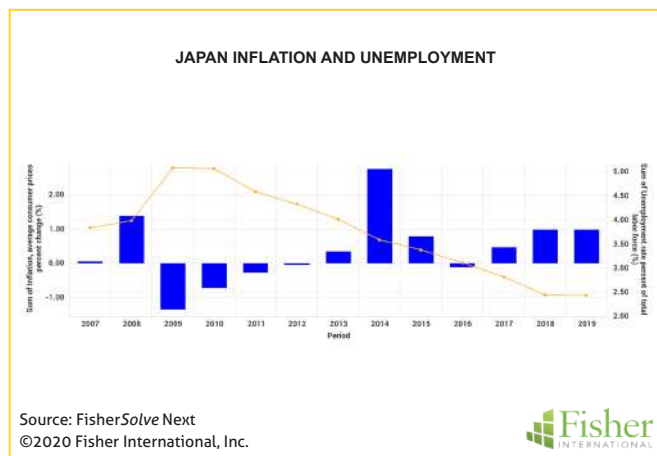


Figure 4

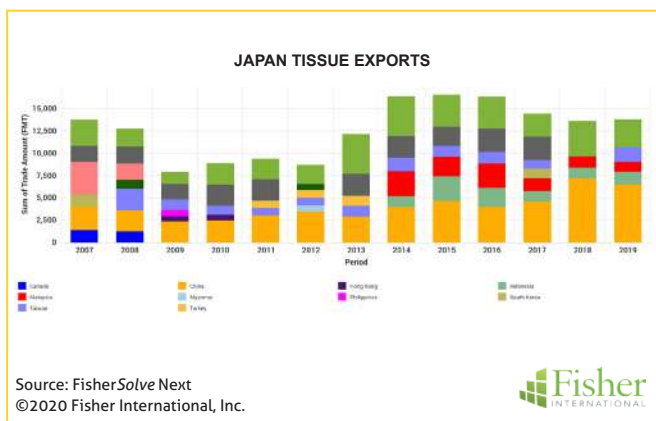


Figure 5

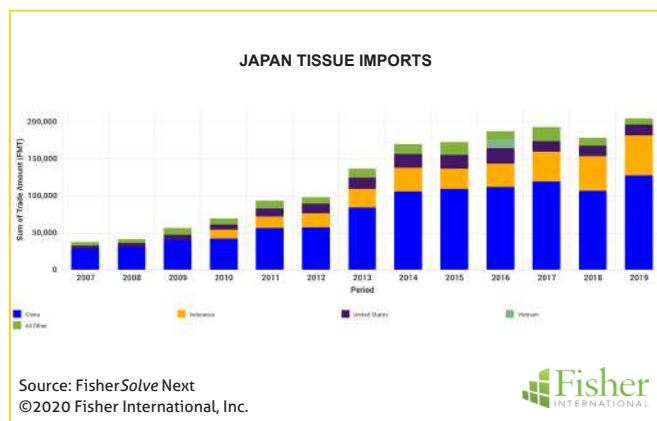


Figure 6

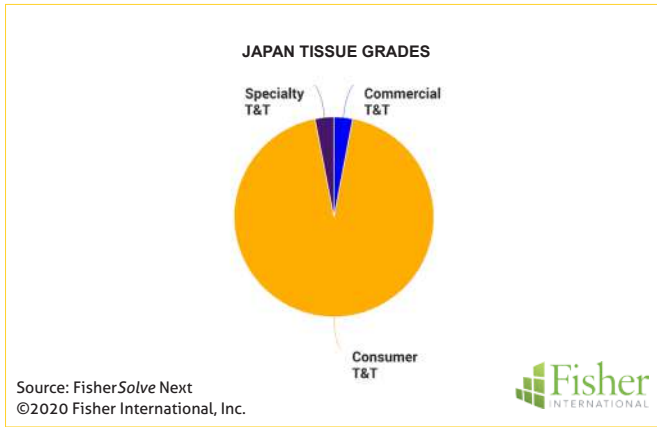


Figure 7

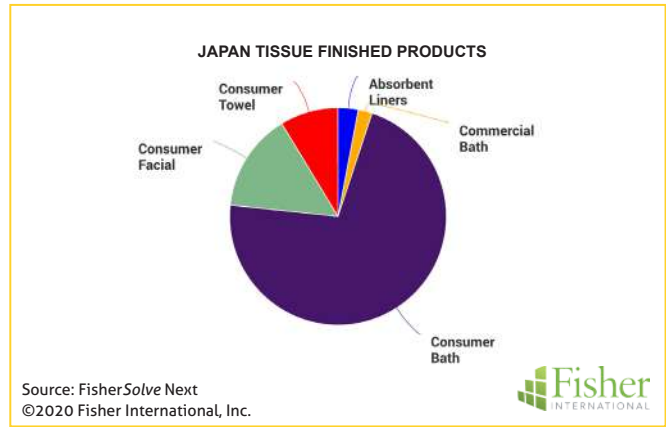


Figure 8

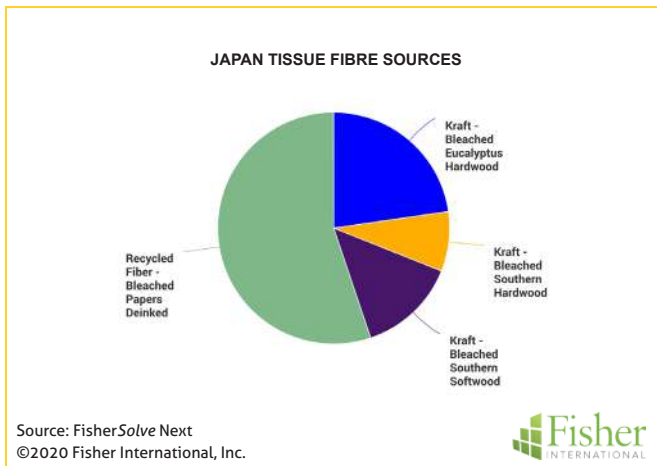


Figure 9

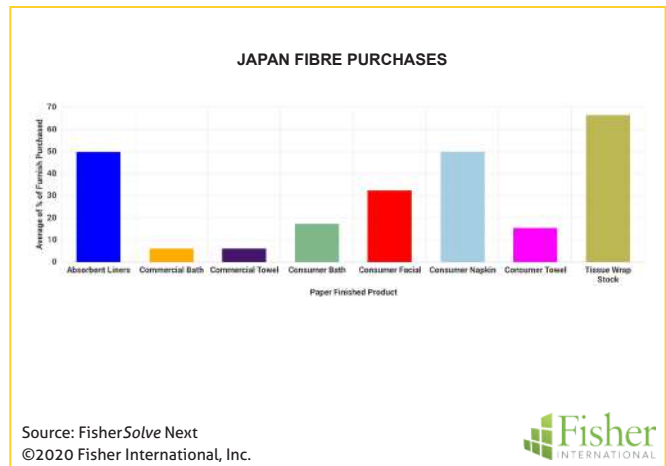


Figure 10

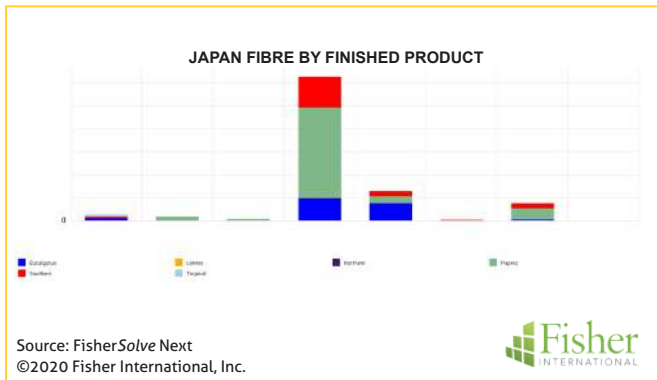


Figure 11



Figure 12

UNLIKE THE UNITED STATES, JAPAN AND THE REST OF THE BENCHMARK SET DO NOT HAVE A MEASURABLE ADVANCED TISSUE TECHNOLOGY FOR WET TEXTURING AND STRUCTURING. OVER 42% OF THE AMERICAN FLEET HAS SOME FORM OF THIS TECHNOLOGY AND CURRENT PROJECTS AND ANNOUNCEMENTS WILL RAPIDLY PUSH THIS TO 50%.

rank much lower with its numerous small machines. Unlike the United States, Japan and the rest of the benchmark set do not have a measurable advanced tissue technology for wet texturing and structuring. Over 42% of the American fleet has some form of this technology and current projects and announcements will rapidly push this to 50%. This technology hasn't made an

impact in the Asian Pacific Region yet, except for Australia. China is reported to be experimenting with smaller home-build equipment. China, Indonesia, and Vietnam all are advantaged in average cost compared to Japan and the United States. If transportation costs were included, this difference would be magnified. Japan appears to have a much higher energy cost than all the others in the set, except for South Korea.

