

The independent news
provider for the global
tissue business

THE TURBULENT TWENTIES

**Market in flux facing new era
of challenges**

Plus

ITALY: COUNTRY REPORT

The home of innovation gears up again

TISSUE WORLD DÜSSELDORF: KNOWLEDGE-DRIVEN

World leading tradeshow set to break records

TECHNICAL THEME: PMs

The electricity revolution

PROJECTS SURVEY 2025

Global industry investments 2024-2026

EXITISSUES

'Skinification': A new era of wellness ... and beauty

CONSUMERSPEAK

Picasso sculpted in ethereal tissue for TWM



YOUR SINGLE SOURCE FOR PARENT ROLLS OF TISSUE SINCE 1976

Bath | Facial | Napkins | Kitchen Towel | Industrial Towel | Center Pull Towel | TAD Bath and Towel | NTT
Carrier and Specialty Tissue | Airlaid | Meltblown | Spunlace | Spunbond | and more

THE GLOBAL LEADER IN **TISSUE**

The Power of Leadership

Since 1976, Convermat has been the leading global supplier of parent rolls of tissue to more than 80 countries worldwide. Our unparalleled market intel and strong network of strategic alliances, resources, and insider knowledge can further grow and strengthen your business to achieve higher profits.

There When You Need Us

We consistently maintain capacity balance for many of the leading global tissue players. Our extensive network of global suppliers and customers enables us to deliver a continuous flow of tissue at the most competitive prices in any market condition and to any destination with speed, reliability, and integrity.

At Your Service

Our experienced team of seasoned professionals is equipped to handle all of your needs including inland and ocean transportation, import/export protocol, technical specifications, testing lab facilities, proprietary product development, foreign currency management, credit risk, and all relevant sales services.

More Than Tissue

In addition to our complete line of tissue, towel, napkins, and specialty paper we supply a comprehensive line of nonwoven substrates for medical, wipes, automotive, filtration, hygiene applications, and more.



www.convermat.com

T: 516.487.7100

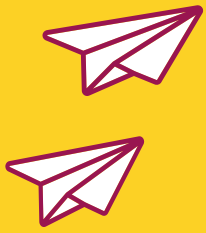
F: 516.487.7170



The mark of
responsible forestry

VISIT CONVERMAT BOOTH #J20
Tissue World | Düsseldorf

IN THIS ISSUE...



Cover: Midway through a tumultuous decade, adaptability, strategic foresight, and agility are key in a rapidly changing landscape.

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

03 FRONTISSUES

We are midway through a tumultuous decade. What do the first five years tell us about the next?

04 MARKETISSUES

Navigating uncertainty in the 2020s: the past, present, and future of North American tissue. With world trade predicted to continue to face many challenges throughout the decade, adaptability is the key to meeting the changing demands of tissue producers and consumers. Report by AFRY Management Consulting.

12 NEWS IN BRIEF

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

18 COUNTRY REPORT: ITALY

Europe's top exporter – its tissue, machines and technologies go worldwide. Slow growth, population decline, viability risk with relatively narrow and slow machinery suggests a risk to status ... but long-term. Analysis by ResourceWise.

24 COUNTRY REPORT: ITALY

New packaging, new formulations, new sustainability features... the home of innovation gears up again. Italy's all sector volume growth tops pre – pandemic levels, and per capita volume consumption is the highest in Western Europe. Report by Euromonitor International.

30 SHOW GUIDE: TISSUE WORLD DÜSSELDORF

Willkommen! We're thrilled to welcome you to Tissue World's flagship European edition – where the industry's most influential minds come together to shape the future of tissue.

32 CONSUMERSPEAK

Lucinda Allwood, a practicing artist and art teacher based in the Northwest of the UK, explains to TWM how tissue features in all aspects of her working life.

34 NUMERA ANALYTICS

Defying the pandemic rollercoaster: tissue demand back to long-term trend after tumultuous period.

36 PROJECTS SURVEY 2025

The annual Projects Survey charts all new capacity being added, ordered or in final planning stages during 2024–2025, as well as noting any projects already planned for 2026 – and 2027.

46 PAPER MACHINE: TECHNICAL THEME

Target Zero: The global tissue industry's drive towards intelligent manufacturing. TWM asked leading companies how they are facing the many challenges of a rapidly evolving market.

58 EXITISSUES

'Skinification': tissue enters the age of wellness and beauty enhancement. For decades an adjacent niche category, skin health promoted by natural ingredients and vitamins is an increasing demand for consumers. Euromonitor International's Liying Qian, Industry Manager for Tissue & Hygiene, reports.

60 AD INDEX



PrimeDry HotAir Box

**For reduced energy consumption
in tissue drying**

The need to achieve energy consumption efficiency for sustainable tissue production, combined with taxes on emissions and escalating gas costs, calls for a breakthrough in tissue machine heat recovery.

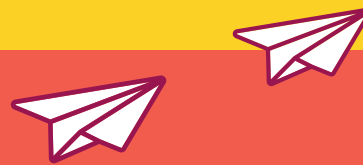
ANDRITZ focuses on exhaust heat with its *PrimeDry* HotAir Box technology, which can boost energy efficiency across a range of tissue-making scenarios.

In tissue production, the viscosity of water has historically restricted water removal by the suction roll. This means that either drying capacity or machine speed place an output limit on most tissue machines.

ANDRITZ has addressed both these limitations with *PrimeDry* HotAir Box for standard (non-TAD) tissue machines, for new machines or upgrades.

For more information,
visit our website.





**We are midway through a tumultuous decade.
What do the first five years tell us about the next?**

Helen Morris, Senior Editor, Tissue World Magazine

EDITORIAL HEADQUARTERS

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

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

Event Director & Publisher
Gerry Dunphy: gerry.dunphy@informa.com

Senior Marketing Manager
Heather Whitman: heather.whitman@informa.com

Senior Digital Marketing Executive
Irene Tran: irene.tran@informa.com

Commercial & Strategy Director
Alan Kelly

Chief Executive
Andrew Mullins

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
Pinky Zhang
T: +86 020 3895 1630
Pinky.Zhang@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 Connect
240 Blackfriars Road, London, SE1 8BF, UK
Tel: +44 (0)20 7017 5000
info@tissueworld.com

Subscription online at
www.tissueworldmagazine.com

In Tissue World all measures are metric and all dollars (\$) are US dollars, unless otherwise stated. Copyright 2024 by Informa Connect. All rights reserved. All materials printed in Tissue World Magazine is owned by Informa Connect and protected under the copyright act. No material may be reproduced in part or in whole without the prior written consent of Informa Connect.

ADAPTABILITY, STRATEGIC FORESIGHT, AND AGILITY KEY IN RAPIDLY CHANGING LANDSCAPE

Eight out of 10 Americans now wash their hands more diligently than before Covid. Good news, and good for tissue as personal hygiene becomes more important. How do we know? The Healthy Handwashing Survey says so. That there is such a survey is encouraging in itself.

Weightier revelations and forecasts focussed on North America but globally relevant come in a comprehensive analysis in *MarketIssues* by AFRY Management Consulting. It covers this extraordinary decade, and with the proviso that accurate forecasting "among many moving pieces" is more complex, it nevertheless rises to the challenge.

Among the moving pieces: RTO mandates, immigration policies, tariffs, economic uncertainty, disruption from climate change, geopolitical fragmentation, digitalisation, managing AI, M&A, population decline, overcapacity, private label's rise ... and the evolutionary changes attendant on new era technology.

ITALY: INNOVATION AND SUSTAINABILITY ARE CORE DRIVERS

Like most economies, Italy's is emerging from tougher times. TWM's *Country Report* covers the progression from high inflation years of reduced disposable income, to the recent evidence of greater spending power.

All sector volume growth now tops pre-pandemic levels. Italy's historic prominence remains: leader in tissue production and exports; technology and equipment spans the world; Lucca alone hosts more than 140 paper mills and converters.

Some trends need attention: the population is ageing and declining; some mill machinery needs upgrading. But strong undercurrents have emerged: AfH paper tablecloths are a dynamic category; more localised supply chains will embrace a rich variety in regional tastes ... all calling for technical advance and artistic expression in quality, patterns, colours, and sizes.

TISSUE DEMAND BACK TO LONG-TERM TREND AFTER THE ROLLERCOASTER

Manufacturers maintained relatively elevated margin returns as inflation eased, and Numera Analytics illustrates just how dynamic the results can be when an economy picks up. Purchasing power in Europe, measured by real wages, fell by 6% 2022-23. The US drop was roughly 2%. Come 2024, while North American saw a recovery in tissue demand of 2.1%, Europe's rose by 5.4%.

'SKINIFICATION' POTENTIALLY HUGE TISSUE GROWTH

Skin health facial tissue ... and beauty treatment. An 'adjacent' niche product for decades is moving at relative speed. The multi-continental region leading the surge is Asia Pacific, the "largest tissue region by dollar of consumption."

By 2028, in *ExitIssues*, Euromonitor International's Liying Qian suggests 53% of its total incremental tissue sales growth will be in beauty tissue.

NAVIGATING UNCERTAINTY IN THE 2020s: THE PAST, PRESENT, AND FUTURE OF NORTH AMERICAN TISSUE

With world trade predicted to continue to face many challenges throughout the decade, adaptability is the key to meeting the changing demands of tissue producers and consumers. Report by AFRY Management Consulting's Brigit Kaila, Analyst, Patricia Marques, Principal, Sanna Sosa, Senior Principal.

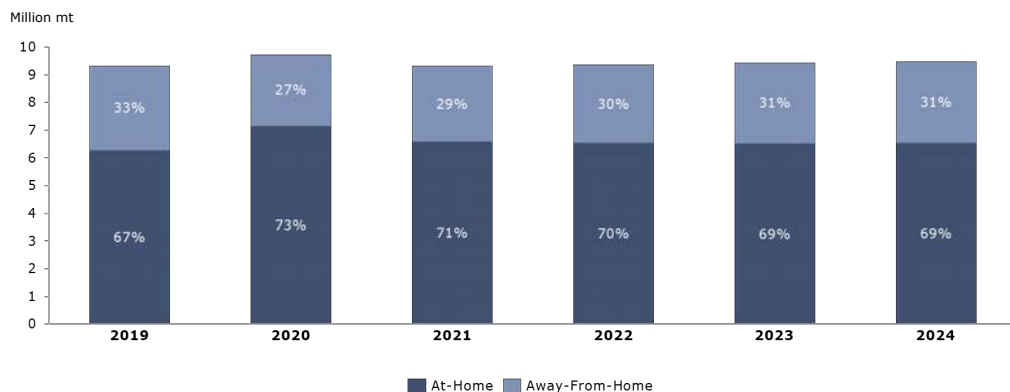


The North American tissue market, historically stable and closely linked to population growth, has faced unprecedented uncertainty this decade. The first half saw major turbulence driven by the Covid-19 pandemic, with lingering effects such as shifted consumer behaviour and a new hybrid work norm continuing to shape demand in 2025. Looking ahead, the market remains in flux, influenced by the uncertainty of Return-to-Office (RTO) mandates, economic unpredictability, new immigration policies, pending tariffs, and significant shifts among key market players.

THE PAST: PANDEMIC AFTERSHOCK

The 2020s kicked off in an unexpected fashion for North American tissue. A market considered stable in the previous decade — growing a predictable 1-2% per year and tightly correlated to North American population growth — was suddenly shocked by the panic-purchasing and public closures of the Covid-19 pandemic in 2020. Total tissue demand spiked, and the market shifted heavily toward At-Home tissue consumption by over 6% that same year (Figure 1. North American At-Home versus AfH tissue demand).

Figure 1. North American At-Home versus Away-from-Home tissue demand



The following year was not less turbulent, with tissue destocking across consumers and retailers reducing overall tissue demand and swinging consumption back towards AfH tissue consumption as public spaces reopened. From 2022 to 2023 the market slowly stabilised and RTO mandates emerged, but AfH tissue did not achieve the same slice of the North American tissue market that it had achieved pre-pandemic (Figure 1) — hybrid and remote work became the new norm, and US office vacancies had stabilised at around 20% in 2023/2024 according to the financial services firm Moody's.

In 2024, At-Home tissue saw its first near-flat year-on-year growth since pre-pandemic dynamics after a slight decline the two years prior. With RTO trends settled at an average of two to three days mandated in-office per week, the readjustment of At-Home tissue demand saw a step-change of around a quarter-million metric tons above 2019 demand levels. The fluctuation of RTO trends, as well as pandemic-led shifts in consumer behaviour, continue to influence tissue purchasing today.

A NEW ERA OF TISSUE CONSUMPTION

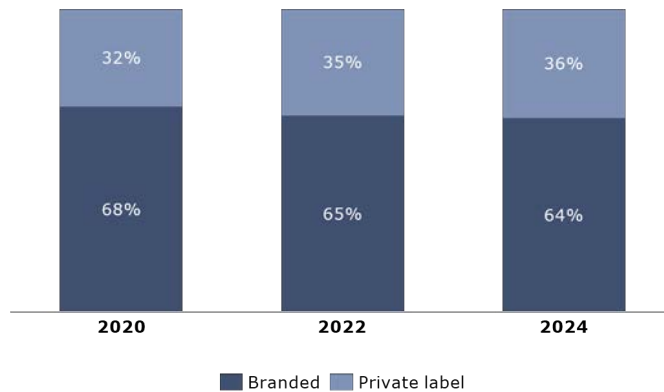
Aside from the drastic peaks and valleys that the pandemic created within At-Home and AfH tissue markets, Covid-19 had more subtle effects on consumer behaviour and purchasing trends. The shifts have been quiet but lasting, including increased hand washing and drying practices and a surge in disinfecting nonwoven substitutes. According to the 2025 Healthy Handwashing Survey by Bradley Company, 79% of Americans say they have been more diligent about handwashing since the coronavirus outbreak — an equal

percentage also report washing their hands more frequently during seasonal virus outbreaks. Away from the home, public practices that boast the importance of hygiene are expected to persist in 2025 and beyond as infectious diseases such as H5N1 bird flu, measles, and others continue to cause public concern. At home, many consumers switched from paper towels to disinfecting nonwoven wipes during the Covid-19 pandemic, a peak witnessed in the performance of key wipes players such as Clorox as product demand rose 500%. While that substitution trend has since curbed, it is possible that another demand swell could arise.

In 2024, At-Home tissue saw its first near-flat year-on-year growth since pre-pandemic dynamics after a slight decline the two years prior.



Figure 2. North American branded versus private label tissue market share



Beyond the predictable rise in consumer concern for hygiene, the Covid-19 pandemic has led to several unforeseen tissue consumption preferences. The shift towards bulk pack purchases, a trend already in motion pre-pandemic, was accelerated and saturated as panic buying began in 2020 — and it has lasted long beyond the days of lockdowns. The majority of AFRY consumer survey respondents report that they started buying larger pack sizes during Covid-19 and have continued the habit post-pandemic, and both retail and e-commerce sales channels have witnessed lasting bulk purchasing trends across various sectors, from toiletries to groceries.

The purchasing of bulk packs is especially favoured in e-commerce sales channels, which also saw a sizable boost in popularity during the pandemic. From 2019 to 2020, the e-commerce share of total global retail sales was boosted by over 4% points according to the U.S. Department of Commerce; compare this to an average share increase of just 1.6% per year since 2015. According to a 2024 Mintel report, younger generations are making most of their purchases online: 58% of millennials, 56% of Gen Z adults, and 60% of Gen Z teens. As Generation Z ages into the workforce, they are expected to continue the shift toward online purchasing that was once bolstered by pandemic-related closures.

MOVING FORWARD AMONG MOVING PIECES

Forecasting for the upcoming half-decade has become increasingly complex. Evolving RTO mandates, US immigration policies, and possible tariffs are only a few of the evolving variables that might cause us to philosophize the future of tissue. As demand models become more flexible to account

for such moving pieces, the macroeconomic outlook becomes more rigid in view. The same economic uncertainty that has marred the early 2020s is expected to continue throughout the decade, according to the International Monetary Fund, with possible economic disruptors including global issues of climate change, geopolitical fragmentation, digitalization, and increasing artificial intelligence (AI) usage. A focus on adaptability when predicting global markets, including the North American tissue sector, has become of high importance.

ECONOMIC UNCERTAINTY, PRICE SENSITIVITY, AND PRIVATE LABEL TISSUE

The early 2020s bore witness to a global pandemic, supply chain disruptions, geopolitical conflict, rising prices — and tissue shortages. Consumer confidence waned and price sensitivity soared, with lowest-cost options magnified in desirability. In 2025, Forrester predicted that price sensitivity will lead to a 25% decline in brand loyalty. This contracting-brand-loyalty trend has been observed in tissue products since 2020, with demand for private label tissue products gaining market share of four percentage points from 2020 to 2024 (Figure 2. North American branded versus private label tissue market share). If uncertain economic conditions continue, private label products are expected to gain share from branded options throughout the latter half of the decade. High price sensitivity continues to be a key driver in the push for private label products.

RTO AS A QUESTION MARK

The future of in-office work remains an unknown variable for the projection of At-Home and AfH

INFINITY

The premier name in
tissue packaging machinery



Throughout our over 20-year history we have been a company committed to continuous refinement. We pride ourselves in offering tissue packaging machinery built with steel frames and robust internal components, designed to give you the most from your investment. Our extensive list of customers speaks to the trust we have earned and continue to maintain as Infinity machinery can be found in over 25 countries across six different continents. Simply put, when you have machinery from Infinity, you have peace of mind.



tissue demand. Some large companies have pushed for a full return-to-office, most notably in 2025 Amazon with 350,000 corporate employees, while others seem content with offering a hybrid or remote work model to employees. Financial industries like banking have seen a strong push to in-office work, while many smaller businesses allow higher flexibility. If current office policies have reached the new equilibrium, then the step change of At-Home tissue demand may be permanent. Otherwise, AfH demand may increase or decrease depending on office occupancy rates to come — with an estimated market share gain of about 2% at stake.

IMMIGRATION POLICIES: CRIPPLING A CRITICAL TISSUE DRIVER

The prevailing demand driver for North American tissue consumption is North American population growth. The more people there are living in a region, the more tissue will be used. Despite boosts from strong tourism years — and threats from bidets, reusable towels, and nonwovens — pre-pandemic tissue demand remained steadfast and highly correlated with the stable growth of the North American population. Historically, that population growth has been steady at around 0.7% per year, according to data from the U.S. Census Bureau, but since 2020, that growth has slowed to only about 0.5% per year. Going forward, the Congressional Budget Office predicts that the U.S. population will grow at only 0.4% per year through the end of the decade, with most of this growth driven by an important dynamic: immigration.

Between 2023 and 2024, net international migration accounted for 84% of U.S. population growth as reported by the U.S. Census Bureau. Of the total immigrant pool, it is estimated that about 23% are unauthorised immigrants, according to the Pew Research Center. Unauthorised immigrants are an estimated 10-11% of the population. Tightened immigration policies and deportation efforts announced by the Trump administration have the potential to slow — or even reverse — U.S. population growth. The quantitative effects of these new policies are yet to be determined, but they could bring changes that affect tissue consumption in the years ahead. More acutely, other evolving Trump administration policies may significantly impact the dynamics of North American tissue on the supplier side, from supply chains to market strategies and beyond.

TISSUE SUPPLY CHAIN CHALLENGES AND POTENTIAL TARIFF INCREASES

A few weeks after inauguration day, President Trump declared 25% tariffs on all imported goods from Canada and Mexico, and a 10% tariff on goods coming from China. Subsequently, Trump agreed to a 30-day pause on his tariff threats against Mexico and Canada, as the two countries took measures towards border security and drug trafficking into the U.S. This temporary pause provided some relief to stakeholders in the tissue industry, however, if these tariffs are implemented it could hurt supply chains and negatively impact consumer prices of tissue products in the U.S.

