Tissue World
by informa

Magazine

SOUTH KOREA
An Asian leader takes on the giants

MARKET IN INDIA
Hygiene driving the rise of tissue

NIBS
Results – investments – innovations

TECHNICAL THEME: PULP
Iberian eucalyptus - fluff pulp potential

EXITISSUES
How to solve the skills crisis

Cover image: South Korean tissue is creating skin-wellness innovations such as tissue with red clay, green tea, and tissue infused with red camellia extracts to provide softness and skin-care benefits.

Image by Stefano Vuga, Founder, PurplePrint Creative, Spain/ Italy,www.purpleprint.eu

IN THIS ISSUE...

03 **FRONTISSUES**
South Korea: A tissue industry forging its own way in the shadow of regional giants and a demanding public.

04 **MARKETISSUES**
Tissue in India: demand and structured production growth signal the long-expected upturn. Strong cultural and economic changes are underpinning a volume-driven growth cycle in the world's largest potential market. Here Sumit Khanna, Director of the New-Delhi based Beeta Machines looks to the short- and long-term prospects.

06 **TISSUE WORLD AWARDS**
The Tissue World Awards are back! Held as part of Tissue World Lisbon 2027, the Awards ceremony will be held on Tuesday 6 April 2027 just before the Day Zero drinks to kick off the world's biggest tissue event.

08 **NEWS IN BRIEF**
A roundup of news from across the global toilet paper and kitchen towel markets. To get the very latest news go to: **www.tissueworldmagazine.com**

16 **SOUTH KOREA: COUNTRY REPORT**
South Korea: economy strong enough to support tissue demand in fiercely competitive region. With no new tissue capacity added since 2014 and a tissue trade balance heavily dependent on imports, the heavy reliance on recovered fibre will require a structural realignment if the consumer swing towards "pure and clean" products continues.

22 **SOUTH KOREA: COUNTRY REPORT**
Consumers swing towards practical tissue solutions for modern households and busy travel and working lifestyles. Premium products key by combing convenience, versatility and value delivered in a highly developed e-commerce infrastructure.

25 **APP: OPERATIONS REPORT**
Staying ahead in the rapidly evolving South Korean tissue market. Nishant Grover, APP Group Co-Chair of Investments, and Chairman of South Korea's MSS Group, explains its rapidly diversifying portfolio of premium and functional products.

30 **PULP: TECHNICAL THEME**
Iberian eucalyptus potential in fluff pulp for absorbent products. By European-headquartered eucalyptus pulp production company Ence's Vitor Batistela, Fluff Product Development Expert, Clara Orozco, Fluff Product Development Technician, Juan Luna, Fluff Product Development Manager, and María Peón, Technical Director of Commercial Area.

37 **EXITISSUES**
Tissue's skills crisis: funded, integrated and agile training systems key to meeting growing challenge from entry level to management. Shortages of advanced level personnel is a recurring problem for the future of manufacturing worldwide. An Industrial Strategy introduced by the UK government aims to provide an integrated multi-level solution. Bethany Windsor, Head of Multimodal and Skills Policy at UK-based trade association Logistics UK assesses its aims.

40 **AD INDEX**

toscotec.com

TT TurboDryer.
Recovered energy for maximum efficiency.

We Tech Care

TOSCOTEC
A Voith Company

South Korea: A tissue industry forging its own way in the shadow of regional giants and a demanding public

Helen Morris, Senior Editor, Tissue World Magazine

Few if any tissue markets are more challenging than that across the wider Asian landmass in which South Korea does business, where near-regional neighbours China, Japan and Indonesia operate at diverse levels of dominance.

The national economy is strong enough, despite domestic issues such as demographic decline and an ageing population, to support low but continued tissue demand – current value growth of 1% to reach KRW1.7tn – even against this fierce competition.

But the tech giant's performance nevertheless faces systemic challenges: no new tissue capacity added since 2014, a tissue trade balance heavily dependent on imports, and a heavy reliance on recovered fibre.

Consumers used to sophisticated products know what they want of tissue. While bamboo and recycled fibre currently dominates manufacturing, consumers are trending towards "pure and clean" products. As the pace of lifestyles undergo fundamental changes – smaller or solo households, long working hours, hectic transport systems – they want practical tissue solutions which combine premium, versatile products, convenience, value-for-money, sustainability, and delivery via a highly developed e-commerce infrastructure.

Is tissue nearing a breakthrough in India?

Tissue use in India has long been a story of extreme contrasts. Sumit Khanna, Director of the New Delhi-based Beeta Machines, sums it up well in TWM's *MarketIssues*: historically a "relatively low-priority niche" product operating against the yawning potential of the largest number of consumers in the world at 1.4bn. All that growth, long out-of-reach. Yet Beeta Machines reports that tissue is now "one of the fastest-growing segments within the paper and hygiene industry."

Key enablers are increased awareness of the importance of hygiene following the Covid pandemic, structural changes within the industry to increase capacity, significant government investment in infrastructure across the country, and increased foreign direct investment. The commercial sector has seen rapid development with formalised RTO policies, quick-service restaurants and HoReCa, and the rapid growth of cloud kitchens – delivery-only commercial cooking spaces that operate without a physical storefront, dining room, or dine-in seating.

The tissue market is opening up.

Skills crisis: funded, integrated and agile training systems the answer

Apprenticeships need to be taken seriously. Much has been said about the skills shortages facings companies as tissue manufacturing technology becomes ever more advanced. That was before large language and numerical models loomed. Shortages of advanced level personnel is a recurring problem for the future of manufacturing worldwide. An Industrial Strategy introduced by the UK government aims to provide an integrated multi-level solution. In *ExitIssues*, Bethany Windsor, Head of Multimodal and Skills Policy at UK-based trade association Logistics UK assesses its aims.

EDITORIAL HEADQUARTERS

Informa, 240 Blackfriars Road, London, SE1 8BF, UK
Tel: +44 (0)20 7017 5000

Senior Editor
Helen Morris: helen.morris@informa.com

Events Director – Tissue World Portfolio
Natalie Diaz-Martin: Natalie.diaz@informa.com

Portfolio Director & Special Projects
Ryan O'Donnell

Campaign Director
Roxanna Kashfi: roxanna.kashfi@informa.com

ADVERTISING ENQUIRIES

Europe & North America
Silvio Arati
T: +39 02 4851 7853 / sarati@studioarati.it

South and Central America
Selma Ugolini
T: +55(11)99904 5350 / selma@gova.com.br

China, Hong Kong & Macau
Rolle He
T:+86-20-3895 1670 / Rolle.He@informa.com

TISSUE WORLD MAGAZINE

is published bi-monthly. The subscription price is US$400 per year for 6 issues. Subscription is free for qualified subscribers in the tissue industry.

Please send address corrections to:
Informa, 240 Blackfriars Road, London, SE1 8BF, UK
Tel: +44 (0)20 7017 5000 / info@tissueworld.com

Subscription online at www.tissueworldmagazine.com

Tissue in India: demand and structured production growth signal the long-expected upturn

Strong cultural and economic changes are underpinning a volume-driven growth cycle in the world's largest potential market. Here Sumit Khanna, Director of the New-Delhi based Beeta Machines looks to the short- and long-term prospects. A TWM report.

The Indian tissue market has transformed from a relatively low-priority niche into one of the fastest-growing segments within the paper and hygiene industry.

In April 2023, the country surpassed China as the world's most populous, according to estimates from the United Nations. At that time, India's population reached approximately 1.425bn people, and now in September 2026 it has risen to 1.48bn compared to China's 1.41bn.

Over the last three years, the tissue market has moved beyond the post-pandemic recovery phase and entered a more structural, volume-driven growth cycle. This growth is being driven by rising health and hygiene awareness, the rapid expansion of the commercial sector, and significant government investment in infrastructure across the country. At the same time, we have seen a substantial increase in tissue-making capacity and overall volumes over the past few years, which is helping the industry respond to this growing demand.

Increasing investment in India, including foreign direct investment, is contributing signi cantly to the formalisation and expansion of these markets.

The consumption mix in the AfH segment has evolved rapidly over the last couple of years.

The key growth drivers have been QSRs (quick-service restaurants), technology and corporate offices, and, of course, the wider HoReCa sector. Increasing investment in India, including foreign direct investment (FDI), is also contributing significantly to the formalisation and expansion of these markets.

Online food delivery and the rapid growth of cloud kitchens - delivery-only commercial cooking spaces that operate without a physical storefront, dining room, or dine-in seating - have been particularly important growth engines, driving increased consumption of napkins and other tissue products. At the same time, the return-to-office trend and formalised office attendance policies implemented by technology companies and multinational corporations have reshaped corporate AfH consumption. FDI has also played an important role in institutionalising and expanding the backend infrastructure of the food-

As modern retail and organised retail continue to expand in India, I expect private-label tissue products to become increasingly relevant.

service industry. Given these structural changes, I believe the AfH segment has considerable room for further growth over the coming years.

In the private-label AfH category, these products currently have relatively limited significance. The segment is largely dominated by plain, non-branded products, particularly in institutional and commercial applications. Private label is likely to be more significant in the retail segment, where consumers are more directly exposed to brands and where retailers have greater opportunities to develop their own product ranges. As modern retail and organised retail continue to expand in India, I expect private-label tissue products to become increasingly relevant.

Over the next five years, I see three major opportunities for the Indian tissue industry; bamboo-based products, the continued expansion of the AfH segment, and international export markets.

These areas have the potential to accelerate India's development as a major global tissue manufacturing and supply hub. In particular, India's growing manufacturing capabilities, expanding domestic consumption and increasing focus on sustainable fibre alternatives could create significant opportunities for both domestic and international markets.

Additionally, one of the biggest challenges facing the Indian tissue industry is the continued dominance of the unorganised sector, the sectors that are part of the economy which aren't regulated, registered or strictly monitored. This creates challenges in terms of standardisation, quality consistency, and the overall development of a more structured market.

Another challenge is the influx of low-cost imported tissue paper and finished tissue products. While imports can provide consumers with more choice, very low-priced imports can put pressure on domestic manufacturers and make it more difficult for organised Indian producers to compete purely on price.

The industry therefore needs to focus on quality, efficiency, innovation and scale in order to build a more competitive and sustainable tissue market.

2023
India surpassed China as the world's most populous country

1.48bn
India's population in 2026

1.41bn.
China's population in 2026

The Tissue World Awards are back! The world's biggest tissue event starts with the industry's biggest night

Celebrating excellence across European tissue manufacturing with 12 categories including Tissue Mill of the Year, Transformational Leadership, and Energy Efficiency and Net Zero Achievement Awards up for grabs, the Tissue World Awards are officially back.

Held as part of Tissue World Lisbon 2027, the Awards ceremony will be held on Tuesday 6 April 2027 just before the Day Zero drinks to kick off the world's biggest tissue event. The Awards will honour the companies and individuals driving progress across the European tissue industry and will be held at a stunning Portuguese heritage site – the location of which will be announced very soon!

This exclusive evening brings together industry leaders for a formal ceremony and gala dinner recognising excellence across 12 categories. Following the awards presentation, guests will be welcomed to the Day Zero networking drinks at the same venue, creating the perfect start to Tissue World Lisbon.

Tissue World Awards timeline: Tuesday 6 April 2027

Arrival & Networking:
Arrive at our stunning heritage site gazebo for our welcome reception. Enjoy local wines and artisan canapés while live Portuguese music sets the perfect ambiance. Network with fellow guests in our dedicated reception area, all designed to immerse you in authentic Portuguese hospitality from the moment you arrive.

Dinner & Awards Ceremony:
Settle in for an elegant dining experience featuring a carefully crafted menu, live music, and entertainment. After dinner, the awards ceremony kicks off with a welcome speech, followed by the presentation of awards across 12 distinguished categories, celebrating excellence throughout the evening.

Post-Ceremony & Transition:
After the ceremony, celebrate and engage with award winners. Professional photos will be taken, and certificates will be presented to the runners up. Then gradually transition to the Day Zero drinks area to continue the evening's connections in a more relaxed setting.

Day Zero Drinks Reception:

Move to the Day Zero reception area in the same venue, open to all Tissue World Lisbon attendees. It's the perfect opportunity to continue networking with the broader tissue community.