Figure 14 spotlights the comparison on energy costs and shows the magnitude of disadvantage in this metric experienced by Japan and South Korea.

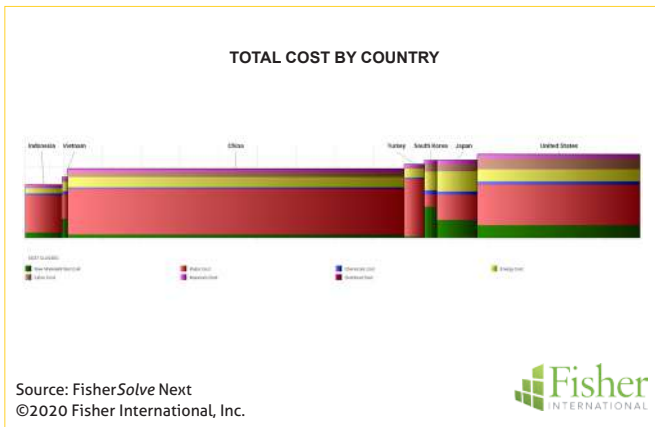


Figure 13

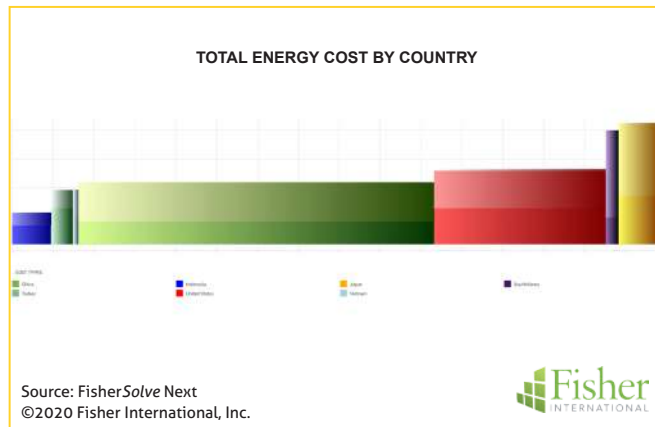


Figure 14

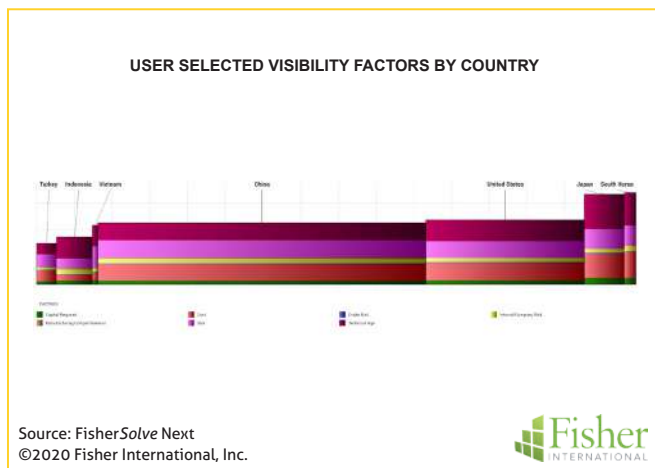


Figure 15

The cash cost benchmarks provide a snapshot of the health of the country's tissue industry. Figure 15 provides a three-five year future assessment using Fisher International's Viability Benchmark that includes costs and compares the future investments required, company risk, along with other forward-looking factors to predict future completeness. Again, Japan and South Korea appear to be more at risk of replacement or being shut down by import pressure.

Carbon emissions per tonne of finished product are expected to become a larger factor in the cost and viability of operations and acceptance of imported products. Japan's tissue assets are not significantly disadvantaged in this analysis. The United States has the highest level of emissions.

This is expected due to its unusually inexpensive energy and high percentage of advanced technology. The TAD process uses more energy per tonne of production but tends to produce higher performance at lower basis weights. That is not included in this analysis.

Japan is in the process of renewing its tissue assets with significant additions

CARBON EMISSIONS PER TONNE OF FINISHED PRODUCT ARE EXPECTED TO BECOME A LARGER FACTOR IN THE COST AND VIABILITY OF OPERATIONS AND ACCEPTANCE OF IMPORTED PRODUCTS. JAPAN'S TISSUE ASSETS ARE NOT SIGNIFICANTLY DISADVANTAGED IN THIS ANALYSIS. THE UNITED STATES HAS THE HIGHEST LEVEL OF EMISSIONS. THIS IS EXPECTED DUE TO ITS UNUSUALLY INEXPENSIVE ENERGY AND HIGH PERCENTAGE OF ADVANCED TECHNOLOGY. THE TAD PROCESS USES MORE ENERGY PER TONNE OF PRODUCTION BUT TENDS TO PRODUCE HIGHER PERFORMANCE AT LOWER BASIS WEIGHTS. THAT IS NOT INCLUDED IN THIS ANALYSIS.

since 2015. These are expected to result in replacement of some of the older high-cost machines. Low-cost tissue imports from China and Indonesia will continue to compete based on lower cost manufacturing factors. The country is now growing its economy while continuing to age and lose population. Tissue consumption per capita will also grow slowly despite automated robotic toilets.

Analysis of competitive position requires specifics on tissue producers and individual machines. This article

presents a static summary of Japan's tissue industry today. Fibre prices, exchange rates, and environmental regulations will change, providing some participants with advantages and others with new challenges. The country's tissue mills will continue to change hands and perhaps consolidate; neighbouring countries will likely invest in tissue-making capacity, thus affecting Japan's imports and exports.

UPDATED FORECAST PUTS JAPAN TISSUE GROWTH AT 6% IN VALUE AND 5% IN VOLUME

All-industry model assumes third pandemic wave in 2021 and up to 7.5% decline in global GDP before an anticipated recovery to set in in 2022.

With nearly 10kg per capita in retail tissue in 2019, Japan has already had one of the highest per capita consumption levels in the world. Not surprisingly then, and in view of the declining population, opportunities for organic growth in Japan remained limited. Innovation has been among the drivers to support industry revenues.

Pre-Covid trends saw the evolution of products like compressed toilet paper, which also supported Japanese consumers' increasing interest in convenience and time saving. Consumers appreciated compressed rolls as they require less frequent replacement and, therefore, reduce the time consumers need to spend shopping. This demand was bolstered by the increasing pressure on consumer time resulting from greater female participation in the paid workforce. Compressed rolls also proved popular amongst small and medium-sized businesses, which often purchase daily necessities such as toilet paper at nearby drugstores for convenience. The expansion of compressed toilet rolls illustrated manufacturers' efforts to generate value and increase profitability in a category that has already achieved a deep level of penetration in the market with contracting population.