Canadian softwood pulp is the main raw material in tissue production. Increased tariffs on imported Canadian pulp will hurt local tissue producers' cost structure considering import tariffs are typically paid by importers. U.S. tissue manufacturers may explore the viability of other sources, including Nordic mills, furnish changes such as adding more hardwood like eucalyptus pulp and alternative fibres.

The total import volume of tissue products from Canada and Mexico combined is estimated at 600,000tpy (equivalent to 10 large tissue machines). This accounts for parent rolls that are brought in to be converted in the US and finished tissue products such as bath tissue, towels, napkins, and facial tissue that we see on the shelves of retailers.

In a 25% tariff scenario, U.S. tissue mills that operate tissue machines in Canada or Mexico may consider shifting production to the U.S. However, this transition could face several challenges,

**Canadian softwood
pulp is the main raw
material in tissue
production. Increased
tariffs on imported
Canadian pulp will hurt
local tissue producers'
cost structure.**



Figure 3. Recent and announced upcoming capacity changes



including the need for capital investment and high pulp costs in the U.S.

On the other hand, tissue companies with operations on both sides of the Atlantic, such as Essity and Sofidel, could capitalise on the opportunity to redirect European production to the U.S. in response to potential volume gaps caused by the new tariffs against Canadian and Mexican products. Implementing this strategy may be hindered by tissue buyers' reluctance to accelerate the shift in sourcing, and further, by the possibility of additional tariffs being implemented on European goods entering the U.S.

UNSTOPPABLE FORCE: GROWTH OF THE MID-SIZE TISSUE PLAYERS

Especially under the protectionist trade policies, domestic U.S. tissue capacity investments are guaranteed to continue. On average, two new tissue machines have been added to the North American market in recent years.

In 2024, Georgia-Pacific started a new TAD machine and three converting lines to support its own branded and private label towel business at its mill in Green Bay, WI, and Kruger expanded its footprint at Sherbrooke, QC, by completing the construction of a new light dry crepe (LDC) machine and converting lines.

Last year was a welcome growth to the recent wave of tissue mill closures. Based on the AFRY Smart tissue capacity tracker, close to 800,000 short tons of tissue manufacturing capacity was closed in North America between 2020 and 2023. Many of the closures were small, aging, and AfH-focused tissue machines. The most notable tissue machine closure in 2024 was the permanent closure of Soundview's Putney mill early in the year.

Despite the new supply coming online and an absence of closures, the industry reported healthy operating conditions, and high operating rates invited several new tissue project announcements in late 2024.

First Quality Tissue announced a commitment to install two new TAD machines and converting in Defiance, Ohio. Irving Tissue confirmed another \$600m expansion including a third TAD machine and converting operations at the Macon, GA, complex, which was started just in 2018. At the time of the expansion announcement, Irving was to continue supplying pulp to Macon from its pulp mill in Saint John, NB — pending tariffs proposed by President Trump may injure this strategy.

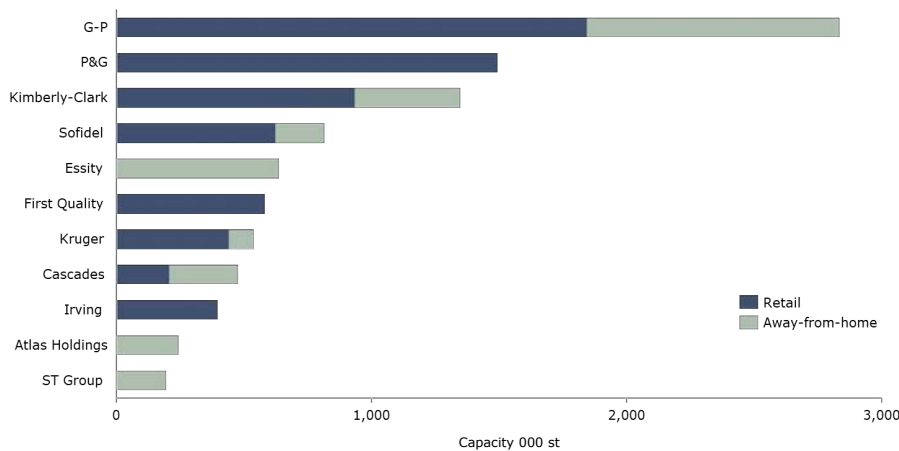
The industry capacity growth pipeline looks robust and aligned with expected overall demand growth, with half a dozen new tissue machines announced to be built over the next few years and a few more expected or speculated. (Figure 3. New tissue capacity pipeline map).

Capacity growth by mid-size tissue manufacturers continues to shape the North American tissue supply landscape whilst "the big three" continue to dominate the tissue manufacturing landscape in North America. However, a new (long awaited) dynamic is emerging on the market: M&A. (Figure 4. North American top tissue manufacturers).

GROWTH ON MATURE MARKETS: M&A

2024 was a year of significant, although singular, M&A in the North American tissue market. It is something we have not seen for years, despite the market dynamics of steady, slow growth and an industry structure of a few leading players followed by many smaller ones being fertile ground for inorganic growth.

Figure 4. North American top tissue manufacturers



The year started with Sofidel acquiring ST Tissue's newly built tissue platform in Duluth, MN, which was only a prelude to the big move of acquiring Clearwater's tissue business in a \$1.06bn deal. The acquisition included four tissue mills, of which one continues to be shared with Clearwater's cartonboard business in Lewiston, ID.

Sofidel is the second largest tissue company in Europe, behind Essity, and now the fourth largest player in North American retail tissue with a growing footprint of seven mills and 13 current tissue machines, with another new machine coming online later in 2025. Sofidel has had a strong growth path in the U.S. after its initial acquisition of Cellynne in 2012.

Clearwater's acquisition created a new private label market leader, with Sofidel to captain the segment together with Georgia-Pacific. A large-scale private label supplier with a strong nationwide footprint is well-positioned to further drive private label market adoption, as well as steer positive EBITDA development for the segment overall.

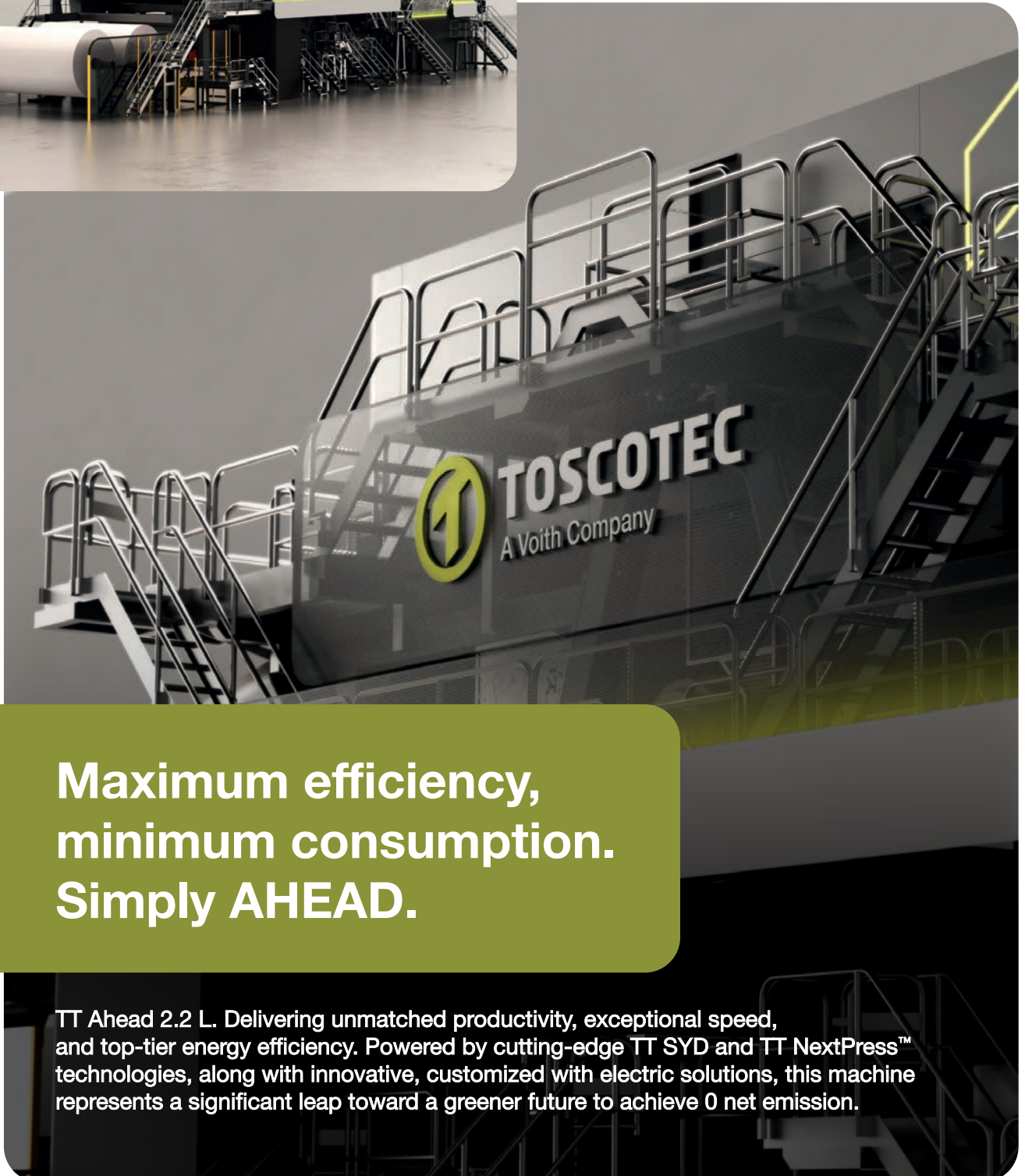
It is undetermined how market dynamics and Trump administration policies will shape the North American tissue landscape in 2025. Kimberly-Clark has been exploring strategic options for its tissue business outside North America, which could pave the path for further consolidation in North America.

growth. If all proposed policies take effect, their impact on demand will be significant and complex. On the supply side, tissue manufacturers must remain agile in this rapidly changing landscape, optimising product portfolios and fortifying supply chains to stay competitive. Navigating these challenges successfully will require a blend of strategic foresight, adaptability, and operational resilience.

It is undetermined how market dynamics and Trump administration policies will shape the North American tissue landscape in 2025.

THE DISRUPTIVE DECADE

The late 2020s are shaping up to be just as uncertain as the former half of the decade, with tariff threats, new immigration policies, and altered consumer behaviour shaking up what has been a market of dependable



**Maximum efficiency,
minimum consumption.
Simply AHEAD.**

TT Ahead 2.2 L. Delivering unmatched productivity, exceptional speed, and top-tier energy efficiency. Powered by cutting-edge TT SYD and TT NextPress™ technologies, along with innovative, customized with electric solutions, this machine represents a significant leap toward a greener future to achieve 0 net emission.

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

EUROPE'S TISSUE INDUSTRY TITANS UNITE FOR TISSUE WORLD'S STRONGEST-EVER SPEAKER LINE-UP

NEW FEATURE:

Unlocking the future: pilot plants, and the tissue revolution

Tissue World Düsseldorf 2025 will host the most powerful speaker line-up in its history, featuring an elite league of European-headquartered tissue industry heavyweights including executives from Essity, Sofidel, WEPA, Metsä Tissue, LC Paper and Duni.

Peers from Ukraine's Kyiv Cardboard and Paper Mill (KCPM) will also take the stage to shape the future of the tissue industry, as well as global powerhouse Fine Hygienic Holding (FHH).

Under the theme Future-Proofing the Tissue Industry for Sustainable Growth, this year's conference will provide a high-level platform where top industry leaders, innovators, and technical experts share insights into the most pressing challenges and opportunities.

From strategic trade risks and supply chain resilience to decarbonisation, energy transitions, and cutting-edge digital solutions, the agenda is designed to equip businesses with the knowledge they need to thrive in an evolving landscape.

A Premier League of industry expertise:

This year's line-up brings together the most influential voices in tissue manufacturing, supply chain management, and sustainability, ensuring attendees receive first-hand insights from the companies setting the global agenda. Highlights include:

- Luigi Lazzareschi, CEO, Sofidel – Keynote on industry leadership in a rapidly changing world
- Strategic Trade & Supply Chain Risks – Foreign Policy Research Institute, Metsä Tissue
- Decarbonisation of Paper Plants – Modellfabrik Papier, Metsä Tissue, AFRY
- Retail Tissue Trends & AI Innovation – Euromonitor International, Tietoevry
- Managing Pulp Supply Chain Risks – FHH.

With pilot plants from Valmet Karlstad, Valmet Converting, Andritz, Gambini, and Saueressig showcasing next-generation tissue innovations, this year's conference offers an unparalleled opportunity to explore emerging technologies and sustainability-driven advancements first-hand.

A landmark conference in tissue industry history

Agnes Gehot, Conference Director at Tissue World, emphasised the unprecedented strength of this year's speaker line-up: "Tissue World Düsseldorf 2025 is bringing together the industry's most influential minds under one roof – this is the European Premier League of tissue leaders.

"We have never had such a powerhouse line-up, covering every critical aspect of the sector's future. Whether you're looking to navigate supply chain risks, drive decarbonisation, or explore game-changing innovations, this is the conference you cannot afford to miss."

NEW FEATURE:

Unlocking the future: pilot plants and the tissue revolution

Join us for an interactive and insightful session that puts the spotlight on pilot plants, cutting-edge technologies, and the innovative products they bring to life.

This dynamic new session will showcase companies at the forefront of research and development, offering a unique opportunity to explore, feel and touch the latest advancements in materials, fibres, additives, and production techniques.

Each participating company will have a dedicated tabletop display featuring their products and a poster detailing their process, breakthroughs, and market impact.

Additionally, each company will deliver a 15-minute presentation, providing a deeper dive into their pilot plant operations.

Expect engaging discussions, video demonstrations, and hands-on sample exploration.

This session is designed to foster dialogue through interactive polling and discussions, promote collaboration, and offer valuable insights into the industry's future.

TOSCOTEC TO SUPPLY TWO YANKEE HOOD UPGRADES IN EUROPE AND USA

Toscotec has said it will supply two Yankee hood upgrades to a confidential tissue manufacturer in Europe and in the United States.

On both projects, the machinery supplier said it will supply high-efficiency Yankee hoods complete with burner system and ductworks.

Scheduled for completion in 2025, the scope of supply also includes TT Drying Equilibrium, which Toscotec said automatically adjusts the air balance in the hoods and air system to guarantee the highest productivity and energy efficiency.

Gabriele Romanini, Sales Manager, Toscotec, said: "These projects will deliver a substantial optimisation of the energy efficiency of these two existing machines and allow the mills to boost their production capacity."

UNITED KINGDOM

METSÄ GROUP SUBMITS FINAL PLANNING APPLICATION FOR GOOLE; LATEST TECHNOLOGIES AIM FOR FOSSIL-FREE PRODUCTION BY 2030

Finland's Metsä Group has submitted the final planning application for its proposed new Metsä Tissue mill in Goole.

If approved, the mill would be capable of producing 240,000 tonnes of fresh fibre-based tissue paper per year once fully operational, which represents about one-fifth of the current tissue volume in the UK.

The company said the project would increase the UK's self-sufficiency in the tissue paper market to approximately 85% – around 40% of the tissue in UK and Ireland is currently imported.

Cutting edge production technologies will be used to aim for fossil-free production and offerings by 2030.

Mika Paljakka, Metsä Tissue's Senior Vice President, UK & Ireland, said: "Our Technical Director's team of planners, architects, technical designers, specialists and project managers, has meticulously examined the details of the planned tissue paper mill and consulted public bodies.

"They have delivered plans for a new state-of-the-art tissue paper mill capable of world-class local tissue paper production in the UK."

Falling under Metsä Tissue's strategic Future Mill programme, the planned mill in Goole would use cutting-edge production technologies to deliver an efficient and modern facility with an outstanding environmental performance.

Metsä Tissue aims to offer fossil-free production by 2030.



Metsä Group's proposed Goole tissue paper: if the project goes ahead, the company expects to increase the UK's self-sufficiency in the tissue paper market to around 85%

BRAZIL

SUZANO REPORTS RECORD Q4 AND FY SALES; REACHES NOMINAL CAPACITY IN "RECORD TIME" ON R\$4.5BN CERRADO PROJECT

Suzano has set a "sales record" in 2024 as it reaches nominal capacity and one million tons of production in "record time" on the world's largest single-line eucalyptus pulp mill – at its Andritz-delivered pulp mill in Ribas do Rio Pardo, Brazil.

In its quarter four – and full-year results, its pulp and paper sales for the year reached a new record of 12.3m tonnes, rising 7% on 2023, and driven mainly by the additional capacity at Ribas do Rio Pardo.

Further capacity from the recent acquisition of paperboard mills in America has also contributed to the record sales volume.

Higher sales volumes and favourable exchange rates boosted export revenues and resulted in net

revenues increasing 19% to R\$47.4bn in 2024, 19% higher than in 2023.

Suzano reported a net loss of R\$6.7bn due to the accounting impact of the US dollar denominated debt and hedging operations translating into Brazilian Real.

The company invested R\$17.1bn in 2024, with R\$4.5bn allocated to the Cerrado Project in Ribas do Rio Pardo which started operations on 21 July 2024.

Beto Abreu, Chief Executive of Suzano, said: "We successfully completed our Cerrado Project and made significant strides in our strategy, with the acquisition of assets in the US and a stake in Lenzing, the Austria-based textiles business.

"Despite these investments, we ended 2024 with lower net leverage than the prior year, reflecting Suzano's discipline in capital allocation, operational competitiveness and financial strength."

The production milestone in Ribas do Rio Pardo



Production boost: Suzano's eucalyptus pulp mill in Ribas do Rio Pardo, Brazil, was delivered by Andritz. Photo – Suzano

YD-PL450SE Non-Stop Rewinding Line



Toilet roll, Kitchen towel, Maxi roll
ALL IN ONE LINE



DISCOVER
TR:PLER
THE NEWEST
EMBOSSING
SOLUTION

WHEN **ITALIAN MASTERY**
MEETS **CHINESE ATTITUDE**
THE **EXTRAORDINARY**
BECOMES **REAL**

BaoSuo Enterprise Provide You The Turnkey Solution For Tissue Production



Tissue Machine



Converting Machine



Packing Machine

was reached less than six months after start-up and nearly four months ahead of schedule.

On 29 December 2024, Suzano consistently produced bleached eucalyptus kraft pulp at an average daily rate exceeding the planned 7,203tpd for 30 days.

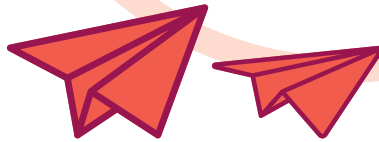
On 8 January, it reached its first one million tons of pulp. When fully operational, it will have an annual production capacity of 2.55m tons.

Leonardo Mendonça Pimenta, Director of Industrial Operations at Suzano in Ribas do Rio Pardo, said: "This achievement is the result of a combination of several factors, including excellent equipment, great suppliers, and very good project execution.

"The training of the operating team more than a year before the start of operations also played a major role in delivering these extraordinary results."

The scope of supply by Andritz included a pulp mill with technologies for fibre production and chemical recovery including gasification plants on an Engineering, Procurement, Construction, Civil Works (EPCC) basis.