Why Submit an Award Entry

- Gain industry recognition
- Showcase your achievements to the sector's most influential audience
- Benchmark performance
- See how your initiatives compare with the best in the business
- Amplify your story and inspire your team

Winners receive promotion across Tissue World's channels including Tissue World Magazine, website, and social media.

2027 Award Categories:

Energy Efficiency & Net Zero Achievement Awa

Leading the charge towards a low-carbon future. Celebrate mills that have achieved exceptional results in energy management and decarbonisation, proving that sustainability and operational excellence go hand in hand.

Digital Transformation Leader Award

Where technology meets tissue production. Honour mills that harness digital innovation to transform operations, elevate decision-making, and empower their workforce for the future.

Fibre & Product Innovation Award

Breakthrough thinking that reshapes what's possible. Recognise pioneering advances in fibre sourcing, processing, or product development that push the boundaries of both sustainability and performance.

Workplace Safety Excellence Award

Acknowledge mills where employee health and safety are woven into every aspect of operations, creating environments where people thrive and protection is fundamental to success.

Packaging Innovation Award

Smart packaging that delivers on every front. Celebrate solutions that masterfully balance sustainability, functionality, and customer appeal in ways that set new standards.

Holistic Environmental Leadership Award

Comprehensive commitment that raises the bar. Recognise mills demonstrating environmental excellence across all dimensions, establishing benchmarks that inspire the entire industry.

Operational Excellence Award

World-class performance, measurable results. Honour mills achieving outstanding manufacturing metrics that define what excellence looks like in tissue production.

Transformational Leadership Award

Leadership that changes everything. Celebrate executives who have fundamentally reshaped organisational culture, performance, and future trajectory through visionary direction.

Workforce Development & Future of Work Award

Building tomorrow's capabilities today. Recognise mills proactively preparing their teams for Industry 4.0, creating workplaces where human talent and technology amplify each other.

Product & Market Innovation Award

Innovation that meets the market where it matters. Honour breakthrough tissue products that successfully address diverse customer segments and evolving consumer needs.

Community & Regional Development Award

Impact that extends beyond the mill gates. Celebrate exceptional contributions to community prosperity and regional development, especially in rural or economically challenged areas.

Tissue Mill of the Year Award

The pinnacle of industry recognition. This honour celebrates all-around excellence, visionary leadership, and transformative impact across every dimension of mill operations. With over 30 years as the world's leading tissue industry event series, the Tissue World – Europe edition – will be held for the first time in Lisbon, Portugal, between 6-9 April 2027.

Submit your awards entries today:

https://tissue.awardsplatform.com

https://www.tissueworld.com/lisbon/about-the-awards/

NEWS IN BRIEF

A roundup of news from across the global tissue industry. To get the very latest news go to **www.tissueworldmagazine.com**

GLOBAL

K-C reports "significant strides" in Q2 results; enters next phase of development following Arbex launch

Kimberly-Clark Corporation (K-C) has announced it is "accelerating its transformation" while sustaining the momentum of its brands and businesses.

Its latest results report that the company's "durable operating model" has resulted in sustained, innovation-driven volume-plus gains, as net sales increase by 0.6% to of $4.2bn.

Gross margin was 38.3% compared to 35.0 percent in the prior year, while second quarter operating profit was $633m compared to $592m year-on-year.

For the first half of the year, net sales of $8.4bn increased 1.6%m and gross margin was 37.6% compared to 36.1% year-on-year.

Year-to-date organic sales increased 0.5%, as volume growth of 0.8%, led by gains in consumer tissue and professional categories was partially offset by price-related investments to drive consumer trial of new products.

Chairman and Chief Executive Mike Hsu said: "Our achievements in the first half of the year show that Kimberly-Clark's durable operating model is enabling us to accelerate our transformation while sustaining the momentum of our brands and businesses.

"Our team is executing with agility and addressing discrete headwinds that will moderate our growth and earnings potential in 2026.

"We continue to invest in our innovation-led growth agenda and superior brand propositions that win with consumers across the value spectrum.

"Combined with industry-leading gross productivity savings, we're ensuring that our base business is well positioned to drive sustainable growth in 2027 and beyond."

The company launched Arbex – its strategic joint venture with Suzano – in July.

Hsu added: "We entered the next phase of development of our next-generation, sustainable materials innovation platform by announcing the construction of an alternative natural fibres pilot plant in the Southwest of the United States.

"Our pending acquisition of Kenvue remains on track to close by the end of this year.

"In sum, our vision for a new kind of health and wellness company, reimagined care for billions of people around the world, and lasting value for shareholders is becoming clearer by the day."

The company also noted that its second quarter results were "negatively impacted by a discrete disruption stemming from false allegations regarding the quality of certain diaper brands in the China market."

It said: "Independent testing conducted by a government-certified third party confirmed the quality and safety of the company's products, refuting the false allegations.

"While the company is effectively navigating the situation, the impact from the spread of false claims across social media significantly impacted the company's diaper sales in China in the second quarter and is expected to further impact sales and profits in the near term."

Essity reports higher volumes and resilient profitability in latest result

Essity has reported a net sales increase of 2.6% to SEK35,061m (34,185) in its Interim Report Q2, as sales for its Consumer Tissue division decline due to lower prices and volumes.

EBITA for the group was SEK4,105m (4,628), while profit for the period was SEK2,693m (3,053).

Organic sales increased during the quarter, which the company said was driven by volume growth and positive development of the product mix.

Three of the four business areas – Health & Medical, Personal Care and Professional Hygiene – contributed positively, while growth remained strong in Incontinence Products Retail, Feminine Care and Medical Solutions.

Professional Hygiene grew because of higher volumes and a favourable product mix.

Sales for Consumer Tissue declined due to lower prices and volumes. The company said the business area is currently working intensively to secure profitable volumes and increase prices to address the cost headwinds that emerged during the quarter.

Ulrika Kolsrud, President and Chief Executive, said: "Higher volumes and an improved product mix resulted in sales growth for the quarter.

"Our focus on growth by developing our offerings, investing in marketing and selective price adjustments continued, and we reported good growth in Health & Medical, Personal Care as well as Professional Hygiene.

"Profitability was healthy even though the geopolitical situation causes higher cost inflation."

Essity reported higher margins for Health & Medical and Professional Hygiene, while margins in Consumer Tissue and Personal Care declined.

Consumer Tissue was negatively impacted by higher cost inflation, which Essity said it has not yet offset with price increases.

Innovation remains a key driver of competitiveness and growth

During the quarter, Essity launched new products across all business areas.

AI played a role in the launches, for example by shortening product development lead times.

Kolsrud said: "AI is increasingly being adopted to drive sales and improve efficiency across the value chain.

"One example of this is an agentic Group-wide AI solution for procurement deployed during the quarter that is helping to increase efficiency and improve data quality."

During the first half of 2026, she added that the company took key steps to strengthen the conditions for profitable growth: "Our new organisational structure has made us more agile and customer-focused, while actions taken under our cost savings programme is unlocking resources for investments in our strong brands.

"We have also taken important steps to optimise our portfolio and strengthen value creation through the acquisition in Feminine Care and the strategic review of Consumer Tissue."

In the second half of the year, she said the company expects to see positive effects from the new organisational structure and the implemented efficiency improvements.

"Our aim is to continue strengthening our market positions and expand in our most attractive categories and segments," she said.

Essity has reported a net sales increase of 2.6% to SEK35,061m (34,185) in its Interim Report Q2, as sales for its Consumer Tissue division decline due to lower prices and volumes. EBITA for the group was SEK4,105m (4,628), while profit for the period was SEK2,693m (3,053).

Navigator reports net profit up 85% in Q2 results; tissue segment shows "growth trajectory at a global level"

The Navigator Company has reported a turnover of €442m – up 4% on the previous quarter – and EBITDA rising by 21% to €79m in its second quarter results.

Net profit increased by 85% to €32m, which the company said reflects the recovery in volumes and prices across the core businesses and the growing contribution from the packaging and tissue divisions which accounted for over 30% of turnover.

For the first half of the year, turnover totalled €869m, with EBITDA of €143m and a net profit of €49m. The improvement in results was against a backdrop the company described as "strongly characterised by economic and geopolitical volatility, exacerbated by tensions in the Middle East and the resulting rise in the costs of raw materials, energy and logistics."

In response to rising operating costs, the company has launched a new programme to reduce variable costs, with the initiatives expected to offset almost half of this impact over the course of 2026.

This programme is expected to generate an estimated positive contribution of around €28m in 2027 and in subsequent years, strengthening Navigator's competitiveness and ability to create value. The company is also in the final phase of a major strategic investment cycle: in the first half of the year, total investment amounted to €127m, of which around €72m was allocated to environmental or sustainability initiatives.

The integration of new technologies and state-of-the-art industrial projects entailed a period of operational adjustment, with a temporary impact on available volumes of pulp and paper.

In response to rising operating costs, the Navigator Company has launched a new programme to reduce variable costs, with the initiatives expected to o set almost half of this impact over the course of 2026.

Tissue strengthens its international presence and focuses on premium products

The tissue business continues to establish itself as a strategic pillar of growth and international diversification, already accounting for around a quarter of turnover. Against a backdrop of increasing competitive pressure, tissue has shown a growth trajectory at a global level, demonstrating resilience in a more challenging economic and market environment. Tissue sales volume in tonnes was in line with the first quarter, with average prices rising by 2%. However, the company said this was constrained by increased competition in the UK and a focus on margin management, at a time when a project to transform the industrial footprint in that country is underway.

The project is aimed at enhancing operational efficiency through asset locations and costs, and is expected to be completed during the first half of next year. Sales outside Portugal by the tissue business accounted for 80% of sales volume in the first half of 2026 (compared with 54% in 2022, prior to the integration of Tissue Ejea and Tissue UK), with the most significant markets being Spain (32% of total sales), the UK (31% of total sales), and France (15% of sales).

The company said the At Home channel has been "gaining increasing importance", currently accounting for around 84% of sales, whilst the AfH segment accounts for the remaining 16%.

Recovery in international pulp prices

The company added that following "a year of strong pressure on international prices", the pulp market entered a recovery cycle during the second half of 2025, which consolidated in the first half of 2026.

This, it said, reflected a gradual improvement in the balance between supply and demand and increasing discipline on the production side. The benchmark index for short-fibre pulp – PIX BHKP in US dollars – closed the half-year at $1,409 tons in Europe, representing an increase of approximately 27%.

In China, the benchmark price closed the half-year at $605 tons, a rise of around 7%. Navigator's pulp sales totalled 111,000 tonnes this half-year.

€127m invested in the modernisation and decarbonisation of operations

In the first half of 2026, Navigator invested €127m (compared with €94m in the same period last year), of which around €72m related to value-creating investments in environmental or sustainability initiatives.

Resilience and recovery for the second half of the year

Navigator said the outlook for the second half of 2026 continues to be influenced by a challenging and highly volatile international environment, characterised by growing economic and geopolitical uncertainty, trade tensions and pressure on value chains. Following the recovery seen in the first half of the year, the pulp market began to show signs of adjustment in China during July, reflecting more moderate demand and greater availability of domestic production. Despite short-term adjustments, the overall outlook for 2026 remains one of average prices higher than those recorded in 2025, particularly for short-fibre pulp in Europe and China. In the Tissue segment, the outlook for 2026 "remains favourable overall", with demand expected to grow by around 0.8% in Europe and 1.6% globally.

Navigator continues to consolidate its competitiveness and reinforce a resilient, integrated and forward-looking strategy.

Sofidel and WWF Italy renew partnership on climate and energy

Sofidel and WWF Italy have renewed their partnership on climate and energy transition, responsible forest sourcing, and stakeholder awareness.

Eighteen years after signing their first agreement, Sofidel said the collaboration has "delivered positive and measurable results, supporting and giving concrete expression to Sofidel's decision to make sustainability a strategic driver of growth."

The outlook for the second half of 2026 continues to be in uenced by a challenging and highly volatile international environment, characterised by growing economic and geopolitical uncertainty, trade tensions and pressure on value chains.

The partnership began in 2008 when Sofidel joined WWF's international Climate Savers programme, becoming the first Italian manufacturing company and the first tissue company worldwide to do so.

Luigi Lazzareschi, Chief Executive Officer of Sofidel, said: "Our partnership with WWF has been a driving force from the very beginning. It has helped us build internal awareness, develop responsible energy and sourcing policies, and measure our progress rigorously. We believe this long-standing collaboration has been a valuable catalyst for cultural growth, helping Sofidel advance its sustainable growth journey on solid foundations."