With the onset and spread of Covid-19, Japanese tissue demand spiked well beyond the originally projected growth for 2020, rising in both value and volume terms. In fact, while Euromonitor International pre-Covid projections set expected value growth in retail tissue at 1% (USD, 2019 fixed exchange rate), updated forecast puts growth at expected 6% in value terms. Volume growth is set to see over 5% increase in retail by the end of 2020, compared to previously expected nearly flat performance. As in many other markets affected by Covid, home seclusion is behind surge in demand for at-home use.

Earlier days of the pandemic and above-normal consumer demand led to pressure on supply chain, in store and e-commerce space. In fact, Euromonitor International e-commerce price and SKU tracking

analytics VIA indicates that in April the proportion of Out of Stock SKUs had risen to over 40%. The pressure on supply chain eased up in the second half of 2020, as demand normalised.

Toilet paper, napkins and boxed facial tissues are amongst the categories to see the most positive impact from the home seclusion aimed at limiting the spread of Covid-19. In contrast, products designed for on-the-go consumption, such as pocket handkerchiefs, are seeing a slightly negative impact from the pandemic. The fact that such products are often purchased on impulse is a further constraint on their development as consumers have turned to less frequent, more planned shopping.

While home seclusions ease up, some of the adopted practices, such as working from home might linger. Indeed, Japan was already moving in this direction with its Work Style Reform policy, which is partly focused on making work more flexible. Although it will not compare with the levels of demand seen during the period of home seclusion, a trend towards more people working from home on a more regular basis might boost demand for products such as toilet paper for at-home use. At the same time, the negative economic impact of Covid-19 is likely to further intensify pricing competition in the already relatively commodified retail tissue category, as



Taro Yamato
Research Analyst, Euromonitor
International, Tokyo, Japan

consumers might trade down in view of tighter budgets. Euromonitor International Industry Forecast Model provides a variety of scenarios that demonstrate the potential impact of Covid-19-driven macro shifts. The most likely one has a probability of 25-35%, assumes third global pandemic wave in 2021, and 2020 global GDP ranging between -7.5% and -5.5%. In this scenario, Japan retail tissue value growth might see value sales in 2021 lose additional 0.5% in retail value sales. Scenarios that assume further declines in GDP, beyond the most probable scenario, would lead to stronger losses in value of retail tissue sales as trading down and affordability will emerge as even stronger priorities for households. The model anticipates the recovery to set in in 2022.

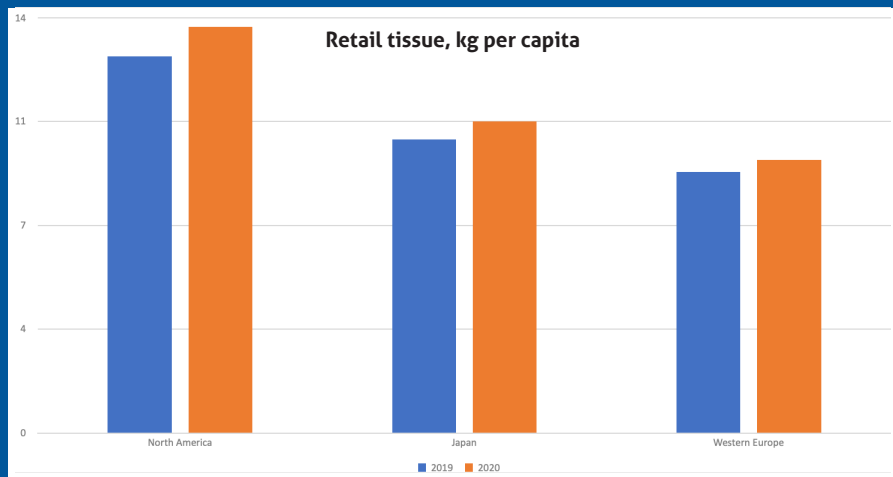


Table 1

Source: Euromonitor International

TISSUE USE HABITS ARE CHANGING AS 'NEW LIFESTYLE' TAKES HOLD IN JAPAN

Nippon Paper Crexia Co. President Mr. Kazufumi Yamasaki outlines focus on product development to meet challenges of rapidly changing market and the possibility of a third wave of the virus.

TWM/1: How has the Covid-19 pandemic impacted your company and how have you responded?

"People's hygiene habits and awareness have been changed throughout society to adopt the "new life style" recommended by the government. For this reason, products such as hand towels and wet wipes grew significantly as antivirus measures."

TWM/2: And on the local tissue market?

"From February, the rate of the infection spread began to appear, and in March and April, the momentum didn't slow down. Since the Japanese people refrained from going out due to the stay-at-home request by the government, consumers enhanced household stockpiles such as tissue products and consumables from staying at home. As a result, "panic buying" occurred and some products disappeared from the store."

TWM/3: What increases in volume for tissue products have you seen and do you expect that increase to continue in the longer-term?

"Hand towels and wet wipes were in high demand. Especially hand towels, which grew rapidly to be used as an alternative to jet air towels in office buildings. This tendency is expected to continue and grow for the time being since the demand of the restaurants and hotels to welcome foreign tourists, who had been stagnant due to immigration restrictions, is going to gradually recover."

TWM/4: What are your projections for how the AfH market will evolve?

"The AfH market is expanding from the restaurant and hotel business to theme parks and sports gyms and economic

recovery in the stagnant manufacturing industry such as machine tools would be recovered, so the market is expected to grow to some extent."

TWM/5: Are you seeing an increase in private label products, away from branded tissue products?

"Since not only our company but also other domestic tissue makers are aiming for coexistence with private label products, we anticipate that these products will increase."

TWM/6: What changes and trends do you forecast for the changes to people's buying habits?

"Depending on the property of the products, the type of consumers is divided into two: the ones who prefer price-oriented products, and the others who prefer quality-oriented products. We expect the products that meet each requirement will grow."

TWM/7: What are your plans for growth in terms of machinery investments or organic growth over the next year or two?

"We will invest management resources in the rapidly growing product category to build a thorough production system. Also, we will work on improving the efficiency of production system as well as upgrading the existing old machines or equipment."

TWM/8: How is the Covid-19 situation now in your local markets?

"Now that we are facing the second wave of Covid-19 and having new cases every day, including in Tokyo, the impact on the market is immeasurable. Although we are expecting some effect from the government's measures being gradually activated, with the



situation which is changing every moment as well as the possibility of the third wave arrival, we would say it will be difficult to predict the entire impact on the market."

TWM/9: In terms of e-commerce, do you forecast more and more people will start going online to buy their tissue and towel products?

"We anticipate that more and more people will purchase tissue and towel products online."

TWM/10: What are the main opportunities and challenges for you and the tissue market in the next few months?

"The range of use of facial tissues, hand towels, wet wipes and kitchen towels has begun to vary due to the change of wiping scenes that matches "our new lifestyle". It seems that the separating line of the usage among these products is disappearing. We would like to focus on developing new product category to meet a wide range of customer requirements."

MARUTOMI GROUP TARGETS UNIQUE PRODUCT DEVELOPMENT IN DRIVE TOWARDS 20% HOME MARKET SHARE

The goal of Marutomi Seishi Co., a tissue product manufacturer with facilities across Japan, is to reach a 20% share of the Japanese tissue market in the near future. TWM Senior Editor Helen Morris spoke to its President, Mr. Takeo Sano.



Marutomi Converting Co.: the group's new company was established in 2017 and specialises in converting unique toilet rolls such as ultra-long coreless rolls.

The Marutomi Group is a major player in Japanese tissue. Market share as 2020 draws to a close in extraordinary circumstances is 15%. A variety of production incentives are in place to increase that by a third again.

Through the intricacies of Japanese-to-English translation, company President Mr. Takeo Sano is eager to expand on those incentives.

The group comprises six companies, 13 facilities, 14 paper machines, 17 converting lines for conventional (with core) and 22 converting lines (without core). Annual production capacity is 160,000tpy.

By segment, consumer products including private brand are at 70%, AfH including coreless products is 30%, toilet rolls is 95% and facial tissue and hand towel 5%. All for home consumption, none for export.