"With Kruger PRO's updated positioning focused on making business more comfortable, we're excited to highlight our deep understanding of our customers' needs and the trust they place in us to deliver."



NORTH AMERICA

FIRST QUALITY ANNOUNCES LOCATION FOR ULTRA-PREMIUM T&T OPERATIONS

First Quality Tissue has confirmed that a new plant in Defiance, Ohio, will home its two new TAD tissue machines.

The first of two state-of-the-art Thru-Air-Dried paper machines with associated converting facilities are expected to be up and running in the first part of 2028.

Its expansion of ultra-premium T&T manufacturing operations "demonstrates First Quality's continuing commitment to satisfying the needs of the market, and the growing demands of the consumers," the company said.

It added that the initiative will enable the company "to continue to be a leader in providing ultra-premium T&T support the long-term growth of its customers."

KRUGER PRODUCTS REBRANDS AFH DIVISION; SOME CONSUMER BRANDS SOON TO BE AVAILABLE IN CANADA AND AMERICA

North America's Kruger Products has introduced the rebranded Kruger PRO, which it said aims to align the company's AfH division with the company's overall vision.

As part of the rebrand, Kruger PRO will also introduce some of its consumer brands into the AfH category.

Starting in early April, customers will have access to Cashmere and Scotties in Canada, and White Cloud in America.

Stephen Blythe, Vice President, Marketing, said: "With Kruger PRO's updated positioning focused on making business more comfortable, we're excited to highlight our deep understanding of our customers' needs and the trust they place in us to deliver."

The company's White Swan brand is also undergoing a revamp and its packaging will feature an updated logo, green colour palette and elegant, nature-inspired imagery.

FINLAND

METSÄ GROUP ANNOUNCES SARI PAJARI-SEDERHOLM AS METSÄ TISSUE CEO

Metsä Group has appointed Sari Pajari-Sederholm, previously Executive Vice President, Strategy, as Metsä Tissue's Chief Executive.

Esa Kaikkonen, previously Metsä Tissue's Chief Executive, has been appointed Metsä Group's Executive Vice President, Strategy.

The changes took effect on 1 March 2025.

Ilkka Härmälä, President and Chief Executive of Metsä Group, said: "When experienced professionals move to new roles, they can offer new perspectives, strengthening our decision-making and deepening our expertise.

"This makes us better equipped to meet challenges more effectively."



Start-up team: Indonesia's PT Sun Paper Source starts-up tissue machines PM18 and PM19 at its Ngoro mill

INDONESIA

PT SPS BEGINS PRODUCTION ON TMS; EXPANDS PROJECT TO FIVE UNITS

Indonesia's PT Sun Paper Source (PT SPS) has successfully started up two new tissue machines – PM18 and PM19 – at its Ngoro mill.

PM18 commenced production on 24 January followed by PM19 on 6 February.

Initially planned as a four-machine expansion, the project has now been upgraded to five machines to meet growing market demand.

The remaining three machines are currently under installation and will begin operation sequentially in the end of April.

The five new machines are designed with a speed of 1,800 metres per minute with a fully deckle of 2,880mm.

Once fully operational, all units will be integrated with fully automated converting lines, enhancing efficiency and production capabilities.

With this expansion, PT Sun Paper Source reaffirms its commitment to strengthening its market position and delivering high-quality tissue products to both domestic and international customers.

The company was unable to disclose the machinery suppliers at this time.

SWEDEN

REXCELL COMPLETES DRYING SECTION REBUILD IN SKÅPAFORS

Sweden's Rexcell Tissue & Airlaid has started up its PM1 after a complete rebuild of the drying section supplied by Toscotec at its Skåpafors mill in Sweden.

The machinery supplier said Rexcell achieved its targets substantially by bringing down PM1's thermal energy consumption through the use of energy-efficient drying technology and increase the machine's production capacity.

Toscotec's scope of supply delivered considerable gas consumption reductions and a significant increase in machine run-ability.

The rebuild has included a press section upgrade, the installation of a TT SYD Steel Yankee Dryer with new steam and condensate system, and high efficiency TT Hoods where the air system burners are specifically designed and tested for different fuels (LPG and biomethane).

Lars Andersson, Chief Executive at Duni Rexcell, said: "The project was successful in reducing our carbon footprint. This is an important part of our medium-term efforts toward our 2030 Net Zero target."

Rexcell is a wholly owned subsidiary of Duni Group, and – after starting production in 1898 – now operates one of the most advanced paper mills in Europe for the production of specialised tissue.

EUROPE'S TOP EXPORTER – ITS TISSUE, MACHINES AND TECHNOLOGY GO WORLDWIDE

Slow growth, population decline, viability risk with relatively narrow and slow machinery suggest a risk to status ... but long-term. Report by Bruce Janda, Senior Consultant, ResourceWise.



Italy continues to lead Europe in tissue production and exports, whilst also being a major manufacturer and exporter of tissue-making equipment and technology. This includes complete tissue machines and converting lines. As the third-largest tissue market in the European Union, Italy's overall tissue expenditure totalled over \$1.66bn in 2021. Lucca is recognised as the only official "Paper District" in Europe, hosting over 140 paper mills and converters and accounting for 24% of European tissue production.

Italy's current economic fundamentals only partially support Italy's domestic tissue demand growth. Gross domestic product per capita has grown significantly since the end of the Great Recession, despite a minor setback during the Covid-19 pandemic. The blue line in Figure 1 shows the growth of GDP per capita, expressed as purchasing power parity (PPP). This metric is adjusted for local consumer prices and income to provide a relative idea of the discretionary purchasing power available to Italian consumers. This indicates that the average Italian consumer has a greater spending

capacity. However, the population has been slowly declining since around 2015, as illustrated by the yellow bars in Figure 1. The population is estimated to have decreased by -0.8% in 2024, and the net consumer demand effect of the aging population has yet to be established.

Figure 2 illustrates inflation and unemployment trends for Italian consumers. The blue line shows that inflation peaked at 8.2% in 2022 and is now normalising. The yellow bars indicate that unemployment has gradually decreased to around 7%. Taken together, figures 1 and 2 would generally support consumer demand growth but the effect of the smaller and older population has yet to be seen.

Italy imports relatively little tissue compared to its production capacity and export performance. Over the 18-year period shown in Figure 3, Italy's tissue import levels have remained largely stable. Most imports come from Italy's neighbouring countries such as France, Spain, Germany, Switzerland, Poland, and Sweden.

The trend in tissue exports illustrated in Figure 4 tells a different story. Over time, export volumes

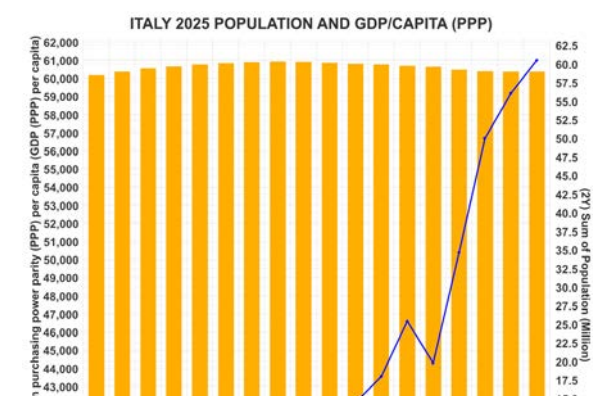


Figure 1: Italy's Population and GDP/Capita

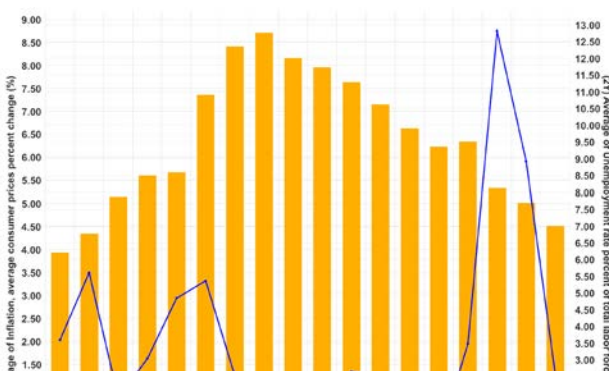
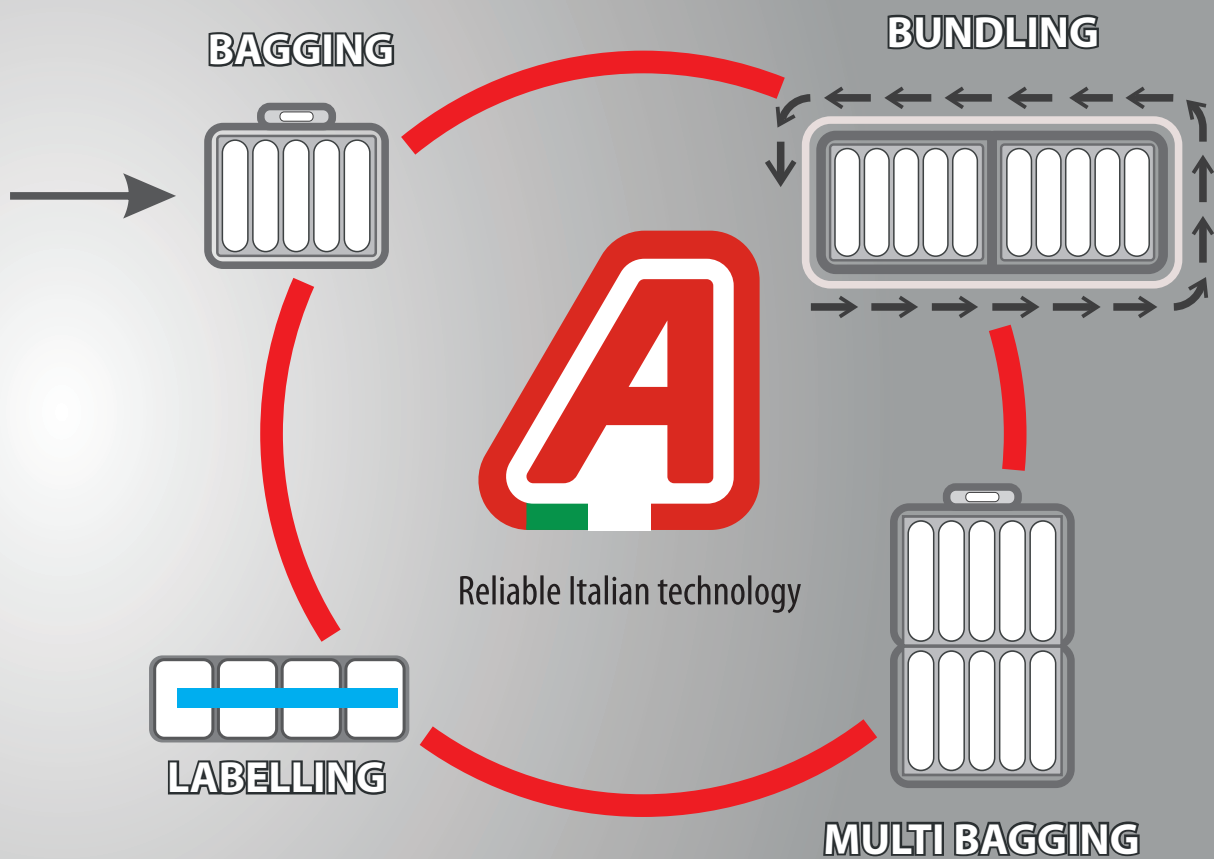


Figure 2: Italy's Inflation and Unemployment



AMOTEK

YOUR PACKAGING PARTNER

Customized end-of-line equipment as turnkey solution for your TISSUE AND NONWOVENS production

Visit us at

Tissue World | Düsseldorf

HALL 8A - BOOTH #C40

8 - 10 April 2025



Amotek S.r.l. a socio unico | Bologna | Italy

Phone +39 051 61868-11 | sales@amotek.com | www.amotek.com

OPTIMA
GROUP

have steadily increased. Notably, the scale of Figure 4 exceeds that of Figure 3 by more than 12 times. While many of the same neighbouring countries are involved in trade, export quantities far surpass import levels. The Italian tissue industry remains strongly committed to exports, which continue to drive future capacity growth.

Over the past 20 years, the number of tissue machines in Italy has remained stable, with a net increase of six machines from recorded changes and projects, as shown in Figure 5. New machines typically have higher capacity than those replaced, resulting in an annual total capacity growth rate of nearly 1%. This growth rate represents more exports and less total domestic consumption as the population decreases.

Figure 6 shows that Italy is the leading tissue producer in Europe. Italy's close neighbours, Germany, Poland, France, Spain, and Sweden are also top producers and represent most of Italy's tissue trading partners.

Italy exports more than just tissue. It is home to companies that manufacture tissue paper machines and tissue converting lines. This contributes positively to the tissue industry in Italy. Figure 7 examines the current fleet of Italian tissue machines by the machine builder.

Eight brands of tissue machines are in operation in Italy, with two sourced from other European suppliers. Notably, approximately 70% of these machines were sourced from Italy. The Italian tissue industry is strongly geared toward Italian equipment, with converting equipment likely having an even higher percentage of Italian origin. With its expertise in tissue machinery and innovation, Italy continues to have a global impact on the industry.

Italian tissue sites mainly rely on non-integrated baled pulp, as illustrated in Figure 8. Fewer than a quarter of the sites incorporate any recycled pulp. This positions Italy as a significant importer of virgin baled pulp, exposing it to the risks of pulp market price fluctuations.

The types of pulp used by Italian tissue makers are further explored in Figure 9, which illustrates the average fibre sources utilised in converted tissue product formats. Eucalyptus hardwood and various southern softwood pulps account for most of the produced formats. Consumer bath, towel, napkin, and facial formats primarily use eucalyptus for its softness, enhancing tissue quality and performance to meet consumer expectations for top-tier tissue grades in

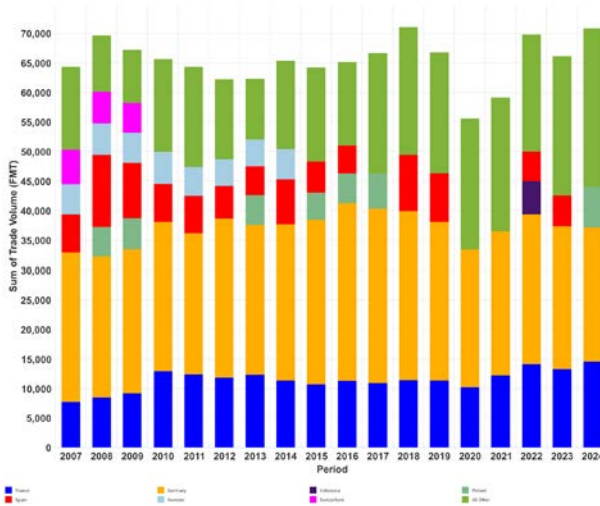


Figure 3: Italy Tissue Imports

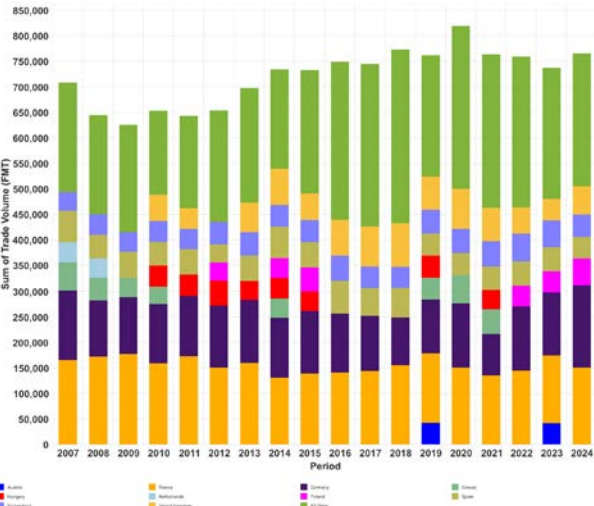


Figure 4: Italy Tissue Exports

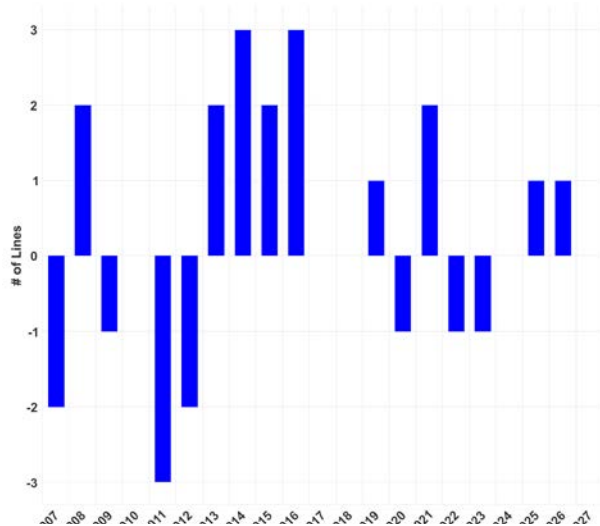


Figure 5: Italy Tissue Machine Count Trend

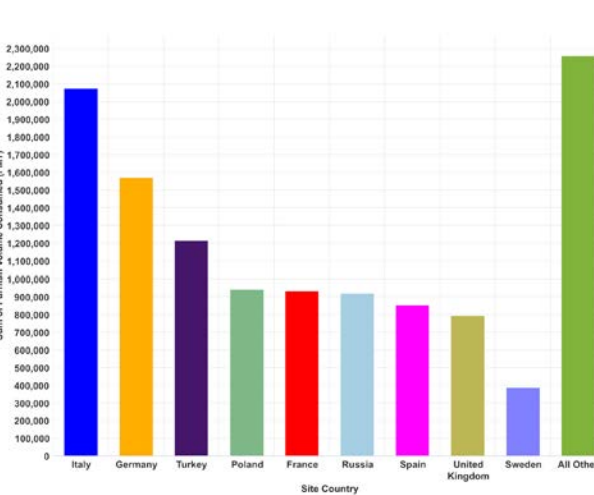


Figure 6: European Tissue Production

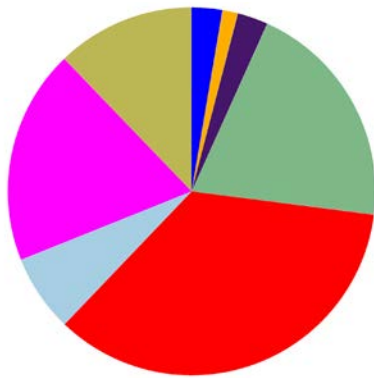


Figure 7: Manufacturers of Italy's Tissue Machines by Machine Count

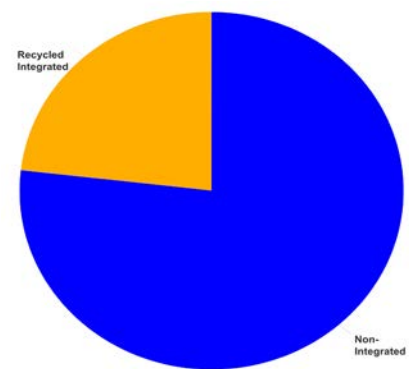


Figure 8: Italy Tissue Sites by Production Volume

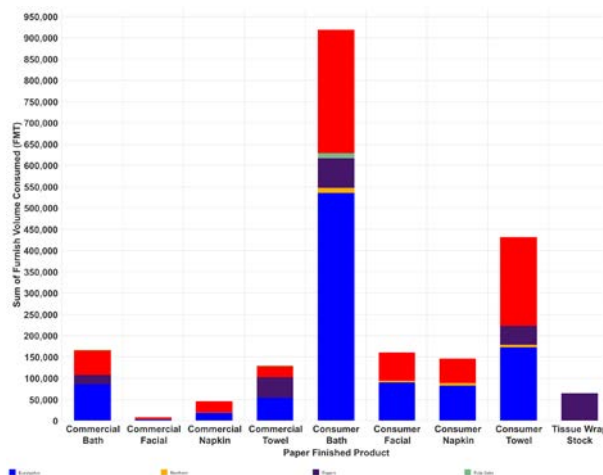


Figure 9: Italy Tissue Finished Products by Fibre Source

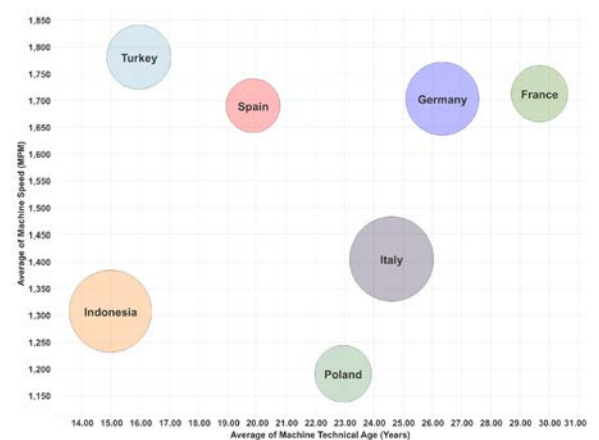


Figure 10: Italy Tissue Machine Quality

export markets and the higher prices associated with these premium grades or brands. The use of recycled fibre is limited in most products, except for tissue wrap stock. Commercial tissue products utilise a significantly higher proportion of eucalyptus than anticipated for commercially priced commodity grades. This also suggests that these grades are high-performance products used in higher-end applications.