Alessandra Prampolini, Director General of WWF Italy, added: "Over time, this partnership has shown how open, constructive, and rigorous dialogue can help strengthen corporate strategies and turn commitments into tangible, positive results. Renewing this partnership today reaffirms our shared commitment to tackling environmental challenges with ambition and responsibility, contributing to a more sustainable and resilient future, together."

The three areas of collaboration for 2026–2028:

On climate and energy, the partnership will support Sofidel in maintaining its commitments under the Science Based Targets initiative (SBTi). Regarding forest sourcing, Sofidel and WWF will continue their transformative collaboration, whose scope extends across Europe and the United States with the support of WWF International. Activities will include support in defining and updating responsible sourcing criteria, monitoring supply chains, and conducting an annual analysis of raw material origins to ensure traceability throughout the value chain.

This work builds on an ongoing effort that has already enabled Sofidel to source 100% of its virgin pulp from FSC® – and PEFC-certified sources.

The third focus area, awareness-raising, includes environmental education initiatives aimed at Sofidel's stakeholders, with WWF leveraging its expertise and experience to promote best practices and strengthen a culture of sustainability throughout the value chain.

Sofidel's commitment is recognized by leading international ESG rating platforms: in 2025, CDP awarded the Group an A – rating for Climate Change and Forests, with the highest score of A for Timber, as well as for Supplier Engagement on Climate Change.

Finally, EcoVadis awarded Sofidel the Platinum Medal, placing the company among the top 1% of companies worldwide with the highest scores.

BW Packaging announces strategic partnership with Crown Packaging

BW Packaging has strengthened its integrated packaging capabilities after forming a strategic partnership with Crown Packaging Corp.

The partnership brings together BW Packaging's portfolio of packaging machinery, automation technologies and integrated systems with Crown Packaging Corp.'s packaging automation, integrated packaging capabilities and distribution network of over 50 branches across the United States, Mexico and Canada.

The company said the partnership will provide customers with solutions designed to improve operational efficiency, reduce downtime, enhance sustainability initiatives and streamline end-of-line packaging processes.

Matt Venezia, Chief Commercial Officer, BW Packaging, said: "Our collaboration with Crown Packaging represents a shared commitment to helping customers solve complex packaging challenges through innovative technology and exceptional service.

"Combining Crown's customer relationships, service footprint and broad selection of packaging supplies with BW Packaging's integrated machinery solutions creates new opportunities to support our customers with scalable, future-ready packaging systems."

Rich Benkelman, Executive Vice President, Crown Packaging Corp., added: "Customers today are looking for more than individual products or standalone machines; they want integrated solutions and trusted partners who can help optimise their entire packaging operation.

"By partnering with BW Packaging, we're strengthening our ability to deliver world-class packaging machinery, technical expertise and long-term value to our customers."

ITALY

Cartiera del Vignaletto boosts production capacity with plant upgrade

Italy's Cartiera del Vignaletto has increased its production capacity after investing in a Toscotec-supplied complete cogeneration plant upgrade at its facility in Zevio. The aim of the rebuild was to increase the mill's energy efficiency, with the project featuring a complete upgrade of the cogeneration plant and air systems of PM4 and PM5.

Matt Venezia, Chief Commercial O cer, BW Packaging, said: "Our collaboration with Crown Packaging represents a shared commitment to helping customers solve complex packaging challenges through innovative technology and exceptional service."

Toscotec's scope of supply covered the complete rebuild of the thermal power system. This upgrade enables the full recovery of the gas turbine's exhaust gas to supply heat to the air systems for both hoods, as well as to generate both high – and low-pressure steam for PM4 and PM5.

The two paper machines have a combined capacity of 46,000tpy and manufacture high-quality tissue products including facial tissue, toilet paper, tissues, and kitchen towel.

Giovanni Pomari, Plant Director at Cartiera del Vignaletto, said: "Completing this project required strong cooperation between Toscotec and our technical team at Cartiera del Vignaletto, supported by the long-term vision of our ownership.

"The result gives our mill a more efficient, reliable, and sustainable energy platform for its future development."

The site is equipped with a 5.5 MW gas turbine capable of supplying electrical power to both machines.

Founded in 1966, Cartiera del Vignaletto produces jumbo and rewound rolls of different grades ranging from 15 to 40 gsm, covering the complete range of tissue products.

Velvet CARE has launched a commercial company in Germany to strengthen its direct presence in German, Austrian and Swss markets. Velvet CARE Germany will take responsibility for the products in the region and will be headquartered in Freiburg.

GERMANY

Velvet CARE boosts private label presence with new branch launch

Polish tissue manufacturer Velvet CARE has launched a commercial company in Germany to strengthen its direct presence in DACH (Germany, Austria, Switzerland) markets. Velvet CARE Germany will take responsibility for the sale of the group's products in the region and will be headquartered in Freiburg.

Its operations focus on providing the highest quality tissue products, particularly under private labels.

Velvet CARE products have been sold in the German market for over a decade under the "Veltie" brand and private labels manufactured for individual retail chains. This is due to the specific nature of the German market, where private labels account for over 85% of paper hygiene product sales.

Until now, Velvet CARE products have been distributed through an external partner. The company's operating model is based on close cooperation with Velvet Care's production facilities in Poland.

Deliveries will be made primarily from the Sulęcin plant (Velvet WEST), located near the German border, due to optimized logistics costs and increased operational flexibility.

Velvet CARE Germany will be led by Stephan Knapp, who has previously worked at companies include Unilever, Reckitt, and the Dr. Beckmann Group.

He said: "Our goals in these demanding markets are very ambitious, but realistic – we are able to offer excellent quality Velvet Care products at competitive prices"– emphasizes Stephan Knapp, DACH Country Manager, who assumed his position on 1 July."

The establishment of Velvet Care Germany is another step in the implementation of the company's international expansion strategy and confirms the key role of Germany as one of the most important markets for the group's further growth.

In the coming months and years, the company plans to expand sales in Austria and Switzerland.

Paweł Bajorek, President of Velvet Care, said: "We plan to triple Velvet CARE product sales in the German market by 2028... and then maintain an equally rapid growth rate.

"This is a very ambitious goal, but one made possible by our ability to offer the highest quality products—tailored to the needs of discerning consumers—as well as efficient logistics and full control over the sales process."

CANADA

Canfor announces closure of Northwood Pulp Mill

Canfor Corporation has announced the permanent closure of its Northwood pulp mill in Prince George, British Columbia. The closure results in an annual reduction of 300,000 tonnes of Northern Bleached Softwood Kraft (NBSK) from Northwood. Approximately 300 employees in Prince George are directly impacted.

The company said: "The pulp and paper sector continues to face significant challenges, including a structural shift in global pulp markets.

"Substantial additional pulp production capacity has come online globally, creating an oversupply in the market and downward pressure on global pulp prices.

"Combined with the persistent challenges accessing fibre, these factors have resulted in a prolonged period of unsustainable financial losses for Canfor Pulp. With no foreseeable improvement in the outlook, Canfor has made the difficult decision to close its Northwood facility.

Susan Yurkovich, President and Chief Executive, said: "The team at Northwood has worked tirelessly to improve performance, navigating challenging conditions to support their operation and we are grateful for their efforts. In the weeks ahead, we are committed to supporting our employees through this transition, including providing severance, and exploring opportunities to redeploy impacted employees to our other operating locations where possible."

Northwood will be following an orderly wind-down process and is expected to close in late Q4 2026.

NORTH AMERICA

Cascades 2Q results exceed expectations; tissue sector benefits from improved productivity and sales volumes

Cascades has reported second quarter results that "exceeded expectations", as its tissue sector results are reported ahead of expected range.

The corporation's second quarter sales of $1,219m increased by $32m compared with the same period last year, a result of consolidated net benefits of $13m from higher average selling prices and a favourable sales mix of $21m.

However, these factors were partially offset by a $2m impact from lower volumes, mainly in the packaging products segment, reflecting the impact of business closures and dispositions in previous quarters.

Second quarter operating income was $58m, compared with $81m in Q1 2026 and $36m in Q2 2025, while second quarter EBITDA (A)1 totalled $140m, an increase of 2%, from the $137m generated in the same period last year.

Cascades said this was driven by higher volumes, higher average selling prices and cost reduction initiatives across the corporation's businesses.

Hugues Simon, President and Chief Executive, said: "Our second quarter results exceeded expectations, driven by a stronger performance in packaging, reflecting continued solid production and demand levels across our paper mill network, meaningful progress in onboarding new customers and a more favourable economic environment than initially anticipated.

"Packaging volumes tracked ahead of our forecasted assumptions, contributing to stronger profitability in the quarter.

"In tissue, the results came in slightly ahead of our expected range. Performance benefited from improved productivity and sales volumes and the positive impact of ongoing cost reduction initiatives.

The operational improvements achieved over the past several quarters are translating into greater efficiency and a stronger cost structure across the business.

"Overall, our leverage ratio remained stable during the quarter, while net debt decreased modestly despite unfavourable exchange rate movements.

"On 20 July 2026, the US administration announced new tariffs on a number of products imported into the United States and we are conducting an assessment of the potential impact on our operations.

"Based on information currently available, certain tissue and packaging products exported to the United States could be subject to the announced 50% tariffs.

"While this represents a notable development, we believe the potential impact is manageable.

"We are actively pursuing several tactical initiatives that we expect will materially mitigate the potential financial impact of these tariffs over the coming months. In addition to the direct effects of this announcement, some customers whose products are subject to these tariffs may experience weaker demand or reduce production levels, which could negatively affect volumes in certain segments.

"Based on our current assessment and the mitigation actions underway, we remain confident in our ability to successfully manage these challenges.

"Looking ahead, this situation does not change our confidence in the earnings trajectory of the business.

"Supported by our ongoing profitability improvement initiatives and the momentum we continue to see across our operations, and excluding the potential impact of the announced tariffs, we now expect annual run-rate Adjusted EBITDA to exceed $600m during the second half of 2026, surpassing our original objective.

"The implementation of previously announced selling price increases in both packaging and tissue is progressing as planned."

In packaging, the recent $50 per ton price increase announced in June is expected to further strengthen earnings momentum.

He said: "This confidence reflects the significant work completed over the past several quarters to make Cascades a more resilient and agile organisation.

'Through operational excellence initiatives, cost optimisation efforts and disciplined capital allocation, we have strengthened our ability to respond effectively to changing market conditions and navigate a period of heightened geopolitical uncertainty.

"We are also closely monitoring developments in the Middle East. Continued instability has increased volatility in energy markets, and sustained increases in oil prices could create additional inflationary pressures on transportation, manufacturing and other operating costs."

South Korea: economy strong enough to support tissue demand in fiercely competitive region

With no new tissue capacity added since 2014 and a tissue trade balance heavily dependent on imports, the heavy reliance on recovered fibre will require a structural realignment if the consumer swing towards "pure and clean" products continues. Report by ResourceWise Senior Consultant Bruce Janda.

When this column last examined South Korea in 2023, it traced the country's long recorded history, dating to about 2300 B.C., and noted an economy built largely on manufacturing and trade after its separation from North Korea. At the time, South Korea was emerging from the Covid-19 pandemic while contending with higher energy costs tied to Russia's invasion of Ukraine. Those pressures have since intensified, as continued attacks on Russian oil refining and distribution linked to the war in Ukraine, along with the closure of the Strait of Hormuz, have pushed energy costs higher. Meanwhile, new US tariff regimes have disrupted global trade. Although tissue production has never been a major pillar of South Korea's economy, the sector is now facing mounting headwinds from an ageing population, rising pulp import costs, and higher energy expenses.

South Korea's tissue production footprint remains relatively concentrated, as shown in Figure 1. The country has 15 tissue-producing locations, several of them clustered within the same cities, and are difficult to distinguish on the regional map. Those sites are controlled by 10 producers: two publicly traded companies and eight privately held firms. Among the private operators is Yuhan-Kimberly, a Kimberly-Clark joint venture. Yuhan-Kimberly enjoys the largest market share at about 29%. Like Kimberly-Clark's partnerships in Mexico and Bahrain, however, Yuhan-Kimberly is not included in the new venture between Suzano and Kimberly-Clark.

The expanded map underscores South Korea's strategic position between Japan and China, while several other regional tissue-producers - including Indonesia, Thailand, Vietnam, and Malaysia - sit just beyond the frame.