Of his business strategy in general terms he says: "We are focusing on developing unique products that are different from other companies, with a care on stabilising market prices."

One of those unique products aims to drive the trend in the Japanese market towards the longer length of toilet rolls ... double and even triple existing lengths. This can be expected to have various merits

such as reduction of distribution costs and reduction of storage space in both warehouses and homes.

During the 'new normal' brought about by the pandemic, it is expected that sales of toilet rolls with longer length (triple or more) will increase so that consumers will be able to reduce the numbers of times they actually need to shop.

Mr. Takeo explains the ultra-long coreless product: "It has a length of 250-300mm and is sold for both commercial and household use. To increase production, we have added ten new and specialised converting lines in the past four years. Our main customers



Above: an example of the company's ultra-long coreless products, which are becoming increasingly popular in Japan.

of the AfH segment are Tokyo Disneyland, Universal Studio, and nationwide hotel chains. In addition to the AfH segment, 250mm ultra-long coreless rolls made from virgin pulp are catching many household customers."

"We expect to increase sales of our unique CNF-blended ultra-long coreless rolls. We will devise a growth strategy with focus on the development of eco-friendly products that have contributed to the SDGs."

While the growth of toilet rolls and facial towels is almost flat, growth of hand towels is around 4% every year. Demand for disposable wipe products, including hand towels, is expected to continue to grow.

Virgin pulp is another relatively new development. Marutomi Paper Co. and its group of companies, had originally provided products using 100% recycling toilet rolls to the market, but with concerns about the recent rise in recycled raw material costs and quality deterioration of raw materials it moved three years ago to stream more virgin pulp and higher quality.

Machinery, also, has been increased and upgraded: "Along with the strength of our converting lines, we purchased two new paper machines from Toscotec. One is in operation from last summer and the other will be in operation next spring."

A new company established in 2017, Marutomi Converting Co., specialises in converting unique toilet rolls such as ultra-long coreless rolls, flexiso printing lines, and three conventional converting lines (with core) to expand the production of virgin pulp products.

Such a technologically advanced nation has been well ahead in web order sales. The group embraced it years ago, and as across global economies this has surged during the pandemic. The new normal established by Covid-19 has contributed to the rising popularity of hand towels, and the prospect of a "disposable" product instead of cotton cloth, which is reusable in the Japanese market. Partner companies will meet the increased demand for base paper.

Another likely shift in the balance of in Japan's tissue future relates to erstwhile paper manufacturing companies. The market is likely to become more competitive in the immediate years ahead as more companies abandon their previous paper operations to move over partially or exclusively into tissue due to the influence of the paperless society.

So the emphasis is on developing unique products sourced from in-group facilities, stabilising market prices and creating a distinct reputation for eco-friendly products in the drive towards that 20%.

MARUTOMI PAPER CO. AND ITS GROUP OF COMPANIES, HAD ORIGINALLY PROVIDED PRODUCTS USING 100% RECYCLING TOILET ROLLS TO THE MARKET, BUT WITH CONCERNS ABOUT THE RECENT RISE IN RECYCLED RAW MATERIAL COSTS AND QUALITY DETERIORATION OF RAW MATERIALS IT MOVED THREE YEARS AGO TO STREAM MORE VIRGIN PULP AND HIGHER QUALITY.



Above: "We are focusing on developing unique products that are different from other companies," Mr. Takeo Sano, Marutomi Seishi Co. President

TRULY MULTI-FUNCTIONAL – MOPPING UP AND SMOOTHING OUT THE SPILLS AND THRILLS OF A HECTIC LIFE AT HOME AND AT THE OFFICE

Mum-of-two Louise Stemp is the Account Director of Contrast Creative, a full service creative and branding agency based in Manchester, UK. But the creativity doesn't end there. Here, she charts the spills, tears and snuffles, and the art and craftwork at the agency's home branch ... and the 'lifesaver' at hand.

With two children, we're constantly mopping up spills, drips, noses, etc, so we make use of many tissue products. We get through an inordinate amount of boxed tissues at this time of year with all the winter sniffles and colds; we have a box in the bedroom, living room and office. I also like to have packet tissues to hand when out-and-about as they wipe up tears, mud and blood – truly multi-functional!

Kitchen roll is a lifesaver that acts as a tool for mopping up spills and also as a makeshift serviette for the kids during meal times. The kids will reuse the tubes from the kitchen and toilet rolls in their crafting and we'll use lots of kitchen roll when painting to clean up the mess. As we approach Christmas I'll normally get some nice Christmas themed serviettes.

I try to balance budget with quality. I've found that cheap doesn't necessarily equal good value (is it me or are the tubes larger on cheaper toilet roll!) so my preference is generally for a luxury supermarket own brand which tends to not be too expensive - it does go down the toilet at the end of the day - but doesn't feel too utilitarian. With kitchen roll I prefer to get the biggest roll possible. I hate running out of kitchen roll, normally when the kids have spilt something across the table.

I rarely go for something fancy design wise, as again, it does just go in the bin. With tissue though I do think it's worth spending the extra, especially during cold season. There is nothing worse than the feeling of a rough tissue on your raw skin as you blow your nose for the 100th time in an hour.

I think my focus at the moment is more on budget than the environmental element for this type of product. We put all our paper products and old tubes in the recycling where possible – although my kids repurpose a lot of the tubes in their crafting into animals of different varieties – so I suppose it feels less of a concern than products which are non-recyclable or that don't break down naturally. We do check for the FSC logo, which I think, is pretty standard now. It would be great if more companies would have compostable packaging as standard though.

Following the outbreak of Covid-19, I don't feel that our buying habits have changed that much. I still prefer to shop in store and try not to buy more than we reasonably need. Whilst I have had online



shops, and it's something we make use of for our business, I like to pick what I get and know I'm going to get what I want. It's very disappointing to have waited in for your delivery to find the items you were looking forward to have been swapped out for something less suitable.

I think I buck the trend as I see more of my friends preferring the convenience of shopping online. We certainly do so for our business where it's easier to buy in bulk and just have it delivered than have to take the time out to shop.

Before the children we travelled to more exotic locations and the quality of the toilet paper was less of a concern than whether there was toilet paper, or even toilets! Again carrying pocket tissues came in handy.

Now we tend to travel (when we're able) to more mainstream, developed countries and it is less of a worry.

The pocket tissues still often come in handy though!



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SPECIAL FEATURE: ANNUAL REVIEW 2020

An exceptionally challenging year for economies, societies . . . and tissue. As the first year of Covid-19 draws to a close, TWM asks leading figures across the industry's global supply chain for their retrospectives on 2020 . . . and predictions for 2021.



Latin Americans were forced to reconsider primary needs and priorities

David Mackinson, Research Manager, Euromonitor, Latin America

One of the most immediate effects of the pandemic was the collapse of purchases that are associated with status, such as restaurants, tourism, or apparel. These have been replaced by goods and services related to living conditions inside one's home. This includes everything from cooking appliances to home office to cleaning supplies. I would also highlight the ability of households to adapt to a sharp drop in purchasing power. Latin Americans have been forced to reconsider their primary needs and overall priorities in order to survive an exceptionally challenging year. Consumers in Latin America are more carefully examining the cost-value relationship or products which means brand loyalty will be highly affected. Private labels in tissue have been especially successful at winning market share this year. Finally, it is absolutely imperative to highlight the boom in e-commerce and how retailers have adapted to this new normal.

E-COMMERCE HAS BEEN STEADILY GROWING OVER THE LAST DECADE BUT COVID HAS BEEN INSTRUMENTAL IN ACCELERATING THAT GROWTH. I WOULD HIGHLIGHT THE ROLE OF LAST-MILE PLAYERS IN E-COMMERCE IN LATIN AMERICA, SPECIFICALLY CORNERSHOP AND RAPPI AS KEY PLAYERS IN 2020.