A comparison set including Spain, France, Italy, Poland, Turkey, Germany, and Indonesia was selected for a technical analysis of nearby tissue trading partners. This encompasses Italy's close tissue trade partners and enables a comparison with a growing export powerhouse in Asia. Figure 10 illustrates this comparison by plotting the average technical age of each country's machines on the X-axis against the average tissue machine line speed on the Y-axis. The size of each bubble represents the total capacity of each producing country.

There are two metrics for tissue machine quality that indicate performance capability. The average machine speed metric used in Figure 10 provides a productivity view of how quickly tissue can be produced. An alternative metric is the average tissue trim width for each machine, with more consumer rolls or sheets produced per meter of run time. Both metrics yield

similar results globally, except in special cases like the United States, where older machines can be quite wide. In this instance, Italy and Poland have relatively narrow machines, which limits their productivity. The bubble chart methodology is restricted to three metrics at a time. Fortunately, FisherSolve Next can incorporate width, total production, speed, technical age, and other measures to calculate a viability index for the set. The viability index will be discussed in Figure 12.

Italy's machines, like those in Poland and Spain, are somewhat outdated and operate slower than those in Turkey, Germany, and France. Additionally, Italian and Polish machines have narrower trims, which may impact their future viability. Emerging markets and regions closer to customers produce narrow and relatively fast tissue machines. This setup allows for smaller investments and market actions to cater to the smaller machines. Broader and quicker production enables costs to be distributed over a greater number of tons per hour or month.

Figure 11 compares the same countries with Italy, highlighting the average cash cost of producing a ton of tissue. The height of each bar reflects the production cash cost for each country, while the width indicates their relative tissue capacity. Furthermore, the coloured segments within each bar represent the costs involved,

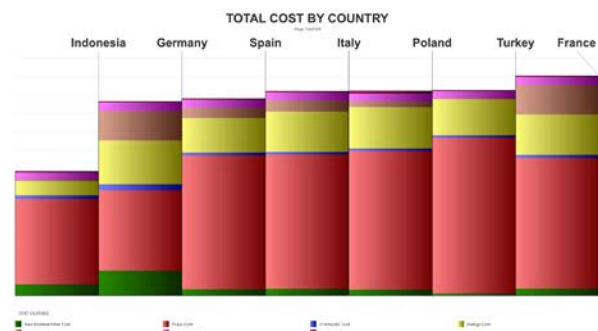


Figure 11: Italy Tissue Cash Cost Comparison

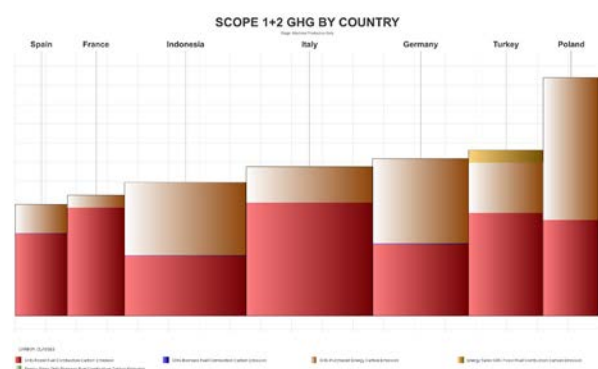


Figure 13: Italy Tissue Carbon Emission Comparison

including raw fibre materials, market pulp, chemicals, energy, labour, materials, overhead, and any credits.

Indonesia is the lowest-cost producer, whereas France is the highest-cost producer. Energy costs in Indonesia are the lowest, partly due to the use of biomass energy in pulping and waste boilers, which are considered carbon neutral. Germany has the highest energy costs, as indicated by the width of the yellow band. Germany also has the greatest amount of recovered fibre, represented by the dark green bar at the bottom. Both Germany and France exhibit very high labour costs, while Poland, Italy, Indonesia, and Spain have the lowest labour costs.

Figure 11 shows a snapshot of the average tissue machine and mill viability. In this case, the cost of the bar height is determined by viability factors, where cost is only one of eight considered. The legend shows these factors as capital required, cost, grade risk, internal company risk, competitiveness, size, technical age, and tons per unit trim.

Turkey has the best (lowest) viability risk score, followed by Indonesia. Italy ranks at the top of the chart for the most significant viability risk. This is where the narrow width of Italy's machines (size) and speed (tons per unit of trim) contribute to more risk, as shown in the taller bar for Italy.

Figure 13 illustrates the carbon emissions associated with Scope 1 (on-site fuel) and Scope 2 (electricity) in relation to the tons of finished tissue produced. The data indicates that Italy's emissions are average, while Spain, France, and Indonesia demonstrate greater efficiency.

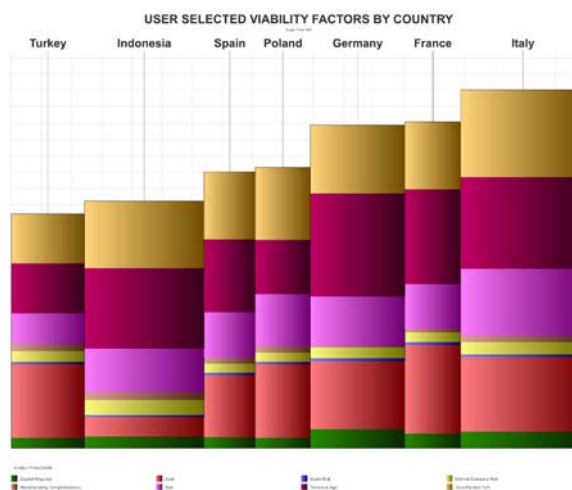


Figure 12: Italy Tissue Machine Viability Comparison

Poland's elevated emissions are primarily due to its reliance on a coal-fired grid. Germany utilizes on-site fuel effectively for power, hot air, and steam; however, it also faces significant challenges from a carbon-intensive electrical grid. Additionally, Italy has an opportunity to improve by reducing its high Scope 1 emissions when compared to neighbouring countries.

Italy's tissue industry is experiencing slow growth due to a declining population, although this is somewhat offset by its focus on exports. Machine replacements and upgrades are progressing at a deliberate pace. Italy remains the most active tissue exporter in Europe. This position is supported by average tissue cash costs in comparison to its peers, yet Italy's tissue machines are relatively narrower and slower than those of neighbouring countries. The average viability risk of Italy's tissue machines is the highest among the comparison group, suggesting that Italy's impressive status as a tissue exporter is at risk in the long term.

A detailed understanding of tissue producers and their individual machines is crucial for analysing the competitive landscape. This article presents an overview of the current tissue industry in Italy. Fluctuations in fibre prices, exchange rates, and environmental regulations create both opportunities and challenges for industry participants. Moreover, changes in ownership and consolidations are expected to persist among tissue mills in Italy, while investments in tissue-making capacity from neighbouring countries may impact imports and exports.



FEEL THE
DIFFERENCE

AQUENCE XTRA RANGE **FOR FIBER TREATMENT**

- » Enhanced surface properties, for a smooth feeling
- » Improved tissue texture, for a fluffy experience
- » Moisturizing properties, for a soft & silky sensation
- » Available with multiple care elements, tailored to you

REQUEST A DEMO



Henkel Adhesive Technologies

NEW PACKAGING, NEW FORMULATIONS, NEW SUSTAINABILITY FEATURES ... THE HOME OF INNOVATION GEARS UP AGAIN

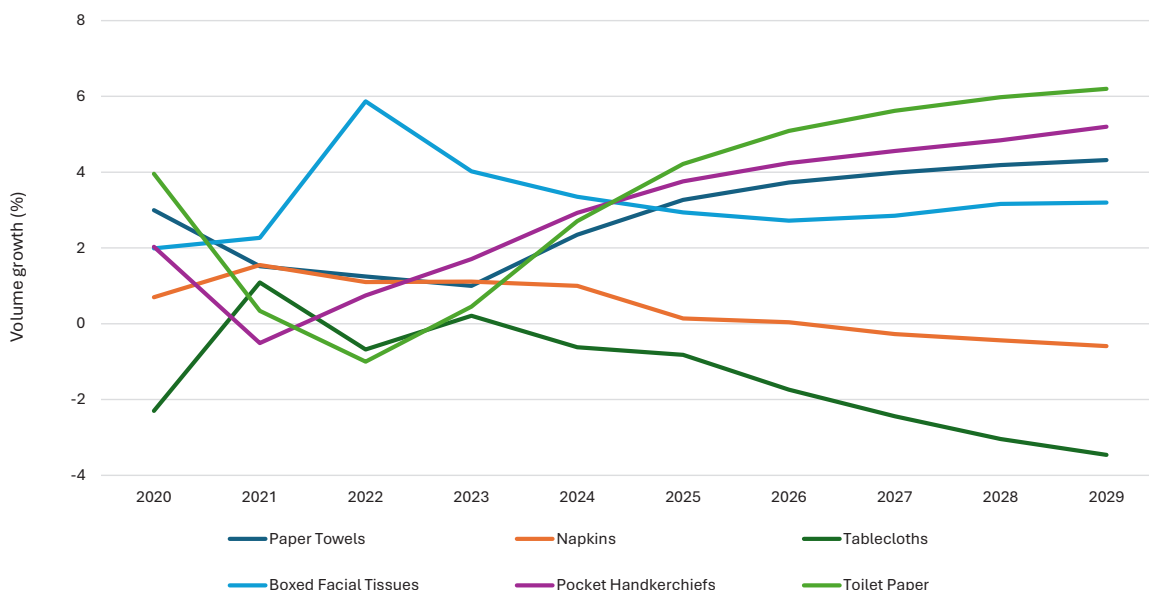


Italy's all sector volume growth tops pre-pandemic levels, and per capita volume consumption is the highest in Western Europe. Report by Sarah Wood, Senior Research Analyst, Euromonitor International.

Overall tissue demand remained high in Italy in 2024. Both retail and AfH tissue experienced volume growth, above pre-pandemic levels, despite high inflation impacting consumers' spending capabilities. The tissue sector continues to benefit from the fact that these products are essential and are not easily substitutable.

Retail tissue also saw value growth in 2024, with toilet paper as the largest category and highest-growing category across the 2025-2029 forecast period. Despite being a worldwide hub for production of toilet paper, during the pandemic and subsequent lockdowns, the country did not experience inventory issues, unlike many others across Western Europe. As a result, demand for toilet paper remained more stable than the rest of

Italy: Retail tissue volume growth by category, 2020-2029





GUTES BLATT. GUTE AUSSICHTEN.

INFORMATIV . VIELFÄLTIG . AUSSICHTSREICH .

Wir informieren über Produkte,
Neuheiten & Trends der Papier- und
Zellstoffindustrie.

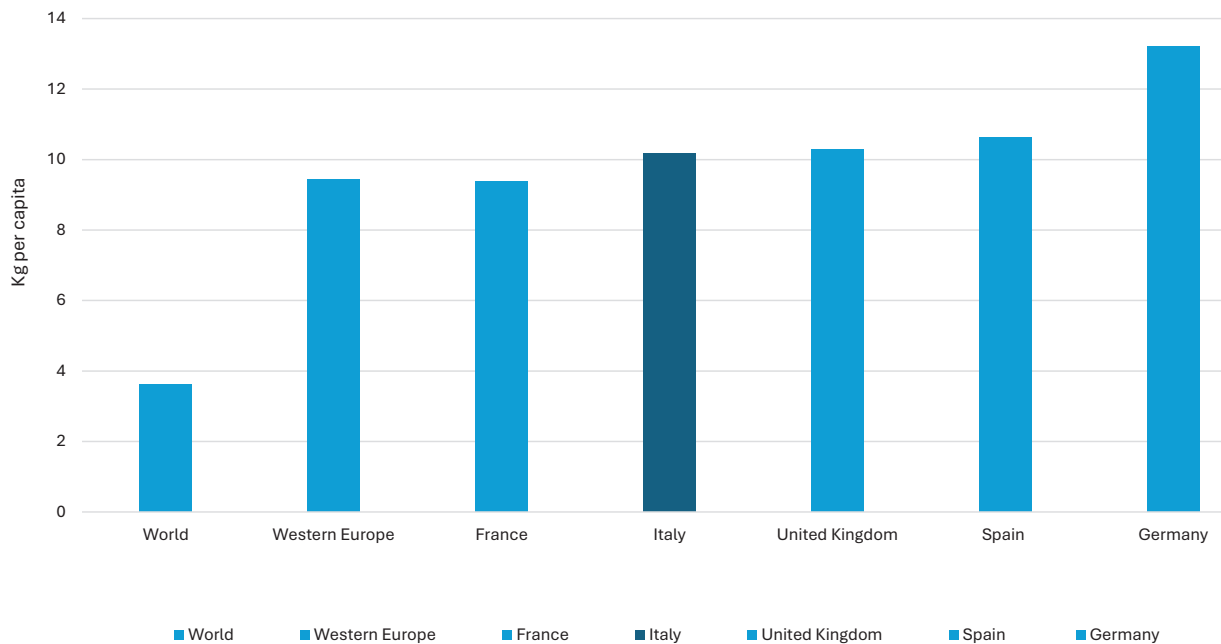
Unser Newsletter nimmt wöchentlich
die Branche in den Blick.
Einfach mal hineinschauen!



**NEWSLETTER:
JETZT KOSTENFREI
ANMELDEN!**



Tissue per capita volume consumption, World vs Key Western European markets, 2024



Source: Euromonitor International Tissue and Hygiene Annual Research, published February 2025

the region. Boxed facial tissues showed the fastest growth in 2024, with this growth largely the result of lasting post-pandemic trends in which Italians increasingly substitute textile handkerchiefs for boxed facial tissues.

High inflation and reduced disposable income have fuelled the growth of private label in recent years. Large grocery retailers have been investing in private label developments through new packaging, new formulations, and improved sustainability features. One example of this comes from Coop Italia, who have re-worked retail tissue products across their Viviverde private label line, so that they are now made from fibrepack, a recycled fibre derived from soft drink cartons. Developments such as this continue to make private label an increasingly attractive option for Italian consumers.

AfH tissue grew in volume consumption in 2024 more moderately than in the years immediately following the pandemic. However, there was still demand for AfH occasions in 2024, with visits to restaurants and cafes driving this demand.

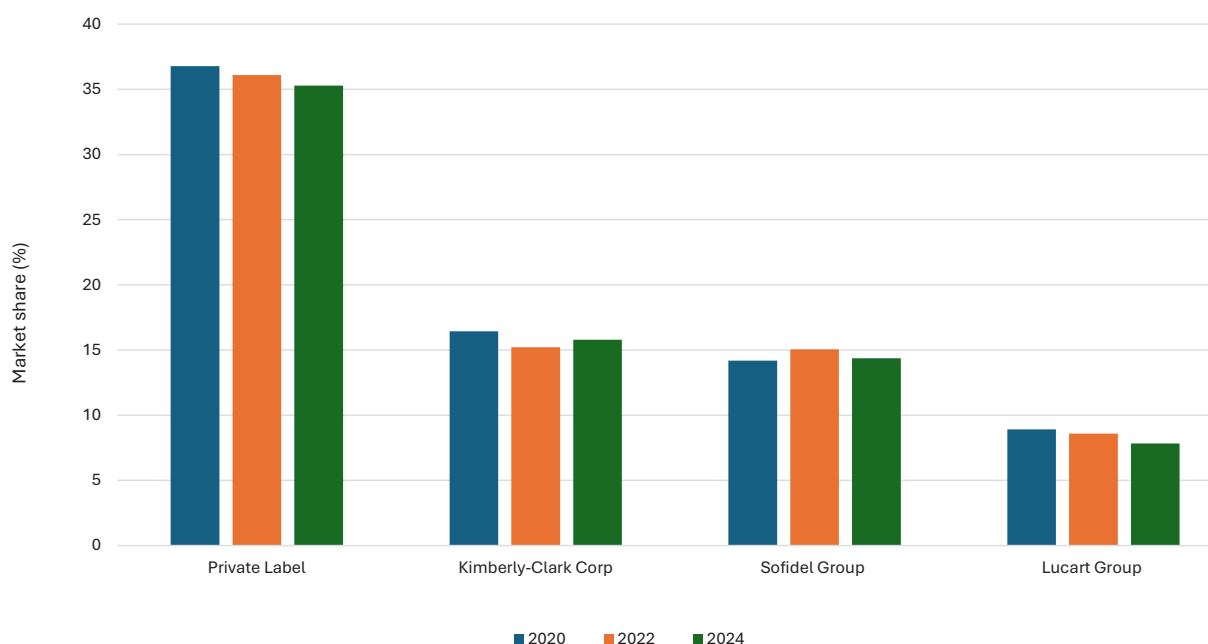
Putting Italy in the context of Western Europe, the tissue per capita volume consumption in Italy is higher than the average for Western Europe. Italy has an aging population which contributes to this, given that older adults use tissue products on a more frequent basis.

The aging population in Italy is higher than the regional average, with 24% of the total

population aged 65+, in comparison to Western Europe, where only 20% of the total population was 65+ in 2024. In addition to this, Italy is a major tourist destination, with this contributing to the consumption of tissue products in public spaces as well as private accommodation. Inbound arrivals to Italy increased in 2024, with in-destination spending similarly seeing value growth in 2024.

High inflation and reduced disposable income have fuelled the growth of private label in recent years.

Italy: Private label vs leading players, retail tissue, 2020/2022/2024



Source: Euromonitor International Tissue and Hygiene Annual Research, published February 2025

Spending on food and dining in particular experienced value growth, with this positively impacting tissue consumption.

CONSUMERS WARM UP TO BRANDED PRODUCTS AMID SUSTAINABILITY INNOVATIONS

Whilst private label continued to grow in retail value and volume sales in 2024 and remained the largest tissue player of all, they did cede some value share to branded players as the effects of inflation have eased and some Italian consumers moved away from private label to branded products. This is evident given that Sofidel's Regina products remain amongst the most popular brands in terms of value sales across retail tissue in 2024, despite having a higher price point compared to other brands. Sofidel remains popular amongst Italian consumers given its performance, specifically its absorbency and usability, as well as the fact the company invests in sustainable practices, features that consumers are willing to pay more for.