South Korea appears to have the economic base to support continued tissue demand, as Figure 2's population and GDP (PPP) trends suggest. But the headline indicators do not fully reflect the strain of a rapidly ageing population or the fiscal pressure that demographic shift is placing on the country. Consumer behaviour is also diverging: higher-income households are increasingly turning to online, warehouse-style bulk purchases, while lower-income

Figure 1: South Korea Tissue Sites on Regional Map

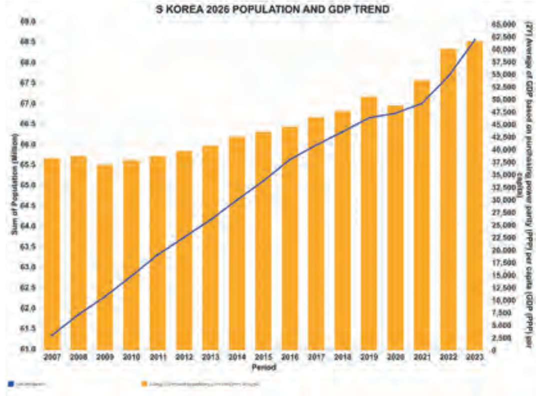


Figure 2: South Korea Population and GDP (PPP) Trend

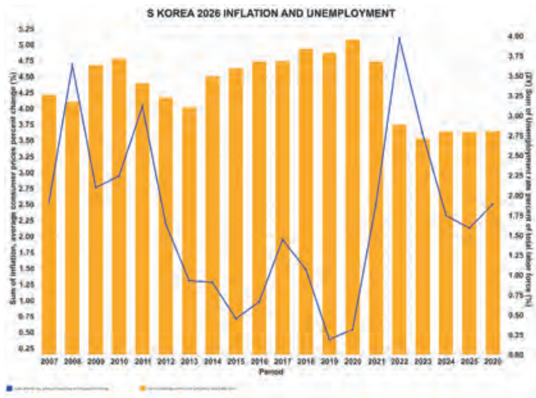


Figure 3: South Korea Inflation and Unemployment

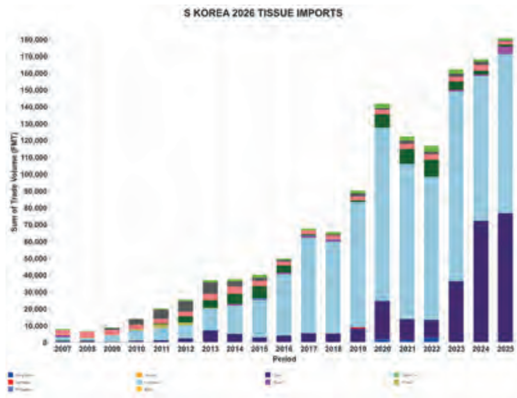


Figure 4: South Korea Tissue Import Trend

Figure 5: South Korea Tissue Export Trend

Figure 6: South Korea Tissue Machine Count Trend

shoppers are relying more on smaller purchases through convenience stores. Private-label tissue, led by Yuhan-Kimberly, has gained traction in that shifting market.

GDP (PPP) is forecast to expand by roughly 2% annually in the near term, with much of the growth expected to come from high-tech exports.

Inflation has begun to move higher, as Figure 3 shows, and the pressure could persist as energy and raw material imports absorb shocks from strained global supply chains. Unemployment remains low, partly because South Korea's ageing population

South Korea appears to have the economic base to support continued tissue demand, but the headline indicators do not fully re ect the strain of a rapidly ageing population or the scal pressure that demographic shift is placing on the country.

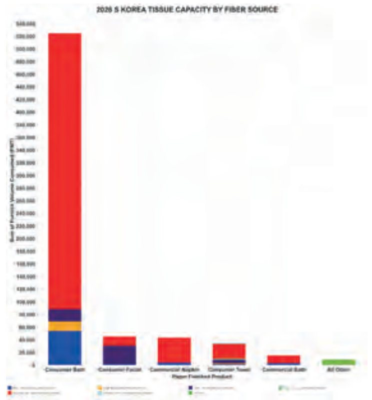


Figure 7: South Korea Tissue Production by Product Type and Fibre Source

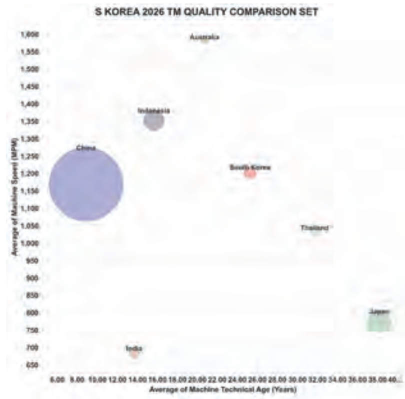


Figure 8A: South Korea Tissue Machine Quality Comparison by Machine Speed

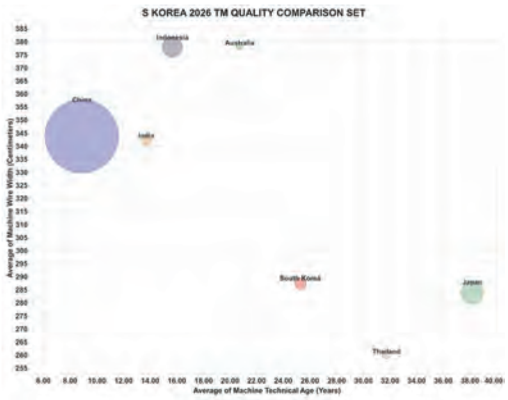


Figure 8B: South Korea Tissue Machine Quality Comparison by Machine Width

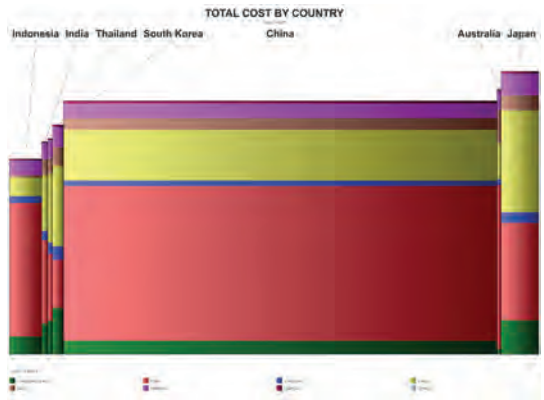


Figure 9: Average Cash Cost Comparison

is shrinking the workforce. For domestic tissue makers, that combination is accelerating investment in manufacturing and packaging automation, along with projects aimed at reducing energy use. Even so, rising cost pressures could leave South Korean producers less competitive than regional rivals such as Indonesia.

South Korea's tissue trade balance has shifted sharply over the nearly two-decade study period. Imports have climbed almost twentyfold, while exports reached their high point in 2019. Figures 4 and 5 show the import and export trends on the same Y-axis scale, underscoring the widening gap between the two. Today, tissue imports are roughly nine times the level of exports. Indonesia and China are the two leading sources of tissue imports.

South Korea's tissue trade balance has shifted sharply over the nearly two-decade study period. Imports have climbed almost twentyfold, while exports reached their high point in 2019.

New tissue-machine investment has been limited over the past two decades compared with other developed markets, as Figure 6 shows. Commercial and specialty tissue each recorded one machine shutdown during the period. Consumer tissue added one machine in 2007, 2011 and 2014, while 2013 marked a larger replacement cycle with five new consumer-tissue machines. The segment also lost one machine in 2008 and two more in 2015. No additional machines have been announced, and South Korea has not added new tissue capacity since 2014.

Figure 7 breaks down South Korea's tissue output by finished product and fibre source, revealing an industry that relies heavily on recovered fibre across nearly every product category. The red bar segments underscore that dependence. The approach could become a vulnerability as consumers place greater emphasis on "pure and clean" products and scrutinise chemical additives more closely. If South Korean buyers were to adopt concerns similar to those seen in China over recycled fibre in products used in direct human contact, producers could face pressure to shift their furnish mix. With limited domestic forest resources, however, South Korea must import virgin baled pulp, raising the possibility that mills will look to domestic non-wood fibre sources to offset some of those costs.

Consumer bath tissue dominates the country's tissue output, with volume far exceeding all other formats combined. That segment also uses eucalyptus fibre, along with smaller amounts of northern softwood and bleached non-wood short fibre—an indication that these furnishes are likely used in premium, higher-softness grades. Consumer facial tissue contains higher levels of eucalyptus fibre and some recovered fibre, while commercial napkins, commercial bath tissue and consumer towels are produced largely from recovered fibre.

Commercial tissue remains a relatively small part of South Korea's production base compared with markets in North America and Western Europe. Commercial napkins are the notable exception, standing out as the strongest segment within the country's away-from-home tissue mix.

A comparison group of Australia, China, India, Indonesia and Japan was selected to benchmark South Korea's tissue-production base against current trade partners and potential lower-cost competitors. Figures 8A and 8B use bubble charts to compare tissue-machine quality, with bubble size indicating production capacity. In both charts, the X-axis shows average technical age. The Y-axis differs: Figure 8A plots average machine speed, while Figure 8B plots average machine width. Although analysts typically use one measure or the other to illustrate machine capability, this review includes both because speed and width together reveal wide differences in productivity across the group. Those same factors are also reflected in the average tissue-machine viability analysis shown in Figure 10.

China operates the newest tissue machines in the comparison set, with India and Indonesia close behind. South Korea, Thailand and Japan have the oldest fleets on average. Indonesia and Australia also benefit from faster and wider machines, creating a productivity advantage that spreads labour and overhead costs across more tons of output. That advantage could become increasingly important as South Korea and Japan contend with shrinking, ageing populations and tighter cost pressures.

Figure 9 shows how sharply tissue-production costs vary across South Korea's regional peer group, with each bar measuring average cash cost per ton and its width reflecting production capacity. Australia and

Consumer bath tissue dominates the country's tissue output, with volume far exceeding all other formats combined. That segment also uses eucalyptus fi re, along with smaller amounts of northern softwood and bleached non-wood short bre

Japan occupy the highest-cost positions, while South Korea sits slightly below China's average. Indonesia stands out as the region's clear low-cost producer. Energy, shown in the yellow bars, is already exerting an outsized influence on the cost picture, even though the underlying estimates were developed before the Iran war.

Figure 10 shifts the comparison from immediate cash costs to a broader test of long-term competitiveness, measuring the average viability of tissue machines across several countries. The FisherSolve model factors in estimated capital requirements, production costs, machine size, technical age, local economic risk by grade, internal company risk, manufacturing competitiveness, tons produced per unit of trim and export fees. Taken together, those indicators offer a five-year view of which tissue fleets are best positioned to compete.

By that yardstick, South Korea's tissue fleet ranks as the second weakest in the group, ahead of only Japan; higher scores signal lower viability or greater risk. The country is weighed down by higher capital requirements and production costs than most regional competitors, while Indonesia benefits from a lower-cost base and lighter capital needs. Figure 12 adds an emissions dimension to the same competitiveness story.