Hoarding or panic buying of tissue products was not as common as in the United States or Europe, and since the AfH channel is far less developed here, it means that the channel shift from institutional to retail was much less dramatic. Euromonitor projections for the AfH segment in Latin America do not include a fully recovery until at least 2023; this is based on the consumer foods service segment, and the thousands of permanent closures during 2020, as well as the collapse of the travel and tourism industry, and finally the very slow return to corporate offices.

E-commerce has been steadily growing over the last decade but Covid has been instrumental in accelerating that growth. I would highlight the role of last-mile players in e-commerce in Latin America, specifically Cornershop and Rappi as key players in 2020. Some manufacturers are bypassing retailers entirely and attempting to reach consumers directly, mainly through social media. This applies to different industries and while tissue is not the exception, it is much more common to see in small/local companies. The most important conclusion here is that digital reliance will become the norm.

Another innovation is that department stores such as Ripley in Peru and Chile are selling all kind of items through their online platform, including toilet paper. This versatility is interesting and will be fundamental for positive growth now and in the future.

Income from wages in Latin America has fallen by 19% in 2020, compared with a global average of 11%. The most affected consumers will be among the region's lower-middle classes. Therefore, we expect some changes in their behaviour. For example, we expect continued growth in private labels, a trend that we are already seeing across the region in 2020.

On the bottom of the economic spectrum, we might also see a resurgence in daily purchases, instead of weekly or monthly ones. Within tissue, that means small grocery retailers like neighbourhood almacenes (warehouses) or bodegas, selling individual or single format items, such as a single role of tissue paper.

Paper towels saw their best year ever, growing at rates of over 20 and 30% in various Latin America countries. Increased time at home coupled with hygienic awareness are the two factors behind our forecast that this positive inertia will continue during the forecast period.



In North America the pandemic rages ... in China life has normalised already

Esko Uutela, Principal, Tissue, Fastmarkets RISI

The Covid-19 pandemic has drastically changed daily life around the globe, including freedom to move, employment, operations and liquidity of companies, and the global economy as a whole—which is undoubtedly now in a major recession. It is difficult to estimate how long and deep the downturn will be, but most economists share the opinion that it will be more serious than the 2008-2009 financial crisis now known as the Great Recession. Covid-19 has had distinctly different consequences on the consumer and AfH tissue sectors. The consumer tissue sector has seen a boom and record sales, while the AfH business has started to suffer from drastically less public traffic, unemployment, more home-office working, travel restrictions and downtime in the HoReCa segment.

Generally, the pandemic has been a global phenomenon; however, there are some regional differences regarding how much it has affected daily life and the tissue business. In Europe, the second wave has been worse than the outbreak phase in March-April, while in North America the pandemic has continued raging and recently reached the new record of more than 180,000 daily new case (at the time of writing). But China, where the

stocks sold out.

Toilet paper has benefitted very much, with 15% more sales throughout the week 2020 compared with the period of 2020. In the US, the growth in consumer bathroom tissue has been even more, close to 20%.

The consumer tissue business has seen a very positive year, and capacity limits have restricted the availability of the most popular brands, particularly in the US. Globally, we expect that the total tissue consumption will grow by around 5% in 2020, if not even more with continuing pandemic and intensive buying for reserve stocks at households. The outlook for 2021 is difficult to forecast. It is likely that the first half and the second half of 2021 will show different features. We believe that at least the first quarter and the beginning of the second quarter will not differ much from the current situation with consumer tissue doing well and the AfH sector continuing to be a bear market. From May-June onward, we expect that the pandemic will gradually release its hold, also as most likely vaccinations for part of the population should have begun for the risk groups at least. The AfH market is likely to survive, but not yet fully to the pre-pandemic level, and the consumer tissue business and shopping behaviour will return closer to its normal level. Global growth of 3.5%-4.0% can be expected for tissue consumption in 2021.

In the longer term, there are some positive factors helping tissue consumption. It is likely that people will continue to be concerned with hygiene issues, such as hand washing, which then requires drying.

And many washrooms have reportedly turned off air hand dryers because they have been found to be virus slings. This is a positive for paper towelling, at least in North America, Europe and Japan, and probably also in other regions.

In the consumer tissue sector, households are likely to maintain higher stocks at home than they had been—reports are saying at least two weeks' worth instead of one. And folded hand towels are also being found in households for hand drying, reducing the use of cloth towels.

Globally, the general awareness of the importance of good hygiene for protecting health is expected to have positive effects for tissue, and the number of tissue users will likely grow in countries with no tradition in tissue use.

FOR THE TISSUE BUSINESS, THE PANDEMIC HAS BEEN MORE POSITIVE THAN NEGATIVE UNTIL NOW, WITH THE EXCEPTION OF THE SUFFERING AFH SECTOR WITH VOLUME LOSSES OF 15-20% DURING THE PANDEMIC MONTHS BECAUSE OF HOME OFFICE WORKING, LIMITED PUBLIC TRAFFIC AND LOCKDOWNS.

coronavirus originated, according to current knowledge, has been saved from the second wave and announced only very few cases per day, amazing when compared with the huge size of the country. In China, life has practically normalised already.

For the tissue business, the pandemic has been more positive than negative until now, with the exception of the suffering AfH sector with volume losses of 15-20% during the pandemic months because of home office working, limited public traffic and lockdowns. Throughout the world, as the pandemic began people started panic buying toilet paper as well as other tissue products and disinfectants. Through this hoarding of tissue goods, many sales outlets had empty tissue aisles for weeks, and companies reported sales doubling and all



We believe consumer behaviour triggered by the pandemic will continue in years ahead

Patrice Minguez, President, Resolute Tissue

With the onset of the Covid-19 pandemic, 2020 has been a year unlike any other. We have seen a number of opportunities, but many challenges as well. The tissue division at Resolute experienced tremendous growth in sales in 2020 versus 2019, and we further established Resolute Tissue as a key player in the retail private label business. While our biggest opportunities were in the retail market where we experienced unprecedented demand and sales, our greatest challenges were in the AfH market. School and business shutdowns and closures (i.e., offices, restaurants, hotels) considerably reduced the demand for towel and tissue in this segment. As a result, we re-allocated AfH assets to fulfill some of the increased demand in the At-Home market, while other assets dedicated only to manufacturing AfH products were curtailed. We also invested in additional

safety equipment to minimise the risk of contracting Covid-19 for our employees while in the workplace. We initially witnessed a "panic buy", with an increase in the demand for towel and tissue in the At-Home market during the first months of the pandemic, which depleted manufacturers' inventory. With time, this impulsive buying practice and hoarding came to an end, and retailers' shelves were slowly re-stocked with tissue and towel, while At-Home orders remained steady due to the uncertainty of schools and businesses reopening. With the approaching winter season and the anticipated increase in the spread of Covid-19, retailers are pro-actively limiting individual purchases of tissue and towel.

Another trend we see with the closure of businesses and the increase in the unemployment rate is a shift in consumer buying behaviour to frequenting discount/dollar stores, where private label brands continue to capture an even stronger share of the bath tissue and paper towel market. Learning from the experiences of 2020, we believe that many future opportunities in our tissue business depend, in large part, on our ability to innovate and adapt. This could include sustainable packaging options, improvements to our supply chain to more proficiently deliver products to our customers, and streamlining our product mix to increase

efficiencies in our manufacturing operations.

The pandemic has shown us these changes can be made to everyone's satisfaction, both by creating manufacturing efficiencies while supplying our customers with products to meet their needs in a timely manner. We believe consumer behaviour will continue to change and follow the trend triggered by the pandemic. We will likely continue to see an increase in purchases through online channels, discount/dollar stores and clubs, with private label products gaining market share over better known name brands. As a result of the shortage of brand name products at the beginning of the pandemic, consumers now realise that lesser known private brands can provide comparable quality at greater savings.