Sustainability remains an area of innovation for tissue players in Italy, with continued focus centred on creating a wider appeal to sustainability-conscious consumers as well as decreasing operating costs and carbon footprint. One example of this in Italy comes from Eurovast, who are working to increase the sustainability of their Fior di Carta brand. According to Eurovast, 98% of the materials they use are renewable,

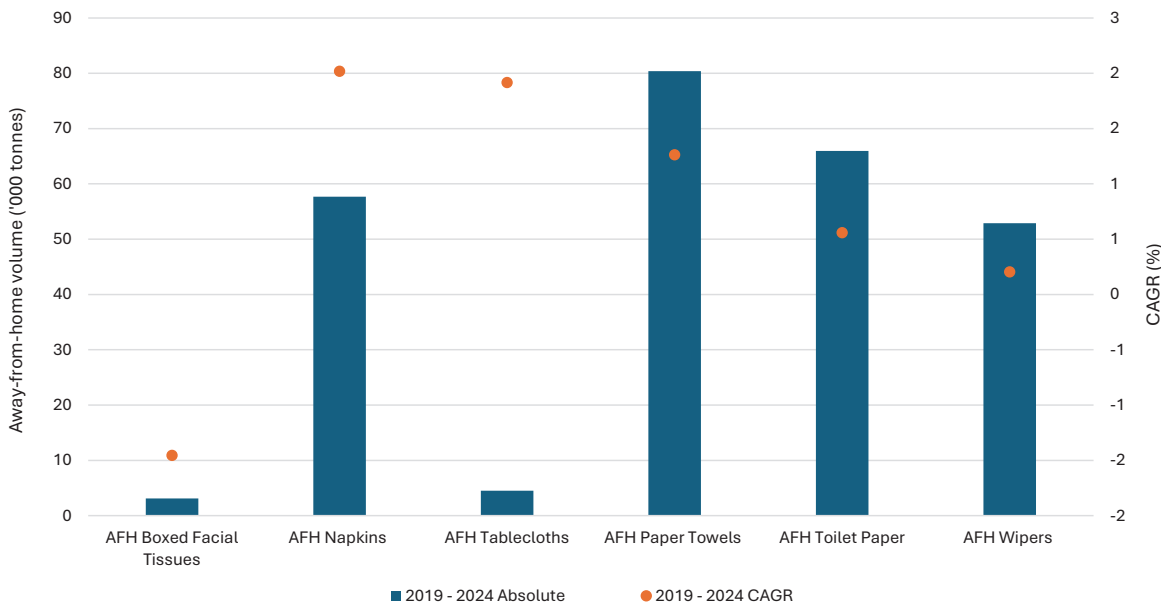
with production of waste down by 5% across its plants in Italy, UK, and the Netherlands. These sustainable achievements are regularly disclosed to consumers through regular communication and sponsorship activities.

NEW LEGISLATION TO COME INTO FORCE IN ITALY IN 2025 PROTECTING CONSUMERS FROM SHRINKFLATION

Retail tissue will continue to grow in both volume and value terms across the forecast period in Italy, as demand will remain stable for these products. Toilet paper is forecasted to have the largest and most dynamic growth in the years to come, thanks in part to the wide availability of types, grades of softness and colours, as well as the fact that toilet paper will remain an essential product for consumers. In addition, Italy will remain an important supplier of toilet paper, and their localised supply chain and ample inventory will allow them to meet consumer demand more cost-efficiently.

New legislation is also coming into place in 2025 to help target 'shrinkflation', the phenomenon in which the price of a product remains the same whilst its size gets smaller. The new legislation requires that Italian consumers must be informed on the packaging if the quantity of the product inside has been reduced to match the previous retail price. This will provide Italian consumers with some protection from continued shrinkflation and will help moderate unit prices for tissue goods.

Italy: AFH tissue volume growth by category, 2019-2024



Source: Euromonitor International Tissue and Hygiene Annual Research, published February 2025

AFH TISSUE EXPERIENCES COMPARATIVELY MODERATE GROWTH IN 2024

AfH tablecloths have emerged in recent years as a dynamic category with steady growth from 2021 onwards as the consumer foodservice industry in Italy has embraced paper as an alternative to textile tablecloths. Paper tablecloths are more hygienic as they can be replaced for each customer, they enable restaurants to save money on dry-cleaning and are available in a wide range of patterns, colours and sizes. This has made them an increasingly attractive option in recent years, with this reflected in their recent growth.

The AfH tissue sector in Italy will continue to experience volume growth across the forecast period. AfH paper tableware, particularly napkins and tablecloths, will continue to experience steady growth as the switch from textile to paper will continue to spread across the foodservice industry. Toilet paper and wipes in the sector will also continue to perform well in future years, given that these products are deemed essential, with constant steady demand remaining across the forecast period.

Channel performance in AfH tissue has remained relatively stable overall in 2024. Business/industry is the largest AfH channel in terms of share of sales for AfH tissue in Italy, despite ceding a small amount of its total share. The Horeca channel

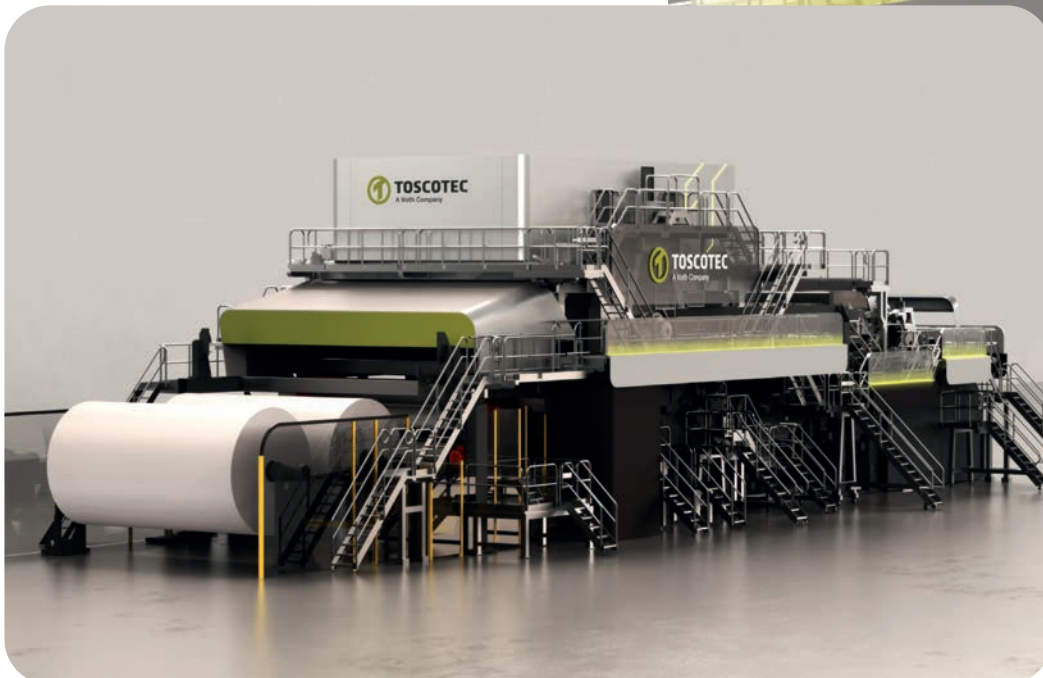
experienced a small increase in share of sales in 2024, as the consumer foodservice industry in Italy continues to embrace paper products as an alternative to textile products.

Sustainability remains an area of innovation for tissue players in Italy, with continued focus centred on creating a wider appeal to sustainability-conscious consumers.

Maximum efficiency, minimum consumption. Simply AHEAD.

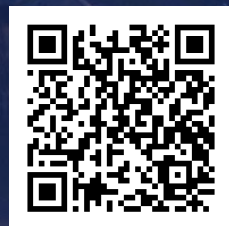
TT Ahead 2.2 L.

Delivering unmatched productivity, exceptional speed, and top-tier energy efficiency. Powered by cutting-edge TT SYD and TT NextPress™ technologies, along with innovative, customized with electric solutions, this machine represents a significant leap toward a greener future to achieve 0 net emissions.



**Tissue
World** | Düsseldorf
8-10 April 2025

Welcome to Düsseldorf



Get the NEW **event app** for a
live view of everything going on!

To access, enter the app code: **EVENTS2025** and
request a PIN using the same email address you
registered, then enter the PIN and select the event.



Willkommen!

We're thrilled to welcome you to **Tissue World's flagship European edition**—where the industry's most influential minds come together to shape the future of tissue.

This year, we're bringing you our **strongest-ever lineup of speakers and sessions**, tackling every critical challenge and opportunity facing the sector.

Whether you're here to navigate supply chain risks, accelerate decarbonization, or uncover game-changing innovations, this is where the industry moves forward together.

Beyond the conference and exhibition, don't miss the networking events and social gatherings: the perfect opportunity to connect with new and familiar faces. See you there!

Gerry Dunphy, Event Director

Don't miss...



Tech Talks

Bite-sized sessions open to all badge types on the show floor
[Day 1, 2 & 3](#)



Conference: Senior Management Symposium & Technical Sessions

Covering the theme 'Future-Proofing the Tissue Industry for Sustainable Growth' [Day 1 & 2](#)



Conference: Pilot Plants

NEW feature: Valmet Karlstad, Valmet Converting, Andritz, Gambini and Saueressig showcasing next-generation tissue innovations [Day 3](#)



Get to the Venue With Ease

Grab our dedicated shuttle bus from Hotel NH Düsseldorf Königsallee to Messe Düsseldorf [Day 1: 7:45AM](#), [Day 2 & 3: 8AM](#)



Happy Hour

Kick back and catch up with your colleagues and peers after a busy and productive opening day [Day 1: 5:30PM](#)



Tissue World After Hours

Take advantage of your time in this vibrant city, come and explore with us! [Day 2: 7:30PM @ The Old Irish Pub, Bölkerstraße in the Altstadt](#)

#TWDüsseldorf

www.tissueworld.com/dusseldorf

BRINGING PICASSO'S SEATED HARLEQUIN TO LIFE IN ETHEREAL TISSUE



"Strong yet delicate, this medium creates fabulous textured grounds for layering and painting into. Watercolour paint will sink into the grooves and form dark pools of colour." Lucinda Allwood, artist and art teacher from Lancashire in northwest England, says tissue is a fundamental material in her working life, and she couldn't be without it.



Tissue features in all aspects of my working life. As a watercolour teacher we use tissue to create pattern and lift highlights in painting.

When teaching embroidery students are advised to use acid free tissue to store their silk embroideries.

My personal work includes painting, collage and model making. I use tissue because of its versatile properties. I am keen to use non-precious, readily available materials and turn them into pieces of art.

Tissue creates fabulous textured grounds for layering and painting into. Watercolour paint will sink into the grooves and form dark pools of colour.

Its tensile strength is excellent for bonding sculptural pieces. It absorbs glue and becomes a strong yet delicate material to layer and hold pieces together.

Tissue suspended by wire is translucent and ethereal and an excellent medium for shadow puppets.

I chose to model the 'Seated Harlequin with a Red Background', 1905, by Picasso, as an example for Tissue World Magazine.

The painting is from Picasso's Rose, period with a pensive

Harlequin set against a violent red background. It is suggested Picasso identified himself as the harlequin/clown figure. The model is made using paper-based clay which is fine and malleable, and it is then rolled flat, cut and sculpted to make a hollow figure in two halves.

He stands 30cm tall, his knees, thighs and arms are jointed so he can sit in his Picasso pose, but also move as a marionette.

The clay is left to dry for several days. Then tissue is torn into thin slivers, soaked in glue and used as 'bandages' to hold the two halves of the body together. Tissue is a surprisingly robust bonding material thanks to its absorbent properties.

His hat and clothing are layered in tissue soaked with glue. I specifically use tissue because it is lightweight and won't add extra bulk to the model. The tissue naturally forms wrinkles and rivulets which create beautiful tonal effects when painted.

The background and bench needed to be worked on a larger scale so larger sheets of tissue were glued and crudely painted.

I see tissue as a fundamental material in my working life, and couldn't be without it.
lucysembroidery@gmail.com



Modelled in paper-based clay and layered in tissue: Lucinda Allwood's artwork for TWM

DEFYING THE PANDEMIC ROLLERCOASTER: TISSUE DEMAND BACK TO LONG-TERM TREND AFTER TUMULTUOUS PERIOD

As inflation has eased, producers have maintained relatively elevated margin returns. Report by Mathieu Wener, Senior Economist, Numera Analytics.



Tissue demand in mature markets – North America, Europe, Japan, and Oceania – rose at a steady pace of 1.3% per year over the 2010-2019 period. This is not surprising for a staple household product with high penetration rates, for which demand growth is mainly driven by labour market factors such as employment and real wage gains.

From 2020, however, the pandemic set demand on a volatile path (see chart 1). At the onset of the outbreak, consumers depleted retailers' toilet and towelling stocks, and demand in mature markets rose 4.2% in 2020. It then corrected by 4.6% in 2021 as households consumed their reserves.

Demand only partially rebounded in 2022 as inventories normalised and supply chains recovered. From that point on, macro factors took over, as rising inflation halted the rebound and kept volumes below the pre-pandemic trend.

Adjusting to a sudden loss in purchasing power, demand in mature markets stagnated in 2023 (+0.2%) before rebounding sizably in 2024 (up 3.6%). This robust gain largely reflects easing inflation and strong wage growth allowing households to regain lost ground.

It is also remarkable to note how purchasing power has guided demand in each respective region since 2022. In Europe, we estimate that purchasing power, as measured by real wages, fell by 6% in 2022-23, three times as much as in the US, which recorded a drop of roughly 2%.

The steeper drop in spending power in Europe of course reflects the additional impact of spiking energy prices following the outbreak of the Russia-Ukraine war. Yet this only delayed the rebound in demand towards its long-term trend. With wage growth remaining strong, purchasing power in Europe has also been recovering as inflation has eased.

While North American tissue demand recorded a 2.1% gain in 2024, Europe saw an eye-popping 5.4% increase over the full calendar year. As a result, we estimate that demand in mature markets realigned with the pre-pandemic trend by the end of 2024.

RIISING DEMAND, LOWER COST INFLATION HAS BOOSTED TISSUE PROFITABILITY

As tissue demand clawed its way back after the inflation shock, publicly traded tissue producers' margins improved significantly. Our seven-company composite EBIT margin highlights the strong rebound in industry profitability over the past two years (see chart 2).

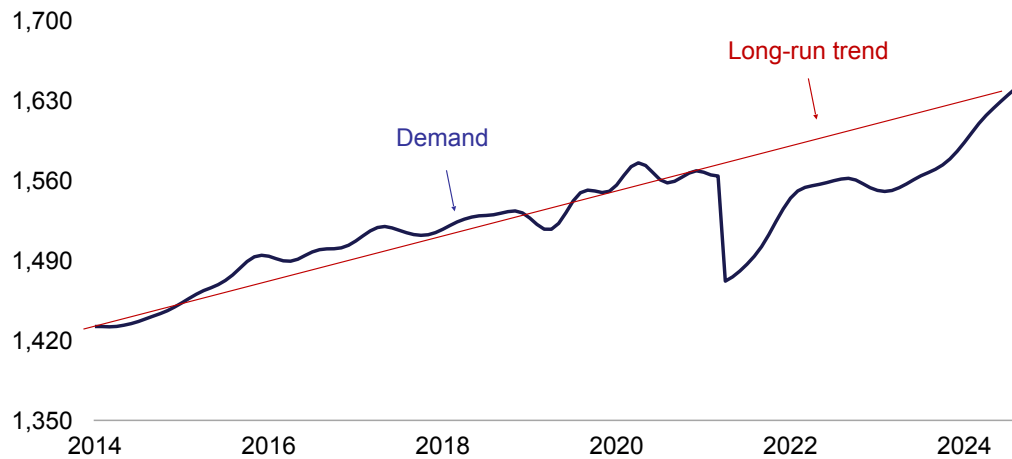
Improving margins, however, were not solely a dynamic driven by improving sales volumes. For one, on the cost side, pulp prices have largely remained below 2022 levels, while energy costs have also eased.

In addition, tissue producers have been able to maintain relatively elevated prices. Numera's modelled pricing series show that the gap between parent roll prices and pulp costs – a crude estimate for gross margins – has surged (see chart 3).

In Europe, for instance, it has risen from roughly €500 per tonne during 2014-2019 to an average of

1. Tissue demand is back in line with long-run trend

Advanced markets tissue demand
monthly, 000s tonnes, SA



Source: Numera Analytics



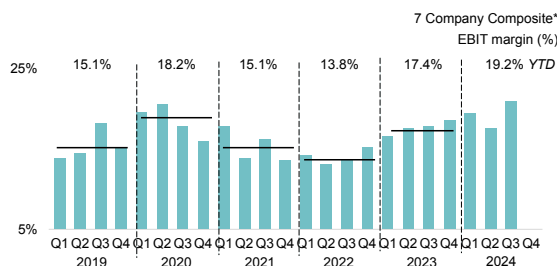
over €800 per tonne since 2022, only part of which can be accounted for by the pass-through of higher energy and distribution costs. This helps explain the strong upward move in EBIT margins over the past several quarters.

With as much as 5.4m tonnes of extra hardwood market pulp capacity coming online in the next five years, a compression of the price-cost differential from the raw material cost side seems unlikely in a context where producers are increasingly favouring hardwood pulp in their grade mix.

As tissue demand clawed its way back after the inflation shock, publicly traded tissue producers' margins improved significantly.



2. Industry profitability has improved since 2022

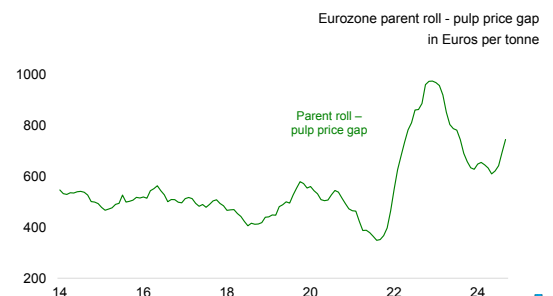


*Note: Average EBIT margin weighed by USD revenues. Sample includes: P&G, KC, Essity, Metsa, Cascades, KP Tissue, CMPC.

Source: Numera Analytics



3. Tissue – pulp price gap has widened significantly



Source: Numera Analytics



PROJECTS SURVEY 2025

TWM's annual Projects Survey charts all new capacity being added, ordered or in final planning stages during 2024-2025, as well as noting any projects already planned for 2026 and 2027.