Figure 11 shows a focus on energy costs per ton of the comparison set. This chart breaks energy costs into steam, electric power and direct fuel. The figures were measured in early 2026, before the Gulf war, and could shift significantly as regional energy markets respond. Indonesia holds the lowest

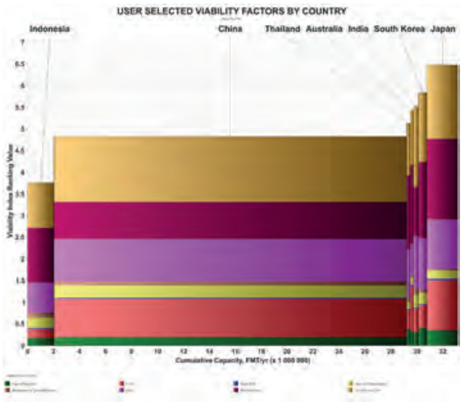


Figure 10: Average Tissue Machine Viability Comparison

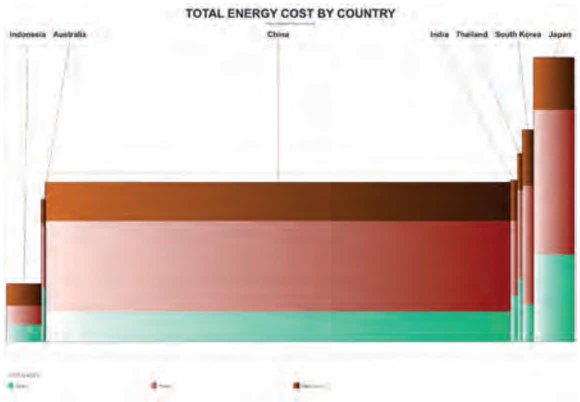


Figure 11: Average Energy Cost/Ton of Tissue Produced

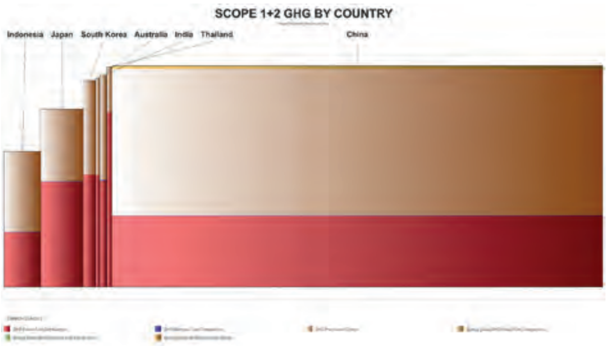


Figure 12: Average Carbon Emissions/Ton as Scopes 1 & 2

energy-cost position per ton, while South Korea and Japan sit at the high end. That spread provides important context for the viability comparison shown in Figure 10.

Figure 12 adds an emissions lens to the regional comparison, showing Scope 1 emissions from on-site fuel use in red and Scope 2 emissions from grid electricity in tan, each measured per ton of finished tissue. Scope 2 results depend heavily on the carbon intensity of the local power grid. Indonesia benefits from a relatively low-carbon grid and lower fuel-related emissions, helped by a larger share of tissue machines located at integrated pulp sites where heat and electricity can be generated from carbon-neutral biomass.

China remains the region's largest source of tissue-production emissions, both in total carbon released and in emissions per ton of tissue produced. Much of that output is tied to the electricity grid supplying production sites.

China remains the region's largest source of tissue-production emissions, both in total carbon released and in emissions per ton of tissue produced. Much of that output is tied to the electricity grid supplying production sites. Thailand, India, Australia and South Korea also sit near China's carbon-intensity level, underscoring how power and fuel supply can shape the environmental profile of tissue manufacturing.

Summary

South Korea's tissue sector is facing mounting pressure from higher energy costs, rising pulp import costs, an ageing population, and shifting global trade conditions. The country's tissue-production base is relatively concentrated, with 15 production sites controlled by 10 producers; Yuhan-Kimberly remains the leading player with about 29% market share.

Domestic demand appears supported by South Korea's strong economic base, but demographic ageing and changing shopping patterns are reshaping consumer tissue purchases.

Tissue imports have grown sharply, rising almost twentyfold over the study period, while exports peaked in 2019; imports are now roughly nine times higher than exports.

Indonesia and China are South Korea's leading sources of tissue imports, underscoring the importance of regional low-cost competitors.

New tissue-machine investment has been limited, and South Korea has not added new tissue capacity since 2014.

South Korea's tissue production relies heavily on recovered fibre, a potential vulnerability if consumers increasingly favour "pure and clean" products made with virgin fibre.

Consumer bath tissue dominates domestic output, while commercial tissue remains a relatively small part of the country's production base.

Compared with regional peers, South Korea operates an older tissue-machine fleet, while Indonesia and Australia benefit from faster and wider machines that support stronger productivity.

South Korea's average cash costs are higher than Indonesia's and sit near China's level, with energy costs playing an increasingly important role.

In long-term machine viability, South Korea ranks as the second weakest in the comparison group, ahead of only Japan.

Indonesia stands out as the region's strongest low-cost competitor, benefiting from lower production costs, lower energy costs, and lighter capital requirements.

Energy-cost volatility, exchange-rate swings, fibre-price changes, and environmental regulation are likely to shape South Korea's tissue competitiveness in the years ahead.

Carbon emissions add another competitive dimension, with South Korea near the higher-intensity group alongside China, India, Thailand, and Australia.

Further consolidation or ownership changes among South Korean tissue producers are likely as regional competition intensifies and new capacity develops in neighbouring countries.

South Korea's tissue industry is moving into a tougher competitive cycle, with its prospects increasingly shaped by regional rivals and the quality of the machines they operate. Indonesia is well placed to emerge as the region's leading tissue exporter, backed by lower costs and stronger production economics. In South Korea, domestic output appears to be narrowing as capacity growth stalls and imports gain share. The divide reflects a broader split in the economy: high-tech industries and their workers continue to advance, while lower-technology manufacturing and workers face rising pressure. Tissue producers are also wrestling with higher energy and fibre costs as consumer demand fragments by income level and purchasing channel.

Global volatility is intensifying those pressures. Shifts in fibre prices, exchange rates, energy markets and environmental regulation are reshaping the economics of tissue production across the region. South Korean mills are likely to see further ownership changes and consolidation, while new tissue making investment in neighbouring countries could alter the country's import and export flows in the years ahead.

South Korea's tissue industry is moving into a tougher competitive cycle, with its prospects increasingly shaped by regional rivals and the quality of the machines they operate. Indonesia is well placed to emerge as the region's leading tissue exporter, backed by lower costs and stronger production economics.

Consumers swing towards practical tissue solutions for modern households and busy travel and working lifestyles

Premium products key by combining convenience, versatility and value delivered in a highly developed e-commerce infrastructure. Report by Euromonitor International Consultant Per Brandberg.

South Korea's retail tissue market continued to demonstrate resilience, recording current value growth of 1% to reach KRW1.7tn. While growth remained modest, the category benefited from the essential nature of tissue products, the continued dominance of e-commerce, and rising consumer demand for premium and sustainable offerings. However, brands are operating in an increasingly challenging environment shaped by demographic decline, population ageing, and intensifying competition from private label and value-oriented alternatives.

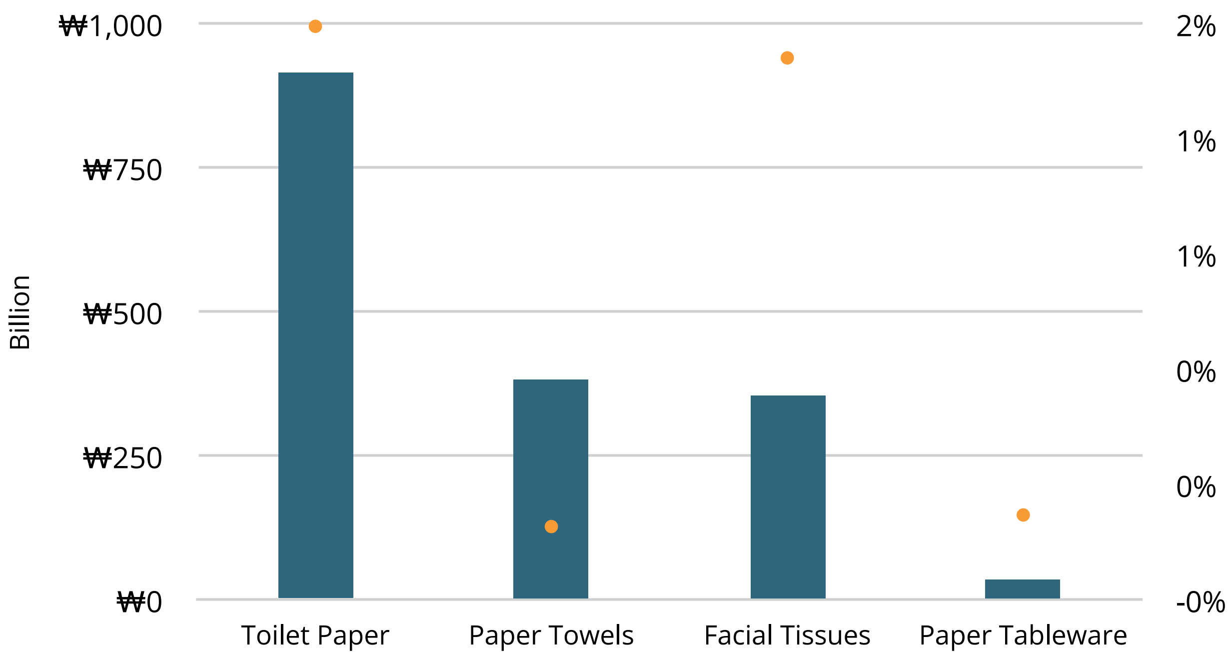
Premiumisation offsets pricing pressures and natural materials drive innovation

The market's performance was largely driven by ongoing premiumisation efforts from leading manufacturers. At the same time, the growing presence of private label products and competitively priced online offerings continued to place downward pressure on unit prices and reshape consumer perceptions of value.

Toilet paper emerged as the strongest-performing category in 2025, growing by 2% to reach KRW915bn. Its success reflects both its status as an everyday necessity and changing consumer shopping habits. South Koreans are increasingly looking for purchases around products that offer greater convenience and versatility, such as premium toilet tissues and interleaf kitchen towels. This trend is particularly evident among urban consumers living in smaller households and managing busy lifestyles.

The second largest retail tissue category, paper towels, continued to struggle in 2025, however the pace of decline moderated significantly. Current value sales fell by just 0.2% to KRW384bn, compared with a 2% decline in 2024. Within the category, however, interleaf or pull-out formats are gaining momentum. These products offer hygienic single-sheet dispensing, ease of use and improved space efficiency, attributes that increasingly resonate with consumers seeking practical solutions for modern households. Consumer interest is clearly reflected in sales performance. According to Daiso Mall's year-end report, its Living Pull-Out Kitchen Towel achieved a 30% reorder

Value growth across Retail tissue categories, 2025



Source: Euromonitor International Tissue and Hygiene 2026 research edition, published February 2026

rate, highlighting strong demand for products that combine convenience, versatility and value.

One of the most notable developments in 2025 was the growing use of natural materials in premium tissue products. Bamboo pulp especially has gained traction as brands seek to appeal to increasingly health-conscious and environmentally aware consumers. KleanNara's partnership with Vastley led to the expansion of its Better range, which includes bamboo-based facial tissues, reusable kitchen cloths and compressed towels. The line targets ingredient-conscious consumers through features such as unbleached bamboo pulp and lotion-infused tissues. The bamboo lotion tissue, containing 25% lotion, received an "excellent" rating from Germany's Dermatest, reinforcing its premium positioning. The products' ecofriendly, hypoallergenic and sustainable credentials enable brands to justify higher price points in an increasingly competitive market.

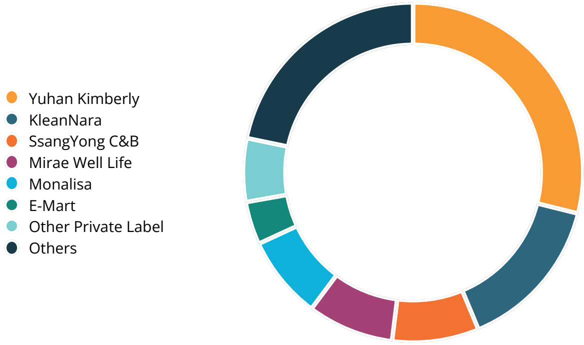
Looking at the market, other manufacturers are following a similar path. Monalisa, for example, has expanded its bamboo-based portfolio with natural, unbleached and fragrance-free pull-out kitchen towels. These innovations align closely with South Korea's changing demographic profile, as a growing proportion of older consumers seek products that emphasise health, safety and convenience.

Market leaders face growing competitive pressure

Retail tissue remained moderately concentrated in 2025, although the market is moving toward being more fragmented than in previous years. Yuhan Kimberly retained the leading position with a 29% value share, supported largely by its Kleenex brand, which accounted for 28% of total brand sales. However, the company has experienced a notable decline in market share over the review period, falling from 35% in 2020. In contrast, KleanNara increased

One of the most notable developments in 2025 was the growing use of natural materials in premium tissue products. Bamboo pulp especially has gained traction as brands seek to appeal to increasingly health-conscious and environmentally aware consumers.

Value brand share, NBO, Retail tissue, 2025



Source: Euromonitor International Tissue and Hygiene 2026 research edition, published February 2026

its share from 12% to 15% over the same period. The erosion of Yuhan Kimberly's position highlights the growing influence of private label products and smaller value-focused brands. This trend is especially visible in toilet paper, where low brand loyalty and the product's essential nature encourage consumers to prioritise price over brand names.