In the first half of 2021, we believe we will continue to see strong demand in the At-Home market, which will slowly stabilise in the second half of the year. However, we don't foresee marked improvement in the AfH market soon. Many employers now understand that many of their employees can perform their jobs working remotely, and we predict we will see companies "re-inventing" themselves with more employees working from home, incurring less business travel and extensive use of virtual communications, reducing the need to staff large office complexes.



We built ahead of specific orders ... and were able to meet the demand when it came

Mauro Luna, Global Sales Director, Körber Tissue

a selection of standard machines and lines for converting and packaging. We made lines without order and without the customer, but they could be delivered quickly. This allowed us to meet the demands of our customers who were suddenly faced with increased demand for tissue products. Only very few companies in the world can make such an investment.

We invested in innovation during the first lockdown and developed a technological update that would allow the production of up to 10,000 masks (in rolls) per minute, and the use of a bamboo-based non-woven fabric that is biodegradable and can be disposed of with other compostable waste.

Following the outbreak of Covid-19, we

forecast that paper products will increase, and that there will be more attention for sustainable products. The AfH sector - dependent on hotels, restaurants, airports - has undergone a major decrease in tissue products in all markets. We also suffered in this side, but it was compensated by consumer goods products.

The AfH market will come back, and we will be ready! There will probably be a change in legislation that will force us to have tissue products instead of air dryers in many areas of our lives, and we are ready for this increase in demand. Another request will be the products that must have lotion, so that they have a sanitising effect against the virus. Again, we are also ready for this.

The year 2020 was a good year for Körber, despite the global situation. There was a worldwide increase in demand for tissue products that we were ready for. In a short period of time, we decided to make available

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I think that new products will be born following the change in consumer mentality. This will be key to drive the industry forward.

Andrew Green, Vice President, Tissue and Nonwovens, PCMC

We've seen an increase in the demand for at-home tissue and a decrease in AfH. For some customers, this has accelerated investments and for others it has postponed investment. Both brands and private label sales increased considerably, forcing customers to squeeze every single tonne of paper out of their converting lines.

In addition to increasing consumption of at-home toilet paper, social distancing and stay-at-home orders also increased the

demand for household towel and pushed forward online sales and new packaging formats and materials. We expect that some of these trends are here to stay.

Through at least the first half of the year, our customers will continue to be faced with high demand for at-home tissue and towel products. The demand for AfH will likely remain low through Q2, making investment decisions very difficult.



Industry leaders want to invest and make business, but they're cautious because there's a great lack of certainty

Carlo Berti, Sales Director, Gambini

I guess what we can foresee for the upcoming 2021 is something we all can perceive by looking at the new normal 2020 presented us with: great care for our health and hygiene, which tissue paper is one of the main players of, both at home and away from it. A fierce battle has started against hand-dryers in public spaces, as well: I think a lot of facilities will soon get rid of them, good for our industry!

Both folded and rolled tissue products will increase their sales volumes, since what we have so badly learned with this pandemic-related mess is here to stay: much more hand-washing and surface-

wiping, also in what we all hope will be the first (almost) post-Covid year: 2021. We are going to clean more (also at home), we all have become more careful when touching stuff, everywhere, no matter where we are.

From an industrial point of view, we haven't seen a real decline in new projects, but a slowed-down decision-making process: that's 2020's legacy. Industry leaders want to invest and make business, but they're cautious, because there's a great lack of certainty (which drains a lot of energy).

New products will be born following the change in consumer mentality ... this will be the key to drive the industry forward.



2021 will be a year of discovery – especially in private label

Marco Calcagni, Sales Director, Omet

The world of tissue has also certainly been affected by the situation, in particular the AfH market. Undoubtedly in 2020 we saw a decrease in demand in the AfH sector. However, this is partially balanced by the increase in demand in the consumer sector.

We believe that 2021 will be a year to

discover! The psychological effects of the pandemic have generated a lot of market instability. I don't think e-commerce can give a strong input into the tissue market, but I'm convinced that good opportunities can arise in the private label sector.

WE BELIEVE THAT 2021 WILL BE A YEAR TO DISCOVER! THE PSYCHOLOGICAL EFFECTS OF THE PANDEMIC HAVE GENERATED A LOT OF MARKET INSTABILITY. I DON'T THINK E-COMMERCE CAN GIVE A STRONG INPUT INTO THE TISSUE MARKET, BUT I'M CONVINCED THAT GOOD OPPORTUNITIES CAN ARISE IN THE PRIVATE LABEL SECTOR.

\$4M INVESTMENT AT ALABAMA MILL TAKES RESOLUTE FOREST PRODUCTS TO SECOND NATIONAL ENERGY AWARD

Case study: The modernisation of Coosa Pines, Alabama Pulp Mill – by David Marshall, Project Manager, Sustainability & Public Affairs, Resolute Forest Products.



David Marshall
Project Manager, Sustainability & Public Affairs, Resolute Forest Products

In November 2020, Resolute Forest Products received the American Forest & Paper Association’s Leadership in Sustainability – Energy Efficiency/ Greenhouse Gas Reduction award in recognition of the energy efficiency and greenhouse gas

improvements to the mill. Today, the operation is an important global manufacturer of the pulp used in tissue and absorbent consumer products. It currently employs close to 300 people and has an annual production capacity of 265,000 metric tonnes.

Resolute invested in Coosa Pines to reduce the mill’s environmental and carbon footprint, while highlighting and optimising the sustainable use of renewable resources. This innovative project underscores that cogeneration is an environmentally responsible source of reliable, baseload generation. Overall – including both scope one and two emissions – Resolute and the Coosa Pines team are proud our combined initiatives achieved a 75% reduction in the mill’s scope one and two GHG emissions since 2000.

This article was written for TWM by David Marshall, Project Manager, Sustainability & Public Affairs, Resolute Forest Products.

(GHG) reduction initiatives we undertook at our Coosa Pines pulp mill in Alabama. It is the second consecutive year we have won this category.

The award recognises Resolute’s \$4m investment to modernise the mill’s cogeneration turbine, which, in the turbine’s first full year of operation in 2019, led to a 65% reduction in the mill’s scope two absolute GHG emissions – equivalent to taking over 20,000 cars off the road.

Resolute is committed to reducing our absolute GHG emissions (scope one and two). At the end of 2019, we had achieved an 82% reduction company-wide compared to 2000 levels.

We also see rising energy costs and power supply disruptions as risks that must be managed. For this reason, our commitments are focused on improving the energy efficiency of our network of manufacturing facilities and maximising internal cogeneration of heat and power from renewable sources.

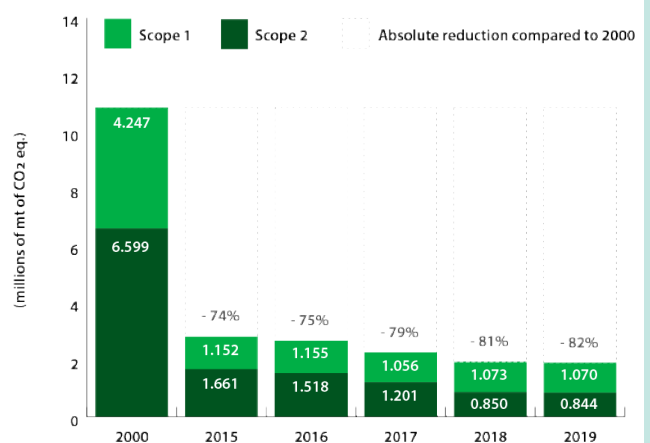
Over the past ten years, we have steadily reduced our environmental footprint, making major investments to modernise and optimise operations – significantly lowering the company’s carbon footprint and helping to mitigate climate change.

Investments also reduce costs, considering, for example, that energy accounts for a significant component of our production costs. Our \$4m investment in Coosa Pines focused on optimising 30 MW of renewable electric power generation capacity through the mill’s cogeneration turbine. The initiative allowed the facility to self-generate nearly 40% of its energy last year, while bringing total energy use (electricity and fuel) sourced from renewable sources, including biomass and hydroelectricity, to 68%.