COUNTRY	COMPANY	INVESTMENT	PM No	NEW/REBUILD	START-UP DATE	CAP. CHANGE (tonnes/yr)
Algeria	Algeria Tissue Mill	-	1	New	2024	23,500
Argentina	Celupaper	Buenos Aires	5	New	2025	23,400
Bangladesh	City Group	Dhaka	1	New	2025	40,000
Brazil	Bracell Cellulose	-	4	New	2024	-
Brazil	Bracell Cellulose	-	3	New	2024	-
Brazil	Bracell Cellulose	-	2	New	2024	-
Brazil	Bracell Cellulose	-	1	New	2024	-
Brazil	Suzano Papel e Celulose	Aracruz	-	New	2026	60,000
Colombia	GrandBay Papeles Nacionales	Pereira	5	New	2025	40,000
China	Asia Symbol	Jiangmen, Guandong	7	New	2024	23,500
China	Asia Symbol	Jiangmen, Guandong	8	New	2024	23,500
China	Asia Symbol	Jiangmen, Guandong	9	New	2024	23,500
China	Asia Symbol	Jiangmen, Guandong	10	New	2024	23,500
China	Asia Symbol	Jiangmen, Jiangxi	11	New	2024	23,500
China	Asia Symbol	Jiangmen, Jiangxi	12	New	2024	23,500
China	Asia Symbol	Jiangmen, Jiangxi	13	New	2024	23,500
China	Asia Symbol	Jiangmen, Jiangxi	14	New	2024	23,500
China	Confidential	Confidential	-	New	2024	-
China	Confidential	Confidential	-	New	2025	25,200
China	Confidential	Confidential	-	New	2025	25,200
China	C&S Paper	Jiangsu	1	New	2025	-
China	C&S Paper	Jiangsu	2	New	2025	-
China	Guangxi Tissue Industry Co.	Baise	1	New	2024	20,000
China	Guangxi Tissue Industry Co.	Baise	2	New	2024	20,000
China	Guangxi Tissue Industry Co.	Baise	3	New	2024	20,000
China	Guangxi Tissue Industry Co.	Baise	4	New	2024	20,000
China	Hengan	Chongqing	3	New	2024	30,000
China	Hengan	Chongqing	4	New	2024	30,000
China	Hengan	Chongqing	5	New	2024	30,000
China	Hengan	Chongqing	6	New	2024	30,000
China	Hengan	Fujian	32	New	2024	40,000

	PM TRIM (m)	PM SPEED (m/min)	SUPPLIER	COMMENTS
	2.85	1,800	Baosuo	Crescent Former
	2.75	1,300	Toscotec	MODULO-PLUS
	-	2,200	Toscotec	AHEAD 2.2
	5.6	2,000	Andritz	PrimeLine™ W 2000 (ShoePress)
	5.6	2,000	Andritz	PrimeLine™ W 2000 (ShoePress)
	5.6	2,000	Andritz	PrimeLine™ W 2000 (ShoePress)
	5.6	2,000	Andritz	PrimeLine™ W 2000 (ShoePress)
	5.6	2,000	Valmet	Advantage DCT 200HS
	3.6	2,200	Toscotec	AHEAD 2.2
	2.85	1,800	Baosuo	Crescent Former
	2.85	1,800	Baosuo	Crescent Former
	2.85	1,800	Baosuo	Crescent Former
	2.85	1,800	Baosuo	Crescent Former
	2.85	1,800	Baosuo	Crescent Former
	2.85	1,800	Baosuo	Crescent Former
	2.85	1,800	Baosuo	Crescent Former
	2.85	1,800	Baosuo	Crescent Former
	2.8	1,500	Andritz	PrimeLineHyTAD
	2.85	1,600	Valmet	IntelliTissue 1600
	2.85	1,600	Valmet	IntelliTissue 1600
	3.5	1,650	Andritz	PrimeLineCOMPACT M 1600
	3.5	1,650	Andritz	PrimeLineCOMPACT M 1600
	2.8	1,500	Baosuo	Crescent Former
	2.8	1,500	Baosuo	Crescent Former
	2.8	1,500	Baosuo	Crescent Former
	2.8	1,500	Baosuo	Crescent Former
	3.65	1,800	Baosuo	Crescent Former
	3.65	1,800	Baosuo	Crescent Former
	3.65	1,800	Baosuo	Crescent Former
	3.65	1,800	Baosuo	Crescent Former
	3.65	1,500	Toscotec	TADVISION

An impressive 132 new projects are listed in this year's annual Projects Survey, which charts the accumulation of tissue capacity data collected across the global industry during 2024, and the projects expected to start-up in 2025 and 2026.

A further 15 projects are also already noted for start-up in 2027, totalling 147 projects between 2024-2027.

This compares with 108 new projects listed in the three years for 2024's survey – which charted all new capacity being added, ordered or in final planning stages during 2023-2024, and projected for 2025 – the 102 tissue projects listed in 2023's survey, 157 listed in 2022's survey, and the 146 tissue machine projects that were listed in 2021's.

TWM's annual Projects Survey gains significant intel from the magazine's six annual Country Reports, which in 2024 included in-depth interviews with tissue mills in India, Türkiye, the United Kingdom, Indonesia, Africa, and Latin America.

Wide ranging news coverage throughout 2024 and into 2025 has also reported on the latest tissue machinery investments from across every continent. In many cases, information and investment strategy have come from leading executives themselves.

While the survey represents a detailed snapshot of production strategies in all the major tissue regions, as always caution must be considered with the survey's findings due in large part to its sheer scope. The figures included here are based on the best information provided, and this has

Shaping the Future of Tissue, Together

Your gateway to tissue industry success in the Americas!

Join North America's premier tissue industry gathering in Miami and receive exclusive access to major tissue industry decision-makers throughout the Americas. By bringing together every segment of the supply chain, Tissue World Miami is the perfect platform to showcase innovations, develop quality leads, enhance market visibility, and gain crucial insights into emerging tissue sector developments.

- Position your brand in front of 1,800+ key tissue industry buyers
- Network and do business with senior industry executives
- Build strategic partnerships that drive your business forward
- Learn from tissue industry experts at The Conference

With **bespoke** exhibitor and sponsorship packages now available, it's time to secure your participation at Tissue World Miami.



tissueworld.com/miami

tissueworldmiami@informa.com

Portfolio:

**Tissue
World**

Official Magazine:

**Tissue
World** | Magazine

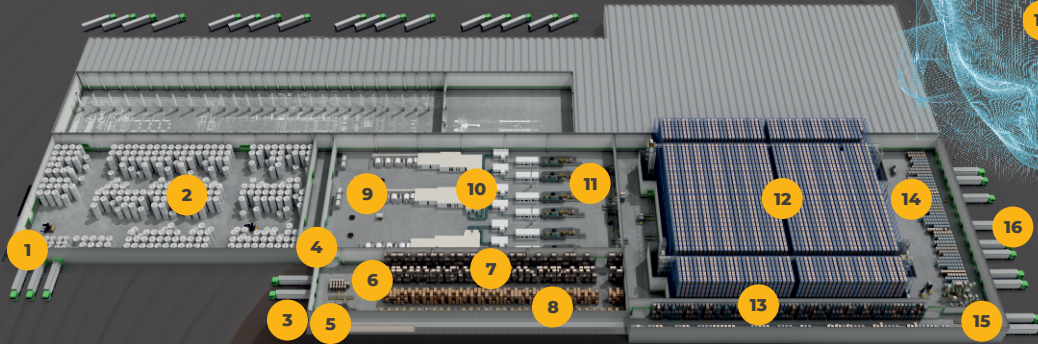
Organised by:

 **informa connect**



AUTOMATED END-TO-END SOLUTIONS A UNIQUE SOFTWARE PLATFORM

CENTRALLY MANAGES THE ENTIRE FLOW
AND OPTIMIZES ALL OPERATIONS



THE ENTIRE FLOW IS MANAGED BY OUR **LGVs/AGVs SYSTEM**

- | | | |
|------------------------------------|---|--------------------------------|
| 1 PARENT REEL RECEIVING / SHIPMENT | 7 PACKAGING/RAW MATERIALS STORAGE | 13 STORAGE SOLUTIONS WITH LGVs |
| 2 PARENT REEL WAREHOUSE | 8 EMPTY PALLET STORAGE | 14 STAGING |
| 3 TRUCK UNLOADING WITH LGVs | 9 PRODUCTION LINE INFEED WITH PACKAGING MATERIALS | 15 FINISHED PRODUCTS INBOUND |
| 4 PACKAGING/RAW MATERIALS INBOUND | 10 CONVERTING AREA | 16 TRUCK LOADING WITH LGVs |
| 5 EMPTY PALLET INSPECTION | 11 PALLETIZING, STRETCH WRAPPING & LABELING SYSTEMS | 17 SOFTWARE PLATFORM |
| 6 PALLET SHAPE CONTROL | 12 HIGH-DENSITY WAREHOUSES - AS/RS | |

INTEGRATED ECOSYSTEM

Satisfy every customer's needs in terms of **quality, service and traceability** is the key to sustain the **tissue industry** in the future.

Our Group will share with you **years of experience**. With extensive know-how and expertise in the development of **fully automated and integrated smart factories**, we aim to take your business to the next level. Swing by and discover our latest **innovations**, explore the **newest trends** in the intralogistics world and attend conferences around key issues such as **sustainability, integration and digitalization**.

COUNTRY	COMPANY	INVESTMENT	PM No	NEW/ REBUILD	START-UP DATE	CAP. CHANGE (tonnes/yr)
China	Jiangsu Hongzehu Paper Co.	Huai'an	3	New	2024	20,000
China	Jiangshan Huasheng Paper Co.	Houma, Shanxi	1	New	2024	17,000
China	Jiangshan Huasheng Paper Co.	Houma, Shanxi	2	New	2024	17,000
China	Lee & Man (Guangxi Chongzuo Liwen)	Chongzuo	16	New	2024	30,000
China	Lee & Man (Guangxi Chongzuo Liwen)	Chongzuo	17	New	2024	30,000
China	Lee & Man (Guangxi Chongzuo Liwen)	Chongzuo	18	New	2024	30,000
China	Lee & Man (Guangxi Chongzuo Liwen)	Chongzuo	19	New	2024	30,000
China	Lee & Man (Guangxi Chongzuo Liwen)	Chongzuo	20	New	2024	30,000
China	Longpai Paper Plastics Products Co.	Guigang, Guangxi	5	New	2025	20,000
China	Shanxi Qiangwei Paper Co.	Jinzhong	1	New	2024	21,000
China	Shanxi Qiangwei Paper Co.	Jinzhong	2	New	2024	21,000
China	Sun Paper	Nanning, Guangxi	3	New	2024	23,500
China	Sun Paper	Nanning, Guangxi	4	New	2024	23,500
China	Sun Paper	Nanning, Guangxi	5	New	2024	23,500
China	Sun Paper	Nanning, Guangxi	6	New	2026	23,500
China	Sun Paper	Nanning, Guangxi	7	New	2026	23,500
China	Sun Paper	Nanning, Guangxi	8	New	2026	23,500
China	Sun Paper	Nanning, Guangxi	9	New	2026	23,500
China	Taisheng Group (Hufeng Paper)	Leshan, Sichuan	7	New	2025	30,000
China	Taisheng Group (Hufeng Paper)	Leshan, Sichuan	8	New	2025	30,000
China	Taisheng Group (Jiangxi Taisheng)	Jiujiang, Jiangxi	9	New	2025	30,000
China	Taisheng Group (Jiangxi Taisheng)	Jiujiang, Jiangxi	10	New	2025	30,000
China	Taisheng Group (Nanping Taisheng)	Nanping, Fujian	11	New	2025	30,000
China	Taisheng Group (Nanping Taisheng)	Nanping, Fujian	12	New	2025	30,000
China	Taisheng Group (Suzhou Taisheng)	Suzhou, Anhui	15	New	2025	30,000
China	Taisheng Group (Suzhou Taisheng)	Suzhou, Anhui	16	New	2025	30,000
China	Taisheng Group (Suzhou Taisheng)	Suzhou, Anhui	17	New	2025	30,000
China	Taisheng Group (Suzhou Taisheng)	Suzhou, Anhui	18	New	2025	30,000
China	Taisheng Group (Zhencheng Paper)	Jingzhou, Hubei	13	New	2025	30,000
China	Taisheng Group (Zhencheng Paper)	Jingzhou, Hubei	14	New	2025	30,000
China	Taiwan Chiufuyu Industry Company	Taiwan	1	New	2024	17,500
China	Taiwan Chiufuyu Industry Company	Taiwan	2	New	2024	17,500
China	Taiwan Yuen-Foong-Yu	Taipei, Taiwan	1	New	2025	30,000
China	Taiwan Yuen-Foong-Yu (dingfeng base)	Taiwan	2	New	2025	23,500
China	Taiwan Yuen-Foong-Yu (dingfeng base)	Taiwan	3	New	2025	23,500
China	Xianhe Co.	Shishou, Hubei	1	New	2024	21,000
China	Xianhe Co.	Shishou, Hubei	2	New	2024	21,000
China	Yusen Gansu	Pingliang	1	New	2025	33,700
China	Yusen Gansu	Pingliang	2	New	2025	33,700
China	Yusen Gansu	Pingliang	3	New	2025	33,700
China	Zhumadian Zhongnan Paper Co.	Suipingm Henan	6	New	2025	22,000

	PM TRIM (m)	PM SPEED (m/min)	SUPPLIER	COMMENTS
	2.85	1,500	Baosuo	Crescent Former
	2.8	1,300	Baosuo	Crescent Former
	2.8	1,300	Baosuo	Crescent Former
	3.6	1,800	Baosuo	Crescent Former
	3.6	1,800	Baosuo	Crescent Former
	3.6	1,800	Baosuo	Crescent Former
	3.6	1,800	Baosuo	Crescent Former
	3.6	1,800	Baosuo	Crescent Former
	2.85	1,500	Baosuo	Crescent Former
	2.85	1,600	Baosuo	Crescent Former
	2.85	1,600	Baosuo	Crescent Former
	2.85	1,800	Baosuo	Crescent Former
	2.85	1,800	Baosuo	Crescent Former
	2.85	1,800	Baosuo	Crescent Former
	2.85	1,800	Baosuo	Crescent Former
	2.85	1,800	Baosuo	Crescent Former
	2.85	1,800	Baosuo	Crescent Former
	3.65	1,800	Baosuo	Crescent Former
	3.65	1,800	Baosuo	Crescent Former
	3.65	1,800	Baosuo	Crescent Former
	3.65	1,800	Baosuo	Crescent Former
	3.65	1,800	Baosuo	Crescent Former
	3.65	1,800	Baosuo	Crescent Former
	3.65	1,800	Baosuo	Crescent Former
	3.65	1,800	Baosuo	Crescent Former
	3.65	1,800	Baosuo	Crescent Former
	2.85	1,400	Baosuo	Crescent Former
	2.85	1,400	Baosuo	Crescent Former
	3.65	1,800	Baosuo	Crescent Former
	2.85	1,800	Baosuo	Crescent Former
	2.85	1,800	Baosuo	Crescent Former
	2.85	1,600	Baosuo	Crescent Former
	2.85	1,600	Baosuo	Crescent Former
	3.5	1,600	Valmet	IntelliTissue 1600
	3.5	1,600	Valmet	IntelliTissue 1600
	3.5	1,600	Valmet	IntelliTissue 1600
	3.65	1,300	Baosuo	Crescent Former

included extensive research into the global tissue industry over the past few years, as well as a reliance on reliable responses from the many companies contacted to detail their present and future developments.

And as is often the case, many of last years predicted start-ups have been delayed and are now planned for 2025, and some of the 'new' capacity announced this year includes some of last year's estimate.

Additionally, some companies declined to comment on their projects at this time. There are also a substantial number of confidential projects, about which companies preferred not to disclose details.*

NOTABLE POINTS TO INCLUDE

As with every recent year, China leads the way with capacity expansion, this year with a total of 62 projects – including TAD machines – that either came onstream in 2024 or are expected to later in 2025 and 2026. This compared to last year's 57 projects.

Of note also is the substantial investment in Indonesia made by Sinar Mas Group's Asia Pulp & Paper which has plans to start up 24 Baosuo-supplied tissue machines at its OKI facility in Sumatra during 2026 and 2027.

In Brazil, 2023's survey noted two tissue projects expected to come on stream, while last year noted seven. Bracell Cellulose alone confirmed that four of those six tissue machines started-up in 2024. For this year's survey, Suzano Papel e Celulose is expecting to start-up its Valmet-supplied Advantage DCT 200HS in 2026.

Mexico's Grupo Corporativo Papelera, Papel San Francisco, and Softys are all expecting or have started up capacity in 2024 or 2025.

Across the Middle East, Saudi Arabia's Crown Paper, MEPCO, Saudi Paper Group have all invested in new capacity, as has a confidential project in the UAE.

In the UK, Turkish headquartered Eren Holding's three tissue machines are expected to come onstream at its plant in Shotton, Wales, in 2026, whilst Fourstones Paper Mill Crescent Former

COUNTRY	COMPANY	INVESTMENT	PM No	NEW/ REBUILD	START-UP DATE	CAP. CHANGE (tonnes/yr)
Confidential	Confidential	Confidential	1	Rebuild	2025	-
Confidential	Confidential	Confidential	1	New	2026	-
Confidential	Confidential	Confidential	-	New	2025	70,000
Confidential	Confidential	Confidential	-	New	2025	60,000
Confidential	Confidential	Confidential	-	New	2027	-
Confidential	Confidential	Confidential	-	New	2027	-
Confidential	Confidential	Confidential	-	New	2025	-
Egypt	Confidential	Giza	1	New	2024	26,000
Europe	Confidential	Confidential	2	New	2026	70,000
France	Confidential	Confidential	-	Major Rebuild	2025	30,000
France	MPH1865	Annonay	2	New	2024	38,000
Ghana	Triton	Kokomlemle	1	New	2025	23,800
Greece	Intertrade Hellas	Oyinofta	2	New	2026	80,000
India	Confidential	Confidential	-	New	2026	-
India	Gayatrishakti Tissue	Vapi, Gujarat	1	New	2024	35,000
India	Jani Sales	Gujarat	1	New	2024	17,000
India	Kamakshi Papers	Amroha	1	New	2025	17,000
India	Kamakshi Papers	Amroha	2	New	2025	17,000
Indonesia	Sinar Mas Group APP-OKI	Sumatra	1	New	2026	22,000
Indonesia	Sinar Mas Group APP-OKI	Sumatra	2	New	2026	22,000
Indonesia	Sinar Mas Group APP-OKI	Sumatra	3	New	2026	22,000
Indonesia	Sinar Mas Group APP-OKI	Sumatra	4	New	2026	22,000
Indonesia	Sinar Mas Group APP-OKI	Sumatra	5	New	2026	22,000
Indonesia	Sinar Mas Group APP-OKI	Sumatra	6	New	2026	22,000
Indonesia	Sinar Mas Group APP-OKI	Sumatra	7	New	2026	22,000
Indonesia	Sinar Mas Group APP-OKI	Sumatra	8	New	2026	22,000
Indonesia	Sinar Mas Group APP-OKI	Sumatra	9	New	2026	22,000
Indonesia	Sinar Mas Group APP-OKI	Sumatra	10	New	2026	22,000
Indonesia	Sinar Mas Group APP-OKI	Sumatra	11	New	2026	22,000
Indonesia	Sinar Mas Group APP-OKI	Sumatra	12	New	2026	22,000
Indonesia	Sinar Mas Group APP-OKI	Sumatra	13	New	2027	22,000
Indonesia	Sinar Mas Group APP-OKI	Sumatra	14	New	2027	22,000
Indonesia	Sinar Mas Group APP-OKI	Sumatra	15	New	2027	22,000
Indonesia	Sinar Mas Group APP-OKI	Sumatra	16	New	2027	22,000
Indonesia	Sinar Mas Group APP-OKI	Sumatra	17	New	2027	22,000
Indonesia	Sinar Mas Group APP-OKI	Sumatra	18	New	2027	22,000
Indonesia	Sinar Mas Group APP-OKI	Sumatra	19	New	2027	22,000
Indonesia	Sinar Mas Group APP-OKI	Sumatra	20	New	2027	22,000
Indonesia	Sinar Mas Group APP-OKI	Sumatra	21	New	2027	22,000
Indonesia	Sinar Mas Group APP-OKI	Sumatra	22	New	2027	22,000

came onstream in Fife, Scotland, in 2024.