Private label continues to gain importance across the category. E-Mart accounted for 4% of retail tissue sales in 2025, while other private label brands collectively represented 10%. Smaller independent brands captured a significant 18% share of the market. Together, these players are steadily cannibalising share from category leaders and intensifying competition across all retail tissue segments.

E-commerce continues to reshape the market

South Korea's highly developed e-commerce infrastructure remains one of the defining characteristics of the retail tissue market. In 2025, online sales accounted for 78% of total category value, making e-commerce by far the dominant distribution channel. Consumers continue to embrace the convenience of next-day delivery and the ability to purchase bulky tissue products without transporting them from stores. The extensive availability of competitively priced private label offerings on platforms such as Coupang and E-Mart further reinforces the attractiveness of online shopping. Although offline channels remain relevant, their role has diminished significantly. Offline retail accounted for just 22% of retail tissue sales in 2025, down from 46% in 2020. Hypermarkets and warehouse clubs continue to attract family shoppers and consumers purchasing in bulk, together representing 19% of category value sales. Nevertheless, these channels continue to lose share as e-commerce strengthens its hold on consumer purchasing habits.

South Korea's retail tissue market is expected to maintain low but positive growth in the forecast period. Category value is forecast to reach KRW1.8 trillion by 2030, representing a CAGR of 1%.

Outlook: slow growth, stronger premiumisation

Looking ahead, South Korea's retail tissue market is expected to maintain low but positive growth in the forecast period. Category value is forecast to reach KRW1.8 trillion by 2030, representing a CAGR of 1%. Growth will be constrained by the country's declining population, which is expected to fall from 52m in 2025 to 51m by 2030, alongside ongoing population ageing. As a result, manufacturers are increasingly prioritising value creation rather than volume expansion.

Functional premiumisation is expected to continue to be the key growth strategy. Brands are likely to focus on fluorescent-free, fragrance-free and colour-free formulations, environmentally conscious positioning, lotion-infused products and formats designed specifically for smaller households. These features help reduce direct price comparisons and create meaningful differentiation from private label alternatives.

Toilet paper is projected to remain the category's primary growth engine, achieving a current value CAGR of 2% and reaching KRW993.5bn by 2030. Growth will be supported by the products role as an everyday necessity, as well as ongoing consumer interest in premium and multifunctional products, with improvements in softness, absorption and functionality increasingly blurring the boundaries between tissue categories. In an environment characterised by demographic headwinds, heightened price sensitivity and expanding private label competition, success will depend on brands' ability to deliver innovation, convenience and tangible product benefits that justify premium positioning.

APP Group acquired MSS Group in October 2024: the purchase included Ssangyong C&B Sejong factory, formerly the company's Jochiwon factory

Staying ahead in the rapidly evolving South Korean tissue market

**Nishant Grover, APP Group Co-Chair of Investments, and Chairman of South Korea's MSS Group, explains its rapidly diversifying portfolio of premium, functional and eco-friendly products.
He spoke to Tissue World Magazine Senior Editor Helen Morris.**

Nishant Grover is a busy man. Our interviews to discuss the company's presence in the South Korea tissue market following its entrance there in 2024 takes place from his travels across various countries and finally back at Grover's home base in Bangkok, Thailand.

Currently the Co-Chair of Investments at Indonesian-headquartered APP Group, his role entails overseeing investments for the company - one of the world's largest integrated paper businesses - and he has also been Chairman of South Korean-headquartered MSS Group and its tissue manufacturing subsidiaries Monalisa and Ssangyong C&B since December 2024.

APP Group signed a contract to acquire MSS Group from Morgan Stanley Private Equity in October 2024, a move Grover says was to increase APP's presence in the region's consumer business market: "MSS group is the market leader in South Korea, and one of the best in the world in terms of product quality and innovation. It is a great addition to our portfolio."

The acquisition included three manufacturing plants that produce Ssangyong and Monalisa's brands: a $132{,}000^2$ plant in Jochiwon, a $33{,}243^2$ plant in Jeonju and a 64,629^2 plant in Nonsan. Seven paper machines are located at the facilities along with several converting lines for tissues, diapers, wet wipes and face masks.

The company has targeted the premium products market following the purchase, with APP launching its PASEO premium tissue and hygiene product brand in South Korea in July, expanding its premium lineup with 4-ply premium bath tissue, 4-ply lotion facial tissue and other upgraded products.

Diverse IP product launches have also been key for the three Korean plants: Catch! Teenieping facial tissue and pocket-format wet tissue were launched in February for the back-to-school season, followed by Codi Art and JOGUMAN Mini Bidet wet tissue in April featuring the JOGUMAN green, sauropod dinosaur character. Premium-quality product launches through retailer collaboration have also included the launch of Codi Red Camellia Soft wet tissue in July in collaboration with E-Mart, with Camellia Vaseline bathroom tissue and facial tissue planned for launch later in September.

Investments have also been key: MSS Group has continued to invest in high-efficiency equipment, waste heat recovery systems and process optimisation in a bid to improve energy efficiency and reduce CO_2 emissions, he says.

Beyond energy, Grover says that MSS Group is improving waste and water management efficiency to optimise resource use and reduce the environmental impact of production: "MSS Group is the first in the tissue industry to achieve ESG Grade A for two consecutive years after earning Grade A in the 2024 and 2025 ESG assessments, gaining external recognition for its ESG management standards. We also obtained PEFC certification at our Korean sites. We are aiming to expand the responsible use of forest resources. MSS Group obtained PEFC-certification (after obtaining Chain of Custody (CoC) via domestic forest certification system Korea Forest Certification Council (KFCC), which operates under a mutual recognition system with the PEFC) for all tissue products and diapers produced by the group, with certified products to be supplied starting with fourth-quarter shipments."

Investments have been key: MSS Group has continued to invest in high-e ciency equipment, waste heat recovery systems and process optimisation in a bid to improve energy e ciency and reduce CO_2 emissions.

Premium product launch: APP's PASEO 4-ply premium brand was introduced into the South Korean market in July

Growth in the South Korean market in the next few years will include expanding investment in eco-friendly production infrastructure: "In line with the Korean government's carbon-neutrality and circular-economy policy direction and global ESG trends, MSS Group has set energy-efficiency improvements and carbon-emission reduction as key investment priorities," he says. "We plan to continue expanding the use of renewable energy such as solar power, whilst also reviewing and introducing energy-saving facilities to progressively reduce the environmental impact of its production processes."

The company will also be expanding investment to raise resource efficiency across the entire production process, which he says includes "greater use of recycled materials, waste recycling, water reuse and adoption of eco-friendly packaging".

"The technology research institute continues R&D on equipment efficiency and on sustainable products and innovative materials and eco-friendly packaging. This means that going forward, growth will focus not just on expanding sales volume but on value growth through an expanded, differentiated product portfolio of premium, functional and eco-friendly products."

Heavy Duty Winding Shafts and Shaft-Handling Equipment for Mill Duty Applications

PURE GOLD

MILL DUTY

LARGE SHAFT REFURBISHMENT SERVICES

ROLL HANDLING EQUIPMENT

MOBILE SHAFT PULLERS

CORE PLUGS

LIFTING TABLES

You know Goldenrod as the industry's leading supplier of **heavy duty reel spools for mill duty applications**. But did you know Goldenrod also offers **large shaft refurbishment services, heavy duty core plugs, shaft pulling and roll handling equipment** as well?

Contact Goldenrod today at **1-800-GOLDROD (465-3763)**, or at **www.goldenrodcorp.com.**

GOLDENROD
CORPORATION
PARTNERED WITH SVECOM P.E.

25 Lancaster Drive, Beacon Falls, CT 06403 USA
Toll Free 1-800-GOLDROD
Tel. (203) 723-4400 • FAX (203) 723-8230
www.goldenrodcorp.com

Expanding sales volume and value growth: the company's Monalisa Jeonju factory

Across the South Korean tissue market, Grover is seeing that the "polarisation of Korean consumer demand is becoming more pronounced". He says: "The domestic tissue market shows a polarising trend, with demand expanding simultaneously for premium products and for value-focused products where price matters most."

In the premium segment, products differentiated by quality and feel are diversifying, while in the value segment interest is growing in private brand and reasonably priced products: "Minimum standards are diversifying beyond simple 'softness and thickness'," he says. "While the focus used to be solely on softness and thickness, consumers now also weigh factors such as raw materials, manufacturing method, real benefits, texture and absorbency, design, and eco-friendliness."

" The domestic tissue market shows a polarising trend, with demand expanding simultaneously for premium products and for value-focused products where price matters most."

He adds that "high-spec" products such as 4-ply, aesthetic tissues or those with skin care elements are also drawing attention as elements that can define new premium products: "For kitchen towels as well, options are expanding toward products that enhance not only absorbency but also thickness, strength, ease of use and use-specific functionality. Generally, we're seeing the diversification of product specifications and packaging driven by changes in household composition and lifestyle. In the past, a 30-roll pack of bathroom tissue was the typical purchase format, but recently, as household size and purchase channels diversify, the pack sizes and product formats consumers want are also becoming more segmented. Single-person households already account for more than a third of all households in Korea and are expected to keep growing over the long term, which should expand market opportunities for small, easy-to-store, easy-to-carry packs and products with varied roll counts."

Design and content are expanding as differentiation factors: "As products evolve to reflect consumer taste

CODI Red Camellia Soft: formulated with camellia extract, the product provides softness and skin-care benefits

CODI Cica lotion tissue: a facial tissue infused with cica lotion, which is known for its soothing properties

and lifestyle, emotional elements such as package design and character and IP collaborations are also growing in importance.

"MSS Group is continuously diversifying its product portfolio in response to these changes. We're strengthening our product portfolio that spans from premium offerings like PASEO 4-ply and lotionised facial tissue to tissues with CICA and Green Tea. We were the pioneers with Gochang Red Clay Toilet tissue rolls and have several other variants of tissue rolls with aesthetic benefits under our Codi and Monalisa brands."

Over the next few years, growth of premium and high-value-added products remains key, he says. "Rather than simple volume expansion, the greater opportunity lies in value growth through premium products that differentiate on quality and feel. Interest is also growing in new premium elements such as natural and eco-friendly raw materials."

Innovations will also include the expansion of products with enhanced functionality and convenience: "Products with clear functional differentiation – aesthetic benefits, texture, absorbency, ease of use and more - are expected to address evolving consumer needs and create new demand. As single-person households increase, small packs such as 1-roll and 6-roll formats and channel-tailored products are also a new growth opportunity.

"Expanding IP collaborations combined with character and cultural content such as JOGUMAN and Teenieping will give consumers new reasons to buy an everyday necessity like tissue. Quickly developing private brand and differentiated products tailored to each channel's consumer characteristics through retailer collaboration is also an important growth opportunity," he says.

Key challenges meanwhile are that Korean consumers expect a high standard not only in product quality but also in functionality, materials, design and other aspects: "Our endeavour is to keep introducing new, differentiated, high-quality products that match evolving consumer needs. MSS Group will continue to build on its strong R&D and manufacturing capabilities and long-standing, trusted relationships with major retailers, aiming to stay ahead of evolving market needs by continuously bringing new, differentiated and reliable products to market.

"The challenge is to maintain product quality and price competitiveness while responding to external cost volatility, and continuing to invest in R&D and new product development."

Rising cost burdens from combined raw material, exchange rate and logistics pressures mean the market remains volatile: "Ongoing global volatility, including tensions in the Middle East, has increased cost pressures across key raw materials such as pulp, energy and international logistics, particularly freight rates," he says. "Because South Korea's paper and tissue industry sources most key raw materials overseas, exchange-rate movements have a direct impact on raw-material procurement costs."

The company is mitigating these impacts by strengthening its response through production and operational efficiency: "To minimise the impact to consumer, MSS Group is working to partially offset cost pressures through improvements in plant efficiency, reduced energy consumption, optimised equipment operation and stronger supply-chain management. Likewise, we are continuing to improve energy efficiency and optimise our production processes to strengthen our resilience to external cost swings."

Production boost: the Ence Navia production complex in Spain has capacity for 125,000tpy of eucalyptus fluff

Iberian eucalyptus potential in fluff pulp for absorbent products




By European-headquartered eucalyptus pulp production company Ence's Fluff Product Development expert Vitor Batistela, Development Technician Clara Orozco, Technical Director of Commercial Area María Peón, and Development Manager Juan Luna.