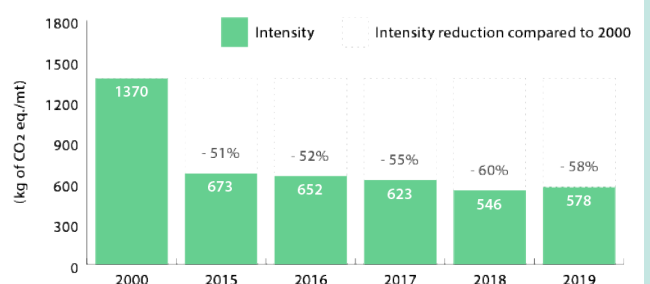
The modernisation of the mill is the latest step in transforming the operation into a more profitable producer of kraft fluff pulp. Since 2014, when the facility’s coal-fired power plant was shut down, we have invested \$42m in capital upgrades and

Resolute Forest Products: scope one and two greenhouse gas emissions, pulp and paper mills, 2000-2019

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EUCALYPTUS – ADDING TENSILE STRENGTH AND KEEPING FORMATION AND SOFTNESS

After nine years of research into reducing the consumption of wood per tonne of pulp, Suzano has launched industrial scale production at its Três Lagoas mill in Brazil. Heloisa Ramires, Suzano Research and Development Manager for Market Pulp, reports for TWM.

While eucalyptus pulp is traditionally used in tissue production because of its ability to deliver formation and softness to the paper, what if we could also enhance the mechanical properties of paper – and keep all the existing benefits?

Suzano's latest fiberline has been launched after nine years of research and development. Designed as an extended impregnation cooking process, it has already shown potential to increase tensile strength and refining energy reduction through its physical and chemical properties.

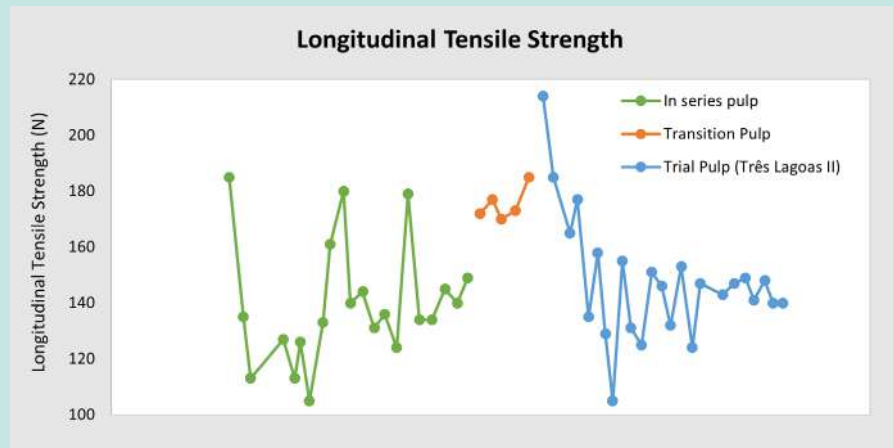
Pilot and industrial trials together with our partners have showed better results when working with higher kappa on kraft process. Cooking is the process where most of the delignification of the wood occurs, with about 95% of lignin removed. We have been able to start cooking to a high kappa number on an industrial scale at the Três Lagoas, Brazil-based plant – the first mill in the world to use this technology.

This means increasing the yield in pulp production – reducing the consumption of wood per tonne of pulp – and plenty of benefits, such as increased product quality, lower consumption of chemicals in the cooking and cost reduction.

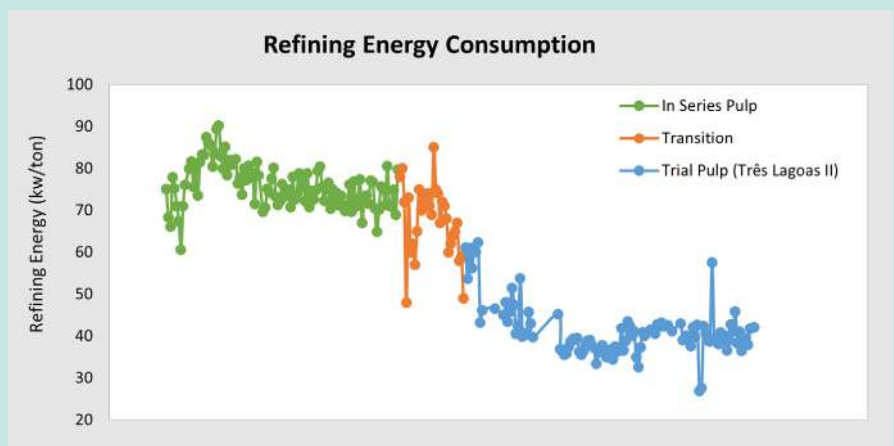
We have been able to cook eucalyptus wood at a regular kappa number that is higher than 20 – when most of mills runs 16 to 18. Due to this, the typical properties show higher tensile strength levels.

The technology allows higher tensile strength levels as typical properties, driven by the excellent preservation of cellulosic chains. As mechanical properties tend to limit the eucalyptus participation in the paper furnish, such pulps can also provide a higher content of this planted forests in the paper formulations.

New developments continue to be pursued in different areas, such as biorefinery. Our pulping process development area is constantly working in more sustainable ways to produce pulp. This is unique because it works in a higher yield level for eucalyptus, better preserving the fibres without generate the so-called rejects – uncooked wood that jeopardises the process in terms of yield and dirt count.



Above: Longitudinal tensile strength



Above: Refining energy consumption

THE TECHNOLOGY ALLOWS HIGHER TENSILE STRENGTH LEVELS AS TYPICAL PROPERTIES, DRIVEN BY THE EXCELLENT PRESERVATION OF CELLULOSIC CHAINS. AS MECHANICAL PROPERTIES TEND TO LIMIT THE EUCALYPTUS PARTICIPATION IN THE PAPER FURNISH, SUCH PULPS CAN ALSO PROVIDE A HIGHER CONTENT OF THIS PLANTED FORESTS IN THE PAPER FORMULATIONS.

As with Suzano's new fibreline, our target here is to create solutions connected with sustainability. We are increasingly looking for solutions in which to produce more with less.

This article was written for TWM by Heloisa Ramires, Suzano Research and Development Manager for Market Pulp.

INSIDE VIEW OF HOW LEADING COMPANIES ARE RESPONDING TO THE COVID CRISIS

The surge in tissue consumption meant an intense focus on operating efficiencies, increasing control of entire supply chains, generational software updates, a catalyst for major investment, and innovation which included creating a healthcare division manufacturing quality approved facemasks. Report for TWM by freelance journalist Simon Creasey.

EI



Simon Creasey
Freelance journalist

When the Covid-19 virus started to spread like wildfire through the global population earlier this year a strange thing happened. People started shopping for tissue-based products in their droves.

Supermarket shelves were emptied of toilet roll, kitchen roll and facial tissues as consumers prepared for government enforced lockdowns. And as news of this stockpiling spread, consumers rushed out to panic purchase supplies of tissue-based products, which put an even greater strain on supply chains and saw shelves emptied of stock as quickly as they were replenished.

So what impact did this have on producers of tissue-based consumer and AfH products? Has the way people shop the category changed for good? And with many countries globally enforcing second, tiered and regional lockdowns over the last few weeks what does the future outlook for the sector look like?

Tissue World Magazine spoke to a number of manufacturers who operate in the UK market and overseas to find out the answers to these questions.

Like many manufacturers, when it

became apparent back in the spring that supplies of tissue-based products were being placed under great strain, Northwood Paper Sales sprang into action. It realigned the capacities of its machines to maximise production and respond to customer requirements, says Paul Fecher, Chairman at Northwood.