In Southeast Asia, Vietnam's Shunfa Paper Co., Xuong Giang, and Xuan Mai Paper have or will be starting up four machines between them, supplied by Andritz – a PrimeLineCOMPACT S 1300 and a PrimeLineCOMPACT S 1800 – and Crescent Formers supplied by China's Baosuo.

In America, five machines are listed to have come on stream or planned to: a confidential customer, which has ordered an AHEAD 2.2L supplied by Toscotec, Grupo Corporativo Papelera's A.Celli-supplied iDEAL 2000 with Forged Yankee, Irving Consumer Products' Valmet-supplied Advantage ThruAir machine, Sofidel's Valmet-supplied Advantage DCT 200HS in Circleville, and Procter & Gamble's Utah-based Andritz-supplied PrimeLineTAD.

*All aggregates taken from the survey should be treated with some caution. While all care has been taken to publish comprehensive data, it is inevitable that projects will be missing or details incomplete. Many projects have also been delayed, so start-up data used in last year's Project Survey has had to be repeated.

5
**Projects listed for
start-up in India
between 2024,
2025 and 2026**



COUNTRY	COMPANY	INVESTMENT	PM No	NEW/ REBUILD	START-UP DATE	CAP. CHANGE (tonnes/yr)
Indonesia	Sinar Mas Group APP-OKI	Sumatra	23	New	2027	22,000
Indonesia	Sinar Mas Group APP-OKI	Sumatra	24	New	2027	22,000
Japan	Confidential	Confidential	6	New	2024	46,000
Jordan	Khattab Group	Amman	-	New	2024	21,000
Latin America	Confidential	Confidential	-	New	2026	30,000
Malaysia	Nextgreen Enviro	Kuala Lumpur	1	New	2025	17,000
Malaysia	Nextgreen Enviro	Kuala Lumpur	2	New	2025	17,000
Malaysia	NTPM Holdings	Penang	16	New	2024	-
Mexico	Grupo Corporativo Papelera	Mexico City	5	Rebuild	2024	-
Mexico	Papel San Francisco	Mexicali	10	New	2025	30,000
Mexico	Softys	Altamira	5	New	2025	-
Middle East	Confidential	Confidential	-	New	2026	-
Oceania	Confidential	Confidential	-	Major Rebuild	2024	-
Oman	Jihong Technology	Oman	-	New	2026	30,000
Oman	Jihong Technology	Oman	-	New	2026	23,500
Poland	VelvetCare	Klucze	-	New	2025	70,000
Saudi Arabia	Crown Paper	Dammam	1	New	2025	70,000
Saudi Arabia	MEPCO/Juthur Paper Manufacturing	King Abdullah Economic City	6	New	2026	60,000
Saudi Arabia	Saudi Paper Group	Dammam	5	New	2025	80,000
Sweden	Metsä Tissue	Mariestad	-	New	2025	70,000
UAE	Confidential	Abu Dhabi	2	New	2024	26,000
UK	Eren Holding	Shotton, Wales	1	New	2026	70,000
UK	Eren Holding	Shotton, Wales	2	New	2026	70,000
UK	Eren Holding	Shotton, Wales	3	New	2026	70,000
UK	Fourstones Paper Mill	Fife, Scotland		New	2024	60,000
USA	Confidential	Confidential	-	New	2026	65,000
USA	Grupo Corporativo Papelera	Montgomery	6	New	2026	-
USA	Irving Consumer Products	Macon	-	New	2027	75,000
USA	Sofidel	Circleville	3	New	2025	70,000
USA	Procter & Gamble	Utah	16B	New	2024	-
Venezuela	HK Import and Export	Aragua	1	New	2024	17,000
Vietnam	Shunfa Paper Co.	Ninhbinh	1	New	2025	17,000
Vietnam	Shunfa Paper Co.	Ninhbinh	2	New	2025	17,000
Vietnam	Xuong Giang	-	12B	New	2024	-
Vietnam	Xuan Mai Paper	-	2	New	2024	-

	PM TRIM (m)	PM SPEED (m/min)	SUPPLIER	COMMENTS
	2.65	1,800	Baosuo	Crescent Former
	2.65	1,800	Baosuo	Crescent Former
	3.6	1,800	Kawanoe Zoki / Valmet	DCT135HS
	2.8	1,600	Baosuo	Crescent Former
	2.85	1,900	Toscotec	AHEAD 1.8
	2.85	1,300	Baosuo	Crescent Former
	2.85	1,300	Baosuo	Crescent Former
	3.4	1,600	Baosuo	Crescent Former
	2.8	1,800	A.Celli	Forged Yankee Dryer
	2.8	2,200	Valmet	Advantage DCT 100TS
	-	2,200	Toscotec	AHEAD 2.2
	-	1,500	Toscotec	AHEAD 1.6
	-	-	Toscotec	-
	3.65	1,800	Baosuo	Crescent Former
	2.85	1,800	Baosuo	Crescent Former
	5.6	2,200	Valmet	Advantage DCT 200TS
	5.6	2,200	Valmet	Advantage DCT 200TS
	5.4	2,200	Andritz	PrimeLine TM W 2200 - XT
	5.6	2,200	Toscotec	AHEAD 2.2L
	5.6	2,200	Valmet	Advantage DCT 200TS
	3.5	1,600	Baosuo	Crescent Former
	-	-	Tbc	-
	-	-	Tbc	-
	-	-	Tbc	-
	2.75	1,700	Tbc	Crescent Former
	4.7	2,200	Toscotec	AHEAD 2.2L
	2.65	2,000	A.Celli	iDEAL 2000 with Forged Yankee
	-	-	Valmet	Advantage ThruAir
	5.6	2,000	Valmet	Advantage DCT 200HS
	5.4	1,627	Andritz	PrimeLineTAD
	2.85	1,300	Baosuo	Crescent Former
	2.85	1,400	Baosuo	Crescent Former
	2.85	1,400	Baosuo	Crescent Former
	1.3	1,300	Andritz	PrimeLineCOMPACT S 1300
	1.8	1,800	Andritz	PrimeLineCOMPACT S 1800

147

Projects in this year's
survey for start-up
between 2024-2027



62

Chinese projects listed
in this year's survey



24

Investments listed for
Sinar Mas Group's
APP's OKI facility in
Indonesia



4

UK projects listed in
this year's survey



TARGET ZERO: THE GLOBAL TISSUE INDUSTRY'S DRIVE TOWARDS INTELLIGENT MANUFACTURING

Green electricity, process integration, advancing machinery, supply chain coordination, multidisciplinary teams, charting diverse cultural and regulatory environments, and "learning the ropes" with AI. TWM asked leading companies how they are facing the many challenges of a rapidly evolving market.

TWM/1: WHAT PAPER MACHINE TECHNOLOGIES HAVE BEEN GROUND-BREAKING DURING 2024 – AND WHAT CAN THE INDUSTRY EXPECT TO SEE IN 2025?

Fabrizio Tonello, Technical Director, A.Celli Paper:

"During 2025, A.Celli has the opportunity to start up the first two units of its innovative device to increase the efficiency of the tissue sheet pressing process by pre-heating the sheet itself. This system, developed and patented by A.Celli, was tested on a pilot machine to prove its effectiveness.

"On another front, A.Celli is preparing for a future in which paper sheet drying will be done with heating systems completely powered by electricity. This scenario will be consequent to the progressive decarbonisation of the power generation chain and the large-scale deployment of systems that can directly produce electricity from renewable sources, such as photovoltaics and wind power. The availability of low-cost electricity will also pave the way for other forms of recovery such as that involving the use of heat pumps, capable on the one hand of ennobling thermal tails at low temperatures, and on the other of condensing fumes and vapours to recover their liquid phases and avoid their release into the atmosphere."

Wojciech Niemczyk, Vice President Sales and Application, Paper & Board and Tissue, Andritz: "Over the past few years, we have been developing our innovative hybrid technology, PrimeLineTEX. Starting out with initial concepts, the technology was successfully integrated into our tissue pilot line, PrimeLineTIAC. We then refined and

enhanced the concept, developing and patenting additional features and tools to ensure seamless and efficient operation.

"With PrimeLineTIAC, our customers have had the unique opportunity to witness this technology in action, allowing them to experience its user-friendly operation and exceptional paper quality first-hand. As a result, it comes as no surprise that we are set to launch our first commercial installation

A circular portrait of Arvid Johansson, a man with short brown hair and glasses, wearing a dark suit and a red tie. The background of the portrait is a soft, out-of-focus mix of green and yellow.

"During 2024, technological innovations include the new Advantage SoftReel and Advantage ViscoTransfer."

Arvid Johansson
Director Tissue Mills Technology,
Valmet

Two stylized red paper airplanes are positioned at the bottom of the circular portrait, one slightly behind and to the left of the other, as if they are flying towards the right.

The Future of Tissue is Here

Discover your future with the most comprehensive machinery and services for converting, packaging, end-of-line automation and folding equipment.

**CONVERTING****PACKAGING****END-OF-LINE****EMBOSSING**

Visit us at Tissue World Düsseldorf - booth G20



of PrimeLineTEX in 2025 – a milestone the market is eagerly anticipating.

"Digitalisation and electrification also remain key areas of development for us. Our METRIS solution has long been a recognised technology in the industry. Building on this solid foundation, we have developed additional features, including METRIS UX, Andritz's DCS solution, and a range of comprehensive analysis tools, including for autonomous process islands.

"The PrimeDry HotAir Box optimises tissue drying by reusing hot, wet exhaust air from the drying hood. After passing through a heat exchanger and filter, the air is evenly blown onto the tissue web ahead of the suction roll. This increases web temperature, lowers water viscosity, and improves dryness after pressing, which reduces energy consumption and boosts production."

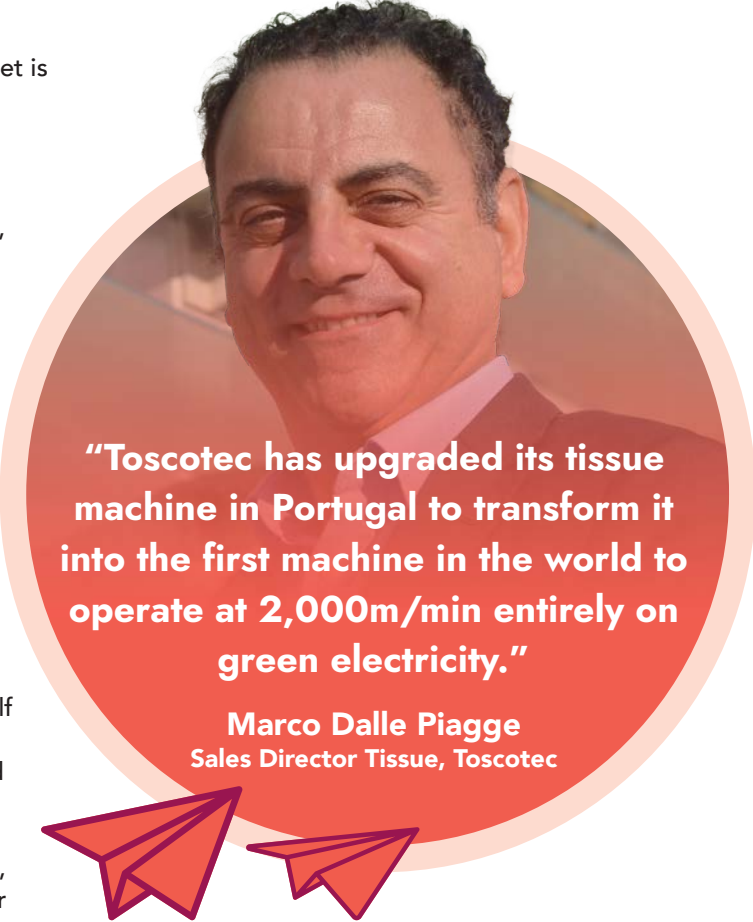
Benny Peng, Vice president, Baosuo Paper Machinery Manufacture Co.: "In the second half of 2024, Baosuo Enterprise Group's subsidiary, Baotuo Paper Machine, successfully won the bid for APP Indonesia's OKI Tissue machine project, involving 24 paper machines with an annual production capacity of 500,000 tons. As a result, Baosuo's market share in the global tissue paper supply industry rose to third place.

"The gradual recovery of the global economy in 2024 is expected to drive an increase in household paper demand. With consumption upgrades, consumer demand for premium and eco-friendly tissue products will continue to rise, including virgin wood pulp paper and biodegradable tissue products. Additionally, the household paper market will become increasingly segmented, with categories such as kitchen towels, wet toilet paper, and beauty wipes experiencing continuous growth.

"In 2024, the focus in the paper machine sector was on the development of energy-saving technologies. We provide customers with permanent magnet synchronous energy-saving motor technology for main drive and auxiliary equipment in tissue paper machines, achieving significant energy savings. Current data indicates an energy efficiency improvement of 11.8%.

"Looking ahead to 2025, the company will further optimise pulping and papermaking processes to enhance production efficiency and product quality. For example, improvements in paper machine design and control systems will enable precise control over paper grammage and thickness. Additionally, intelligent manufacturing will become a key trend, integrating advanced sensors and control systems to monitor production data in real time and optimize workflows.

"The implementation of large-scale projects highlights the increasing concentration within the industry. Leading enterprises, leveraging their

A circular portrait of Marco Dalle Piagge, a man with dark hair, smiling, wearing a suit and tie. The portrait is set against a red circular background that also contains text and two paper airplane icons at the bottom.

"Toscotec has upgraded its tissue machine in Portugal to transform it into the first machine in the world to operate at 2,000m/min entirely on green electricity."

Marco Dalle Piagge
Sales Director Tissue, Toscotec

advantages in scale, technology, and branding, will further expand their market share. Meanwhile, industry differentiation will become more pronounced – some small and medium-sized paper manufacturers may struggle due to a lack of core competitiveness, while those focusing on niche markets with unique products and innovation capabilities can carve out a sustainable position through differentiated competition strategies."

Shinji Goda, Director and Head of Design Department, Kawanoe Zoki: "Various activities to achieve carbon neutrality by 2050 are being promoted in the Japanese paper industry, and progress has been made in the areas of energy conservation and paper quality improvement in 2024.

"In the production of toilet paper made from used paper, a characteristic of the Japanese market includes a series of equipment modifications that have been made to stock preparation, paper machine, and converting to achieve better quality. This is the case even with lower quality, difficult-to-process used paper materials – a response to the decrease in the amount of used paper generated.

"We believe that technological innovation will continue to advance in the field of environmentally friendly recycled paper."

Marco Dalle Piagge, Sales Director Tissue, Toscotec: "During the past year, Toscotec has announced a wide range of ground-breaking innovations in tissue technology. First off, we have



"A.Celli is preparing for a future in which paper sheet drying will be completely powered by electricity."

Fabrizio Tonello
Technical Director, A.Celli Paper

been spearheading the electrification of the tissue making line. Toscotec has upgraded its high-performance AHEAD tissue machine installed at Fortissue in Portugal to transform it into the first machine in the world to operate at 2,000m/min entirely on green electricity. In September 2024, we also started up a new production line at France's MPH1865 that features an innovative low-carbon design with an entirely electrical air system.

"In both cases, this innovative technology allows the paper mills to significantly reduce or even cut to zero the direct carbon emissions associated with the manufacturing process.

"Secondly, Toscotec has taken substantial steps in the area of alternative fossil-free fuels. We have witnessed a surge in the installation rate of Toscotec's TT Hydrogen Burner that allows the use of carbon-free fuels like hydrogen up to a 100% rate. We have also acquired an important order for the supply of tissue equipment fuelled by biomass.

"Last but not least, we are in the process of completing the industrial project of our breakthrough innovation, TT Induction SYD, a Steel Yankee Dryer powered by electromagnetic induction. Its product launch will represent a quantum leap in tissue technology as it will allow for the use of green electricity to directly power the energy-intensive drying core of the tissue line, i.e. the Yankee Dryer, without the use of steam."

Arvid Johansson, Director Tissue Mills Technology, Valmet: "During 2024, we introduced

several new features in our technology portfolio. Among them I can highlight the new Advantage SoftReel and Advantage ViscoTransfer.

"The new Softreel includes more than 100 upgrades to removing limitations of reel efficiency and improving winding performance. Implementing innovative safety solutions reducing the need of manual working procedures and improving access in key areas. Winding improvements with new ability of the software to restrict and control the load dependency on the calliper response during diameter growth makes roll building adaptive to incoming and changing sheet properties secure a stable calliper from bottom to top of the roll.

"Next to highlight is the ViscoTransfer that is really breaking new ground for the TAD machines capability. Sharing the fundamentals with the Advantage ViscoNip press it provides the same great advantages in evenness for the transfer from TAD fabric to Yankee across the full machine width. With this improvement the TAD machines are no longer so dependent on crown fit and not constrained as a traditional transfer roll to the crown fit. Enabling our customers to run different transfer loads depending on the need of the fabric and product. This opens for

several new capabilities such as 20% speed increase for low tensile bath, reduced coating add-on, and possibility to increase ingoing moisture on the Yankee this have been proven on the pilot machine.

"With Valmet Tissue Converting (formerly Körber BA Tissue) we can work more dedicatedly together, finding new ways of optimising the tissue process from bales to end product. During 2025 we will introduce commonly developed technology to the market enabling waste reductions and improved efficiency."

TWM/2: WHAT DEMAND CHANGES HAVE YOU SEEN IN THE GLOBAL TISSUE MARKET, AND WHAT NEW CHALLENGES AND OPPORTUNITIES HAS THAT PRESENTED FOR YOU?

Tonello: "Many newcomer customers are setting out to become tissue paper manufacturers, either because they are already product converters that want to integrate the upstream processes and become independent from the roll production market, or because they can incorporate tissue products into their logistics flows of other similar products. These types of customers expect machines that are flexible and easy to run and maintain.

"The market continues and will continue to be very sensitive to reducing consumptions with high environmental impact, such as energy or soil consumption. There will also be a focus on

improving the overall green footprint by considering the impacts of plant construction as well as its decommissioning at the end of its service life. Since the issues are certainly not newly explored, this insistence causes producers to think “outside the box” to reduce even the consumptions that have a negative impact on the environment and that common sense considers ‘physiological’.

Niemczyk: “The tissue market has cooled down in certain regions during the past year. China is dominated by local machine suppliers, and overcapacity is still evident. In South America, huge new capacities came online. For example, Bracell started up four double-wide Andritz tissue machines with shoe presses in 2024. As such, the mill has one of the smallest CO2 footprints in the world.

“Most markets are driven by energy costs; therefore, the right system and drying concept are key for new investments. Customers want maximum flexibility when it comes to using different energy resources based on availability and cost. This challenges suppliers to provide the best solutions and new developments, for example for electric heating, hydrogen, and other alternative fuels, as well as different energy recovery systems.

“Besides reducing energy and the CO2 footprint, new investments focus on specific furnish usage, such as maximising short fibre input to optimise paper quality at the best fibre cost and availability. Andritz has made a significant contribution to fibre treatment for such applications by developing solutions such as high-consistency refining, a cylindrical refiner (Papillon refiner), and specific line concepts.

“The third key change in market demand is the increased use of digitalisation in the tissue making process. This allows quicker start-ups, faster operator training, process and energy optimization, better management systems, and plenty of other features to support the operator.”