The global fluff pulp market continues to expand, mainly driven by growing demand in adult incontinence products, feminine hygiene, airlaid substrates, medical absorbents and pet-care applications. Historically, this market has been dominated by long-fibre softwood kraft fluff pulp, particularly from North America. However, eucalyptus-based fluff pulp is increasingly emerging as a technically and commercially relevant segment.

Publicly available data indicate that global fluff pulp capacity reached around 7.8m air-dried tons per year in 2024, including swing capacity. Under a central demand scenario, consumption is expected to grow from approximately 7.5m tons in 2025 to nearly 8.9m tons by 2030. Although eucalyptus fluff still represents a minority share, it is clearly transitioning from niche or pilot-scale developments into industrial-scale production.

In this context, new capacity additions are shaping the segment, including Ence's entry into the market with a 125,000tpy eucalyptus fluff pulp line at its Navia biofactory in Spain, focused on supplying the European absorbent hygiene market. Based on publicly announced projects, total eucalyptus fluff capacity could reach around 565,000tpy from 2026 onwards, representing roughly 6–7% of the global market. This evolution opens a strategic opportunity, particularly in Europe, to partially substitute imported long-fibre fluff while benefiting from advantages in softness, compression, rewet performance and overall product design flexibility.

Chemical composition of E. globulus (Iberian) and other hardwoods (%, w/w)

	E. globulus	E. urograndis	E. grandis
Klason Lignin	20.5	26.7	25.7
Cellulose	50.0	48.6	46.6
Pentosans	14.1	11.3	13.5
Extractives	1.7	1.9	2.1
Ashes	0.17	0.53	0.25

Adapted from Evtuguin, 2007

In parallel, eucalyptus fluff pulp has gained increasing relevance in absorbent applications, supported by the development of different species and production approaches. Among them, Iberian Eucalyptus, stands out due to its unique chemical composition and fibre morphology. These intrinsic characteristics enable new approaches to improving performance in hygiene and absorbent products.

Building on a strong background in sustainable forest management and pulp production, Ence has developed extensive expertise in the cultivation and processing of Iberian Eucalyptus. The species, widely recognised for its favorable chemical and morphological profile, allow the production of a fluff pulp that combines good core integrity, softness and reliable liquid management properties. As a result, it is particularly well suited for applications such as feminine care, baby diapers, adult incontinence products, absorbent pads, airlaid and other innovative absorbent solutions.

By combining high-quality raw material, optimised process conditions, product development and dedicated technical support, traditional limitations often associated with hardwood fibres in absorbent products can be effectively addressed. This positioning allows Iberian Eucalyptus based fluff pulp to act as a competitive and sustainable alternative, capable of delivering performance aligned with the requirements of modern absorbent product designs.

This article explores the key elements behind this evolution, including wood chemistry, fibre morphology and application-driven development, highlighting how customer-focused solutions are enabling the expansion of eucalyptus-based fluff across hygiene, specialty and next-generation absorbent products.

Leaff is an Iberian eucalyptus-based fluff pulp developed by Ence after years of research and innovation. Traditionally recognised for its broad portfolio of specialised eucalyptus grades for papermaking, Ence has leveraged its deep expertise in raw material selection and process optimisation to create a high-quality fluff pulp tailored for absorbent applications. By combining selected Iberian Eucalyptus resources with advanced processing know-how, Leaff delivers consistent performance and is suitable for a wide range of conventional and emerging uses.

In general, eucalyptus pulps are known for contributing valuable properties to paper and fibre-based products, including good drainability, high porosity, elevated bulk, and stiffness, as well as distinct opacity. They also enable superior formation, smoothness, and printability, offering a well-balanced

By combining high-quality raw material, optimised process conditions, product development and dedicated technical support, traditional limitations often associated with hardwood bres in absorbent products can be e ectively addressed.

When comparing Iberian Eucalyptus with species such as E. urograndis and E. grandis, which are widely planted in South America, important di erences emerge from a chemical perspective.

combination of strength and structural properties alongside bulk and optical performance.

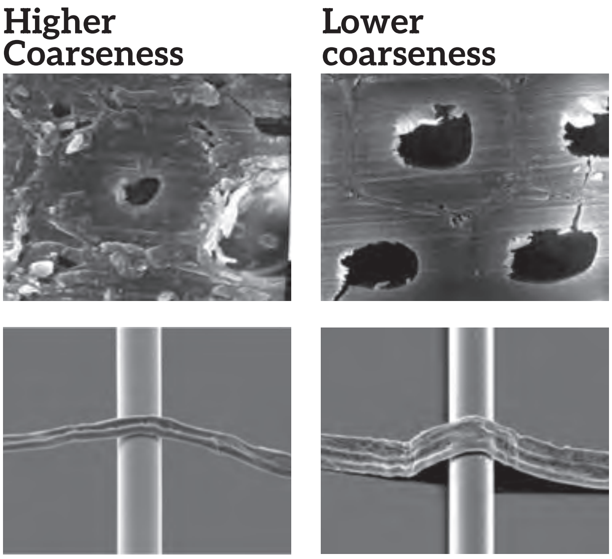
However, not all bleached eucalyptus kraft pulps (BEKP) are the same. Important differences arise depending on wood-related factors, such as species, clone, age, and growing conditions, as well as on processing parameters. These variations are primarily reflected in fibre characteristics, including length and distribution, coarseness, wall thickness, fines content, vessel presence, and hemicellulose levels. Such attributes ultimately define the performance of the pulp in both paper and absorbent applications.

When comparing Iberian Eucalyptus with species such as E. urograndis and E. grandis, which are widely planted in South America, important differences emerge from a chemical perspective. The higher pentosan content, representing a significant portion of hemicelluloses, plays a key role in enhancing mechanical properties. This contributes to stronger interfibrillar bonding, resulting in greater core integrity, and promotes increased water retention within the fibre, reducing fluid return to the surface (lower rewet), which helps minimize leak occurrence and improve skin dryness, lowering the likelihood of dermatitis for the end user.

At the same time, the naturally lower content of lignin and extractives in Iberian Eucalyptus supports better brightness stability and helps prevent hydrophobic effects that can negatively impact liquid absorption. From a chemical standpoint, these characteristics make Iberian Eucalyptus particularly well suited to meet the demanding requirements of absorbent product applications.

From a morphological perspective, Iberian Eucalyptus fibres tend to present slightly greater length, along with higher cell wall thickness and coarseness. These features make the fibres stiffer, which enhances fibre entanglement and contributes further to mechanical strength. Additionally, this structural configuration promotes the formation of more resilient and open void spaces within the fibre network, improving both absorption capacity and liquid acquisition speed.

Launched in August 2025, Leaff has already been tested and regularly used in a broad range of absorbent applications, often requiring only minor, or in some cases no, adjustments to producers' converting lines to achieve premium end products within expected quality requirements. Its application potential has been demonstrated across different segments, including feminine hygiene products,



Milanez, 2007 and Photos from Eucalyptus Online Book and Newsletter, ABTCP

Comparative image between fibres with high and low coarseness

	Iberian Eucalyptus	South American Eucalyptus
Fibre Length (mm)	0.87	0.80
Cell Wall Thickness (Âµm)	3.00	2.78
Coarseness (mg/100m)	6.93	6.57

Ence, 2026

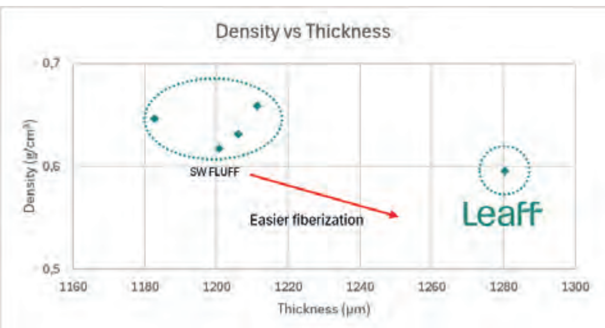
Ence fluff pulp production line

underpads, adult incontinence diapers, baby diapers and airlaid structures.

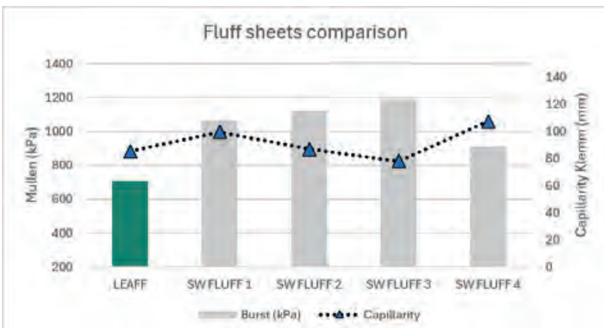
As an Iberian eucalyptus-based fluff pulp, Leaff brings a different fibre concept to a market traditionally dominated by softwood fluff. This difference naturally raises technical questions among producers looking for alternatives to long-fibre supply, particularly regarding sheet density, defibration behavior and absorption performance. A frequent concern is whether eucalyptus fibres necessarily lead to denser fluff sheets, making them more difficult to process or less efficient in absorbent cores. In practice, the answer depends not only on fibre morphology, but also on pulp sheet design, production technology, defibration conditions, and the overall absorbent product architecture.

In the case of Leaff, the combination of selected Iberian eucalyptus raw material and dedicated production technology allows the product to reach a sheet structure that is comparable to the main market references. Its higher sheet thickness, associated with low density and suitable fibre morphology, results in lower Mullen values when compared with long fibre references. This reduced burst resistance is particularly relevant because it favors easier defibration, while maintaining the capillary properties required for efficient fluid management in absorbent products.

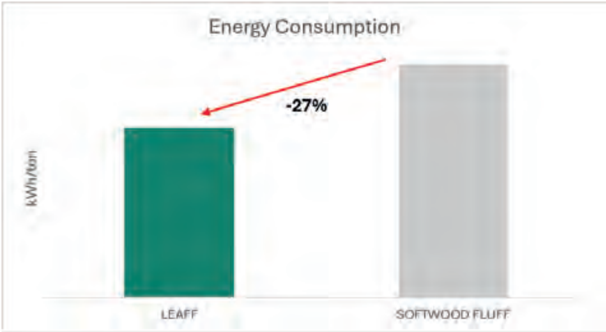
This balance between sheet structure and mechanical resistance has a direct impact on fibreisation quality and energy consumption during processing, whether in sawmill or hammermill systems. A sheet that is easier to open tends to reduce the mechanical effort required during defibration, supporting more stable operation and potentially lower energy demand. At the same time, proper fibre



Density vs. thickness for different fluff products available in the market

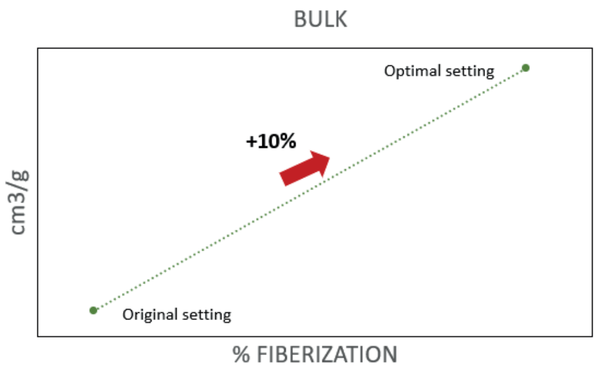


Mullen and capillarity for different fluff products available on the market

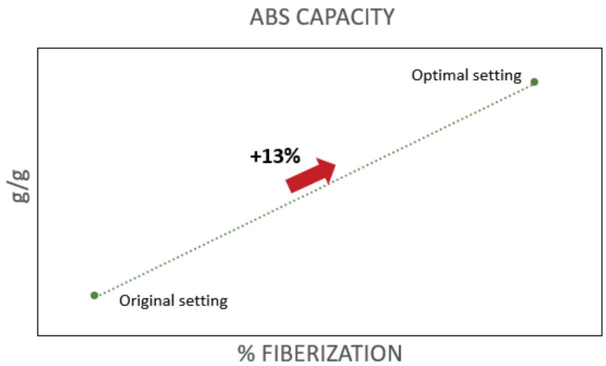


Energy consumption comparison between Leaff and softwood fluff

Comparison of fibreisation quality between Leaff and softwood fluff



Bulk comparison between Leaff in the original mill settings and in the optimised settings



Comparison of absorption capacity between Leaff in the original mill settings and in the optimised settings

opening is essential to ensure homogeneous pad formation, good fibre distribution, and consistent performance in the final absorbent core.