"We were able to utilise all our factories, consumer and away-from-home to respond to the unprecedented call for additional product," says Fecher. "Using our UK mills and our global supply chain we turned on supplies of both virgin tissue as well as responding to the requirements for recycled wiping products in historically unprecedented volumes."

Thankfully for Northwood the timing of the lockdown and the panic buying that ensued came shortly after the business had completed investments in new converting equipment and had increased its paper-making capacities in the UK and Spain.

"We also increased our production of folded hand towel capacity having installed three additional converting lines, perfect timing, for the now focus on hand drying with paper as opposed to air born germ spreading electric hand dryers," says Fecher.

"With our focus on operating efficiencies and being in control of our entire supply chain and distribution, including our own transport operations, we were able to flex our production and distribution networks to absorb the increase in customer demands, either from our buffer stocks or additional outputs."

It was a similar situation at Better All Round, manufacturer of Ora household towels in addition to a number of other tissue-based products. The company was able to keep pace with demand by improving efficiencies internally, according to Oday Abbosh, company co-founder and Chief Executive.

"We did all the stuff that you'd expect sensible manufacturers to do," says Abbosh. "So we reduced the number of SKUs in

manufacturing and we optimised the factory to get as much production and as much capacity out in the market."

Another company that saw a major leap in demand when the first lockdown restrictions kicked in earlier this year is Accrol Group. "Demand in the first lockdown was up to a 10x bigger weekly, which meant that all UK tissue supply was exhausted, but this 'false' demand was driven by the way re-stocking computer software works in the retailers," says Gareth Jenkins, Chief Executive.

"This process has now been addressed across much of the supply chain and for the second lockdown and increased demand, Accrol was in a very good position with both stock and machine availability."

Manufacturers of away-from-home products also saw a similar increase in orders as companies producing tissue-based consumer products. "We had a massive surge in inquiries and a massive amount of orders," says Khalid Saifullah, Managing Director at Star Tissue UK.

"However, things fizzled out very quickly and demand was constrained because obviously schools, hotels, hospitality, leisure and food outlets were all shut down, which is a large part of our business."

Saifullah says orders picked up again in August, which coincided with the UK government's Eat Out to Help Out scheme that saw thousands of people take advantage of cheap restaurant meals.

"Usage went up quite dramatically [in August] and that has continued as things have started to open. Even though the [food and beverage] sector is not fully open, the general usage of the products has gone through the roof."

In the away-from-home sector he says sales have been fueled by enhanced cleaning regimes in hospitality venues, with operators moving from reusable cloths to disposable wipes. A similar thing occurred in the consumer sector as shoppers rushed to buy anti-viral wipes and facial tissues to

contain the spread of the virus. Abbosh says his company, which was already enjoying strong growth pre-Covid, saw a strong uptick in sales as the pandemic took hold. "Sales of our antiviral facial tissue just went through the roof and that comes back to people's desire to be much more focused on hygiene," he explains.

Initially some people feared that the stockpiling that took place in the spring might result in sluggish sales going into the summer as people worked through piled up supplies. However, these premonitions have not come to pass.

"What people sometimes lose sight of is the issue with the lockdown is the kids who would have gone to school and used the bathrooms at school are now using the bathrooms at home and the parents that would have gone out to work and used the bathrooms in the offices are now using the bathrooms at home, so the consumption in households has gone up," says Abbosh.

In addition to toilet roll usage per household increasing significantly over the last few months so too has usage of kitchen roll and facial tissues. "On the facial tissue front guess what - the government's been telling everyone hygiene, hygiene, hygiene, so the usage of product has increased because of hygiene awareness, and rightly so given the pandemic," says Abbosh. "Similarly, with kitchen towel people are much more sensitive to hygiene in the home and therefore we fully expect the use of kitchen towel to increase. Those are potential habit changes that will continue and I don't think they're going away anytime soon."

This projected increase in future demand for tissue-based products has been the catalyst for investment and innovation in the sector. Abbosh says his company has been working on new product lines for the last 18 months or so and recently launched a new anti-viral product that it is currently speaking to retailers about. He thinks we will see "more innovation in that space".

As too does Saifullah, who increased his company's production capacity earlier this year as part of a pre-planned investment programme. Star Tissue has just introduced a new Sirius advanced range of paper cleaning products and he's looking to invest more heavily in the production of hand towel products.

"One of the things we're seeing is people are washing their hands more often and a lot of people are replacing hand dryers, which have been found not to be very clean, to roll towel and hand towels,"

MANUFACTURERS RUSHED TO REASSURE CONSUMERS THERE WAS LITTLE DANGER OF TOILET ROLLS RUNNING OUT. KIMBERLY-CLARK ISSUED A STATEMENT TO SAY IT HAD 100 MILLION TOILET ROLLS STORED IN UK WAREHOUSES ALONE.

says Saifullah. "To fulfil this new demand, which I think will continue, we're looking at creating our own UK manufacturing facility making hand towels because the UK is not really good at that at the moment and a lot of it currently comes from Europe. So we've agreed an investment plan for a hand towel division to make hand towels here in the UK."

Northwood also spied an opportunity to capitalise on the changing demands imposed by the pandemic and has invested in its healthcare division, which now manufactures a CE certified range of facemasks, "which complement our sanitising products and dispensing product range all targeted to protect and combat against Covid-19 both at home and in the work space," says Fecher. He adds that the company has its own "in-house new product development group working on innovations to improve all areas of operations".

In addition to developing new products all manufacturers of tissue-based products are focused on ensuring their existing infrastructure allows them to meet any surge in demand from stockpiling consumers who are worried about future lockdowns.

In the week prior to the November lockdown imposed by the UK government, trade magazine *The Grocer* reported toilet roll sales increased by 43% as consumers were concerned that shops might run out of supplies. Manufacturers rushed to reassure consumers there was little danger of toilet rolls running out.

Kimberly-Clark issued a statement to say it had 100 million toilet rolls stored in UK warehouses alone: "We want to assure our consumers that Kimberly-Clark is doing its best to help ensure a steady supply of product to stores, and we're working closely with our retail partners and customers to understand their current needs and keep store shelves stocked," says Arist Mastorides, President of Family Care for Kimberly-Clark North America.

"We have plans to address the increased demand for our products, while keeping our employees healthy and safe. This includes accelerating production to help meet these needs. We always encourage our consumers

to shop normally to help stores keep up with demand."

While generally the outlook for manufacturers of tissue-based products looks healthy, the sector is not without challenges. Although it's anticipated household usage of toilet and kitchen roll products will continue to rise as people carry on working from home, sales of facial tissues, which traditionally increase during winter months, could fall as a result of measures implemented to stall the spread of the pandemic.

"You have social distancing measures in place," says Abbosh. "In schools they've become so focused on hygiene that this winter we probably won't see as many children in schools catching bugs and bringing them home to mum and dad, and then you've got enhanced cleaning regimes everywhere and people using hand sanitiser left, right and centre, so you'd expect that will help reduce the number of germs and bugs being passed around and that might actually result in perhaps not as much facial tissue being used."

Issues such as this aside Abbosh is optimistic about the future. As too is Saifullah. "It has been hugely challenging for the whole market, but with these challenges come new opportunities and I think those companies who are thinking ahead and who are investing to grow will do well, because I think there's going to be some really good opportunities in the new year. Cleanliness and infection control are much more on the agenda now than they have ever been," he says.

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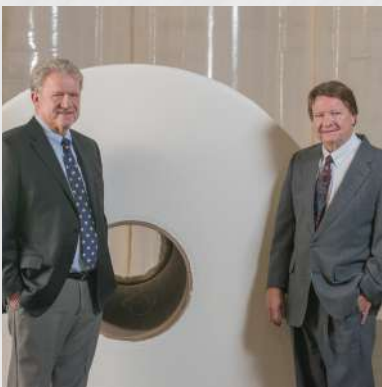
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