At laboratory defibration scale, Leaff has shown comparable fibreisation quality, indicating that eucalyptus-based fluff can be effectively opened under controlled conditions. However, laboratory results should be understood as a useful comparative reference, rather than a complete representation of industrial performance. In real production environments, the operational setup of the defibrator has a direct influence on fibreisation efficiency and, consequently, on absorption behavior, pad strength, and core stability.

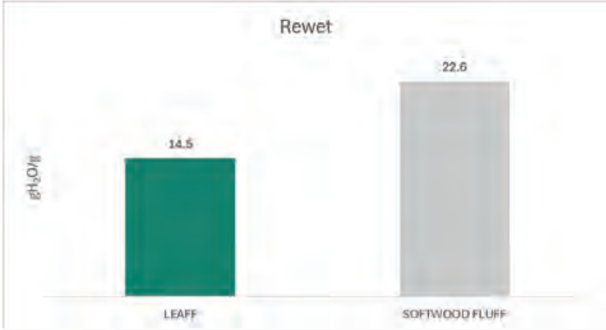
Key parameters such as rotor speed, breaking bar gap, screen opening (when applicable) and feeding conditions can significantly affect the final fibre network. When these parameters are properly adjusted, they can improve fibre separation, reduce fibre bundles, enhance pad uniformity, and increase the effective use of the fibre's intrinsic properties. This was observed in a real case where the original defibration condition was optimized, leading to substantial improvements in several performance indicators.

From an absorption standpoint, it is important to recognise that eucalyptus fibres may present some limitations when directly compared with traditional long fibre fluff, especially in terms of total absorption capacity and acquisition time. The shorter fibre length and different network structure can influence liquid intake dynamics and the volume of open voids available in the absorbent matrix. Therefore, if evaluated in isolation, eucalyptus fluff may show lower absorption capacity or slower acquisition speed than softwood-based references. However, absorbent product performance is not determined by fluff pulp alone. It is the result of a complete system, where fibre properties interact with the design of the core and with other materials such as nonwovens, acquisition and distribution layers, SAP type and dosage, embossing pattern, core channels, tissue layers, and overall pad geometry. When these elements are correctly selected and combined with well-adjusted process parameters, the potential differences in absorption capacity and time can be significantly reduced, or even fully compensated.

This has been demonstrated in underpad testing, where Leaff-based structures achieved absorption capacity equivalent to long fibre references when incorporated into an optimized product design. The result confirms that, with the right combination of raw materials and converting parameters, eucalyptus fluff can deliver the required performance for demanding absorbent applications.

Underpad industrial trial under controlled industrial conditions. No SAP addition

Comparative ISO absorption capacity in the same underpad product with Leaff and softwood fluff



Comparative rewet in the same underpad product with Leaff and softwood fluff

Another relevant advantage of Leaff is its positive contribution to rewet performance. Due to the chemical and morphological characteristics of Iberian Eucalyptus, particularly its hemicellulose profile and water retention behavior, the fibre can help reduce liquid return to the surface after absorption. Lower rewet means improved skin dryness, which is especially important in hygiene applications where comfort, leakage prevention, and skin health are critical quality attributes. In this sense, Leaff can provide a meaningful benefit in liquid retention and surface dryness.

The improved defibration study further reinforces this point. By adjusting the operating conditions of the defibrator, it was possible not only to improve fibreisation quality, but also to enhance several end-product properties. Better fibre opening contributed to more uniform pad formation, improved mechanical stability, and more efficient liquid handling.

These results highlight that the full potential of Leaff is achieved when pulp characteristics, equipment setup, and product design are treated as an integrated system rather than as independent variables.

For this reason, specialised technical assistance plays an important role in accelerating the implementation of Leaff at customer sites. Each production line has its own configuration, limitations, and opportunities for optimisation. By supporting customers in the adjustment of defibration parameters, material combinations, and product design, Ence can help maximise operational performance and final product quality. This approach improves absorbent product performance and also contributes to higher process efficiency, better raw material utilisation, and potential financial advantages.

Overall, Leaff demonstrates that eucalyptus-based fluff pulp can be successfully applied in absorbent products when supported by the right technology and process know-how. While some absorption parameters may naturally differ from long fibre fluff, these differences can be managed through formulation, design, and operational optimisation. At the same time, its favourable defibration behaviour, good pad integrity contribution, and rewet advantages position Leaff as a competitive and sustainable alternative for the next generation of absorbent products.

This article was written for TWM by Ence's Vitor Batistela, Fluff Product Development Expert, Clara Orozco, Fluff Product Development Technician, Juan Luna, Fluff Product Development Manager, and María Peón, Technical Director of Commercial Area.

Leaff as shown comparable breisation quality, indicating that eucalyptus-based uff an be e ectively opened under controlled conditions. However, laboratory results should be understood as a useful comparative reference, rather than a complete representation of industrial performance.

Flexible skills system key for driving growth

The tissue sector depends on a steady pipeline of skilled workers, while employers often experience skills, employment and industrial policies as separate systems. A more integrated approach should include greater transparency. By Bethany Windsor, Head of Multimodal and Skills Policy at UK-based trade association Logistics UK. A TWM report.

As the UK government seeks to reform skills and training provision, it is important that skills policy should be treated as an investment in national productivity with stronger alignment between skills funding, Industrial Strategy objectives, labour market participation and productivity growth. The tissue industries face many of the same challenges as the logistics sector, including an ageing workforce, skills and capability shortages and a more responsive approach to skills and training is key to addressing these challenges.

The All-Party Parliamentary Group on Apprenticeships recently completed a "call for evidence" looking at how to optimise the role of apprenticeships in supporting the economic growth ambitions outlined in the Industrial Strategy. It provided an opportunity to not only outline our members' experiences highlighting the value of apprenticeships for both employers and employees, but also to stress how they should form part of a broader, more flexible skills system.

Employers need greater access to shorter, modular and accredited training alongside apprenticeships to support upskilling and reskilling of the existing workforce. SMEs in particular need simpler processes, stronger brokerage support and better access to training provision to participate fully in the apprenticeship system.

The government's Industrial Strategy acknowledges the vital contribution logistics makes to the UK economy: while focusing on the strategy's delivery, government needs to ensure it does not overlook the needs of the industries that enable the growth sectors to succeed and provide them the support they need to deliver. Manufacturing, clean energy, life sciences, digital and defence supply chains all depend on the movement of goods, materials and components and it is essential that the government recognises how critical efficient logistics is to these sectors' competitiveness. It is therefore essential that any skills reform allows the logistics sector to grow and develop its workforce in a way that will enable the wider economy to thrive. Like logistics, the tissue sector depends on a steady pipeline of skilled workers to maintain productivity, support innovation and remain internationally competitive.

At present, employers often experience skills, employment and industrial policies as separate systems, despite their close interdependence. A more integrated approach should include greater transparency around funding priorities, stronger employer input into decision-making and a longer-term approach to workforce planning. This is particularly important for sectors where workforce needs are influenced by technological change, decarbonisation, infrastructure investment and changing patterns of trade.

It is also essential that the apprenticeship system keeps pace with these changes: increasingly across logistics and supply chains, employers require skills in AI, automation, telematics, low carbon technologies, electrification, digital compliance and advanced data analytics. These requirements mirror those emerging in the paper industry, where modern production facilities also increasingly rely on automation, data analytics and advanced engineering skills.

To ensure that the right workforce is available when needed, skills systems need to become more agile in responding to these emerging workforce needs, delivering the career progression and development opportunities that new entrants increasingly expect.

In the UK, the withdrawal of funding for the widely-used Team Leader Level 3 and Operations Manager Level 5 has been raised as a concern by Logistics UK members as leadership and management skills remain one of the most significant capability gaps across the sector. Employers, in every industry, need competent and confident supervisors and managers to support new entrants, while young people are more likely to be attracted to and remain in a sector where clear progression routes are visible. Apprenticeships should therefore support career advancement as well as entry-level roles.

The key objective should be creating a stable, joined-up system that allows employers to invest confidently in workforce development while ensuring public funding supports growth, productivity and labour market participation. This would also help provide greater certainty for employers making long-term investments in recruitment, technology adoption, decarbonisation and workforce development. Whether in tissue manufacturing, logistics, or other enabling industries, employers need a skills system that recognises the pace of technological change and supports continuous workforce development throughout employees' careers.

Logistics UK is a specialist training provider offering an expanding portfolio of industry-focused apprenticeship programmes. Developed by logistics professionals, these programmes support new entrants to the sector while helping employers build a strong pipeline of future supervisors, planners, technicians and leaders.

In the UK, the withdrawal of funding for the widely-used Team Leader Level 3 and Operations Manager Level 5 has been raised as a concern by Logistics UK members as leadership and management skills remain one of the most signi cant capability gaps across the sector.

ADVERTISER'S INDEX

Baosuo	www.baosuo.com	IBC
Convermat	www.convermat.com	IFC
Goldenrod	www.goldenrodcorp.com	27
Infinity	www.infinitymec.com	39
Tissue World Awards	www.tissueworld.com	33
Tissue World Istanbul	www.tissueworld.com	9
Tissue World Lisbon	www.tissueworld.com	OBC
Toscotec	www.toscotec.com	2

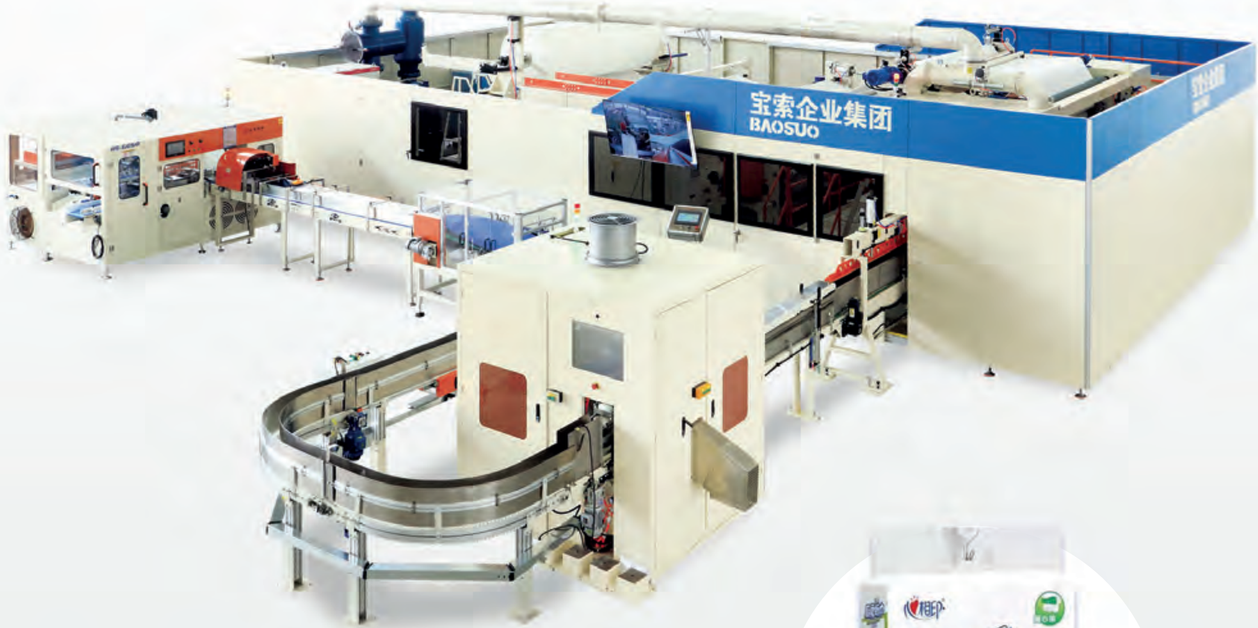
SUBSCRIPTION

Tissue World Magazine is free to qualified members of the tissue industry. Please visit the following link to subscribe to the printed magazines: **www.tissueworldmagazine.com/print-subscription/**

Sign up to the bi-monthly Tissue World Newsletter and six annual Digital Magazines here: **www.tissueworldmagazine.com/newsletter/**

BS BAOSUO

GiOTTO TECHNOLOGIES



BS BAOSUO