Peng: “In terms of market demands and challenges, we are seeing a range of new trends:

- **Rising quality expectations:** Consumers are now looking beyond price, placing greater emphasis on the quality and experience of household paper products, including softness, absorbency, and strength. Demand for high-end, health-oriented, and comfortable products – such as baby wipes and lotion-infused tissues – is increasing;
- **A growing Environmental Awareness:** Strengthened environmental policies and increased consumer consciousness are driving demand for sustainable products. Consumers are increasingly opting for tissue products made from eco-friendly, recyclable, and biodegradable materials;

- **Market Segmentation:** The household paper industry is becoming more specialised, with a growing acceptance of the ‘specific paper for specific uses’ concept. Consumers are showing increasing demand for segmented product categories like wet toilet paper, kitchen towels, and cleaning wipes.

Challenges:

- **Increased R&D pressure:** To meet diverse consumer needs for quality and functionality, companies must invest heavily in research and development to create new products and technologies, posing significant challenges in terms of R&D capabilities and financial resources.
- **Rising Environmental Costs:** Compliance with stringent environmental regulations requires significant investment in environmental protection equipment, operations, and material research, leading to higher production costs.
- **Intensified Market Competition:** A highly competitive market, dominated by leading brands, makes it challenging for new entrants and smaller brands to establish themselves. Severe product homogenization and a lack of technological innovation can lead to price wars, further squeezing profit margins.

Opportunities:

- **Expanding Niche Markets:** The rising demand for products like wet toilet paper and kitchen towels presents new growth opportunities. By focusing on niche segments and developing specialised products, companies can achieve differentiation and competitive advantage.
- **Technological Innovation:** The integration of intelligent manufacturing technologies is a key trend, helping companies reduce costs and enhance market competitiveness.”

Goda: “Although the pandemic has come to an end, hygiene awareness remains high, partly due to influenza and other infectious diseases. Demand for tissue paper, towel paper, and other products remains high, and with growing awareness of environmental issues, products with low environmental impact, recycled raw materials, and production methods with low energy costs are attracting attention.

“Currently, more than 56% of toilet products are long winding products. At the same time, kraft paper wrappers are attracting attention as an alternative packaging material to conventional corrugated cardboard in the means of transportation of recycled toilet rolls.

"In addition, as an effort to improve product performance, new product development is being conducted under the conflicting conditions of product lengthening and pursuit of softness, and research is being conducted on unique embossing equipment and embossing patterns.

"In order to solve these issues, we have used our own pilot paper machines and converting machines since 2020, and are accelerating the development of products that meet market needs by developing products together with our customers."

Dalle Piagge: "We have witnessed three major trends in 2024. Firstly, the growth of the Latin American tissue market with numerous projects coming up to increase the region's production capacity. Secondly, we are recording a strong growth in the North American market, which is certainly one of our strategic markets.

"In North America in particular, Toscotec's technology is recognised as best-in-class for its high level of customization and flexibility in project execution. This recognition blends well with the status of obsolescence of a wide swath of existing equipment in the region, which calls for technological upgrades to take these lines to a whole new level of efficiency and safety.

"Thirdly, we have definitely seen an ongoing growth of the Indian tissue market, where Toscotec has started up a complete tissue line in November 2024."

Johansson: "We see a continuing focus on sustainability, but the importance of balanced operational cost has increased. This requires different solutions depending on the available energy sources.

"Operational efficiency remains important, and it's obvious that tissue makers in many parts of the world have difficulties to attract and recruit personal. This has also resulted in declined collective experience at the mills, affecting operational efficiency in some areas. We see an increasing need of specific training and solutions to support customers."

TWM/3: IN 2015, TWM ASKED HOW THE START-UPS OF NEW TECHNOLOGIES SUCH AS NTT AND ATMOS WERE CHANGING THE MARKETPLACE. NOW TEN YEARS LATER, WHAT IMPACT HAVE SUCH TECHNOLOGIES HAD ON THE MARKETPLACE?

Tonello: "The market does not seem to have turned toward these technologies, which are characterised by significantly more complex processes, but instead it seems to prefer simpler, more traditional processes and technologies."

Niemczyk: "We have observed a growing interest in hybrid technologies, particularly in regions seeking bulkier and softer tissue products, where energy costs are higher. These areas are actively looking for alternatives to TAD technology. Furthermore, the geopolitical challenges we have faced in recent years have accelerated the demand for sustainable and energy efficient tissue production solutions.

"As is often the case with new technologies, we have encountered certain limitations regarding machine operations and the available consumables in the market. In response, Andritz began developing its own hybrid technology early on and decided to establish a pilot plant to validate the concept of PrimeLineTEX, along with other disruptive technologies currently in development.

"Customers who have trained on this new machine and tissue production technology have expressed surprise at how easy it is to operate, noting that it requires no additional consumables beyond those needed for a standard tissue machine. The launch of our first commercial installation will mark a significant advancement for this technology and the market in these regions."

Peng: "New technologies such as NTT and ATMOS are being applied to produce tissue paper with superior properties, including enhanced softness, bulk, and strength. These



"The tissue market has cooled down during the past year. China is dominated by local machine suppliers, and overcapacity is still evident. "

Wojciech Niemczyk
Vice President Sales and Application,
Paper & Board and Tissue, Andritz

advancements cater to consumer demand for high-quality household paper and drive the industry towards premiumisation. We're seeing:

- **Market Expansion:** The improved quality and potential cost reductions from these technologies will attract more consumers, increasing market demand and expanding market share. This may also stimulate the growth of related supporting industries.
- **Cost Reduction:** Optimised production processes and equipment can lower energy and material consumption, enhance production efficiency, and provide companies with a cost advantage in market competition. This could influence market pricing and profit margins.
- **Enhanced Market Competition:** The ability to produce high-quality tissue products at lower costs will intensify market competition. This will push other companies to improve their technology and efficiency to maintain their market share, ultimately driving technological advancements across the industry."

Goda: "Paper machines equipped with new technologies have brought about changes in the tissue paper manufacturing industry in terms of productivity, quality, production costs, and environmental friendliness.

"Paper manufacturers that have already introduced these technologies have been able to offer distinctive product lines to the market and position themselves as high value-products.

"With the establishment of these premium products and the successful price increases of conventional products, some manufacturers are beginning to develop products that follow these products."

Dalle Piagne: "When these technologies appeared on the tissue market, they ignited a dream, i.e. the opportunity of making something different, of giving birth to a completely new generation of products. In many cases, these technologies fell short of delivering that dream. At present, in the global tissue market, this kind of intermediate solutions is not taken into consideration by producers. The available technologies on the market today are designed either for TAD or conventional tissue.

"For the upcoming future, at Toscotec we are actively working on a ground-breaking solution which is specifically focused on sustainability and quality."

Johansson: "Over the last 10 years we have delivered 20 hybrid machines such as Advantage



"The ability to produce high-quality tissue products at lower costs will intensify market competition. This will push other companies to improve their technology and efficiency."

Benny Peng
Vice president, Baosuo Paper Machinery Manufacture Co.

NTT, Advantage QRT and Advantage eTAD to different markets. We are seeing a slow but steady growth in the utilisation and interest in these technologies and the product differentiation capabilities they provide. The market demand for textured and structured products has been slower than anticipated but there is still a growth.

"One of the greatest benefits with the NTT technology has also become a hold back of the utilisation in textured configuration, the swing capability between plain and textured. But I would also like to stress the unique energy efficiency and product quality achievable with NTT while running in plain mode. I would claim that the best plain base sheet products in Europe by a long shot is made on NTT machines, while the same machines perform at market leading energy levels."

TWM/4: HOW IS AI HELPING YOUR BUSINESS ADVANCE ITS MACHINERY OFFERINGS?

Tonello: "AI will provide important opportunities for our industry. In the specific field of our machinery and plants, AI is "learning the ropes." We foresee a not-too-distant future in which machines and plants will have a simple body and a complex brain.

"The metaphor is to say that they will have to be simple enough to be run by low-skilled personnel, while the management of process parameters – managed largely by self-learning AIs and a few very

Yankee Coating Solutions

Light Dry Crepe solutions help you extract more value from your creping process.

TAD+ Structured Tissue Yankee Coatings help you meet the demands of TAD and hybrid structured tissue machines.

Leverage maximum value creation with Buckman's Yankee coating solutions.

Buckman brings a new level of quality and efficiency to your tissue operation with strong support for your entire Yankee creping operation including problem-solving that leads to a better tissue and more efficient tissue making.

Our LDC solutions can help you achieve a stable creping process that maximizes both production and quality. And our proprietary Yankee coating packages for both TAD and hybrid structured tissue platforms will help you meet today's tissue manufacturing demands.

Learn more.

Find out all the ways Buckman expertise and innovation can be applied to help your organization extract more value from your Yankee creping process. Contact your Buckman representative or visit [buckman.com](https://www.buckman.com).



Buckman 
Chemistry, connected.

specialised people not necessarily on-site – will play a large role.”

Niemczyk: “AI is enhancing Andritz’s machinery offering through the Metris Copilot system, which uses advanced machine learning and a real-time chat interface to help mill operators monitor conditions, identify faults, and make faster decisions. By combining Andritz’s process expertise with Microsoft’s AI technology, Metris Copilot provides real-time insights and anomaly detection based on real-time sensor data, ultimately reducing downtime and boosting efficiency.

“This AI-driven solution enables higher autonomy and simpler decision-making, which allows operators to focus on critical choices while routine tasks are handled by the system.”

Peng: “In terms of AI-driven optimisation, and structural and performance enhancement, we are seeing that AI algorithms can simulate and optimise the structure and performance of household paper machinery. By analysing extensive experimental data and user feedback, AI can identify optimal design parameters, improving production efficiency, stability, and reliability:

- **Smart Monitoring and Fault Prediction:** AI enables real-time monitoring of equipment performance and predictive maintenance. Sensors collect operational data, and machine learning algorithms analyse potential faults, reducing downtime and enhancing production efficiency and product consistency.

Supply Chain Management:

- **Demand Forecasting and Inventory Optimisation:** AI can predict market demand, optimize raw material procurement, and streamline inventory management.

- **Smart Scheduling:** AI-driven big data analysis and optimisation algorithms help determine optimal production schedules by considering order priorities, equipment status, and other factors, minimising idle time and production delays.

As a leading provider of intelligent equipment solutions for the household paper industry, Baosuo Enterprise Group integrates multiple business segments, including:

- Baotuo for paper-making equipment
- Baosuo for converting machinery
- Baojin for packaging solutions
- Dongran for electrical control systems
- Zhonghuibao for high-efficiency energy-saving motors.

“All these divisions align with the group’s strategic focus on the household paper industry, aiming to develop high-capacity, low-carbon, energy-efficient, and intelligent high-end technical equipment while driving expansion into both domestic and international markets. Our goal is to enhance user experience and meet the growing demand in a broader market.”

Goda: “For machinery makers, AI is more than just a technological tool; it has the potential to revolutionise the entire manufacturing process.

“It is expected to have benefits in a wide range of areas including preventive maintenance of equipment, optimisation and automation of manufacturing processes, and improvement and uniformity of product quality. In the Japanese paper industry, there is expected to be great demand for AI-based equipment management and quality maintenance to compensate for the shortage of human resources and experienced workers due to the shrinking workforce.

“Although AI has yet to be introduced and deployed on a full-scale basis, we believe that its further evolution and familiarity will lead to

“For machinery makers, AI is more than just a technological tool; it has the potential to revolutionise the entire manufacturing process.”

Shinji Goda
Director, Kawanoe Zoki

solutions to the various problems faced by the papermaking industry."

Dalle Piagge: "We are strongly convinced that the technological offering of a machinery manufacturer like Toscotec must also be focused on the operational optimisation of the equipment and processes. This idea creates a powerful foundation for a collaboration between the technology supplier and the paper producer that goes well beyond the initial supply but extends wide and large into its operation all along its lifetime.

"At Toscotec, in strong synergy with Voith, digital and AI systems are a big part of this cooperative work with customers, because they offer vital support at various levels. Just to mention a few aspects, digital and AI solutions can help tissue mills partly resolve the issue of rare skilled workforce on the job market by offering interactive Operation Management Systems, which simplify the daily work of machine operators. Another application of digital and AI systems is the continuous monitoring of equipment vibrations to optimise maintenance efficiency, improve reliability and availability, and reduce maintenance costs.

"Finally, innovative systems allow the development of Advanced Process Controls (APC), which keep in constant check important production parameters, which in the past could only be checked from time to time through lab tests.

"In conclusion, these new digital and AI systems pave the way for an autonomous paper mill, an innovation that is currently under development and that will soon represent the state-of-the-art of AI systems for tissue making."

Johansson: "Areas where we see advantages with AI are vast. We work in several different fields both within Valmet and with partners. Today we see how it improves our everyday work with the internal workflows. But we are more excited about how it can serve our customers' performance.

"We are already using AI in data analytics and with Industrial internet solutions, providing new ways to find, for example process variations and how to mitigate the underlying factors.

"Another area is also a transition to more advanced AI learnings in control loops."

TWM/5: WHAT GEOGRAPHICAL AREAS ARE YOU LOOKING TO IN 2025 – AND WHY, AND WHAT TECHNICAL PAPER MACHINE TRENDS AND CHALLENGES ARE YOU SEEING IN THESE REGIONS?

Tonello: "Europe and Eastern Europe, both for rebuilds and new machinery. We are outperforming for certain markets and aim for more mature and demanding ones. At the same time, we are preparing to compete with producers who are on the market with very competitive prices that take

advantage of the economic conditions in their homelands. To this end, we developed product lines with specific characteristics (e.g. the E-WIND T80) that are still distinguished by high build quality, but at competitive costs.

"As for the technical paper machine trends and challenges we are seeing in these regions, today everything happens very quickly, and the market for our products will be highly sensitive to the evolutions of the various geopolitical scenarios at this neuralgic moment. "Secondly, the market will be driven by progress in emerging countries where the use of hygiene products is still at levels an order of magnitude lower than in Europe. We are therefore preparing to offer a range of products adapted to these eventualities both technologically and logistically.

"When, as we all hope, peace breaks out, it will be important to be able to offer plants and machinery that are easy and quick to install in order to meet the needs of the rapidly recovering markets in the shortest possible time."

Niemczyk: "Andritz's strategic commitment to the global tissue industry has remained consistently strong over the years. As a multinational corporation, we operate across a broad geographic footprint and intend to uphold this global approach moving forward.

"The tissue sector has demonstrated steady growth over recent years, exhibiting resilience to various macroeconomic and geopolitical disruptions. We anticipate this stability to persist in the foreseeable future.

"However, regional market dynamics will continue to evolve. For instance, China has long been the dominant driver of new production capacity expansion, but sustaining this high level of growth in the coming years may prove increasingly challenging.

"The North American tissue and towel market continues to show signs of slow but consistent growth, both in dry crepe capacity, but especially in premium TAD grades. Several producers have announced new investments or interest in new capacity, and these announcements are expected to be realised in the coming years. Investments in new converting capacity by several producers is consistent with the expectation that new capacity will be added. We expect several dry crepe tissue machine rebuilds to be announced in the coming years, as several ageing tissue machines will require technology upgrades to remain commercially competitive and environmentally sustainable.

"The development of alternative fibres for tissue production remains a leading area of interest in the North American tissue market. Andritz is extremely well-positioned in this field, and we continue to partner with and support tissue producers in their

fibre development projects, aided by our extensive global R&D capabilities.

"The recent change in government leadership in the US and the ensuing geopolitical landscape may have some impact on project schedules in view of the uncertainty surrounding trade tariffs that may significantly impact project costs. The new challenges presented by this development will benefit machine vendors such as Andritz, who have a strong worldwide presence.

"Another key industry development is the transformation in project execution models and investor expectations across various geographic regions. While many aspects of the tissue industry are gradually standardising on a global scale and reducing regional disparities, the approach to the deployment of tissue production technology is undergoing significant shifts.

"In Asian markets, the traditional project execution framework remains largely unchanged, with investors retaining primary responsibility for coordination and integration. However, in other regions, there is a growing trend toward "turn-key" project models, where technology providers are expected to deliver fully integrated solutions.

"This shift presents new challenges for equipment and technology suppliers. Beyond possessing state-of-the-art manufacturing technology, executing large-scale projects now requires a deep understanding of process integration, advanced automation, and supply chain coordination. Additionally, success in this evolving landscape depends on highly skilled, multidisciplinary teams capable of navigating diverse cultural and regulatory environments, as well as robust financial capacity to support complex project execution.

"Andritz remains at the forefront of this transformation, leveraging its global expertise to successfully deliver large-scale, integrated tissue production projects that encompass a comprehensive scope of supply."

Peng: "In 2025, our target market will be global. While maintaining a strong foothold in China, we will expand towards:

- **Europe and the Americas:** Providing high-speed, highly automated premium tissue machines to potential clients;
- **Southeast Asia and the Middle East:** Offering customisable solutions tailored to the rapid growth of the household paper industry in these regions.

"We will continue to provide comprehensive solutions for household paper manufacturing, from paper-making machines to product packaging equipment, catering to diverse customer needs worldwide."

Goda: "The regions where we expect market growth to focus on are the Asia-Pacific region and other emerging countries, including India.

"In each of these regions, the market for tissue, toilet paper, and other household paper products is expected to expand due to the increasing penetration of these products in households.

In each of these regions, paper machine manufacturers will be required to propose equipment that meets technical issues, environmental measures, and market needs."

Dalle Piagge: "For brevity, I could mention three areas of attention for Toscotec. First of all, we are looking to Northern Africa as well as India and Southeast Asia, because there are a number of new projects coming up in these regions. These markets are in the process of expanding and at the same time their per capita tissue consumption is still rather low, which points to a clear potential for future market growth. In terms of technological trends, we are looking at conventional tissue machines installed by a certain number of newcomers to the market, in which case the challenge for technology suppliers consists of providing a high level of assistance.

"Second, we are focused on the U.S. market with the installation of new complete lines and technological rebuilds. The main trend is that of upgrades, and Toscotec stands out as a key player because we can deliver efficient tailor-made solutions on rebuilds. The market is definitely rewarding Toscotec on this aspect, in North America as well as in Europe.

"Finally, we are looking to China where we have recently started up two TAD lines at Chinese leading tissue producer Hengan International Group. The Chinese market is showing a surging interest in premium-quality structured tissue, which is of course produced on TAD machines. The challenge in this case is a low utilisation rate of the installed machine base in the country."

Johansson: "Valmet will continue its global presence, and 2025 is an exciting year with start-ups on five different continents.

"We do see different market trends with different requirements and needs around the world. Differences that have become more evident and crucial over the last years. The most critical areas focussing on the R&D work are water scarcity, energy source availability and quality demands."

CHROMASCAPE®

Paper Colorants

*Partner with Us for Success:
Comprehensive Paper Colorants
for the EMEA Region*



Direct Liquid, Powder, Sulphur Black & Basic Dyes

Full range of direct liquid, powder and sulfur black dyes (Levacell®) and basic dyes (Astra®), renowned for their cationic nature.

Aqueous Pigment Dispersions

Full line of pigment dispersions (Ponolith®) formulated with a range of dispersants. We offer organic and inorganic pigments.



Fixative Agents

Our cationic fixatives (Levogen®) provide retention, bleed-fastness and effluent coloration improvement for anionic dyes and pigments.

Contact your ChromaScape EMEA sales representative to discuss how our CHROMASCAPE Paper Colorants can bring value to your business.



Explore our products at
chromascape.com



CHROMASCAPE

serviceeu@chromascape.com • 44 7775 958332

TISSUE ENTERS THE AGE OF WELLNESS AND BEAUTY ENHANCEMENT

For decades an adjacent niche category, skin health promoted by natural ingredients and vitamins is an increasing demand for consumers. Euromonitor International's Lying Qian, Industry Manager for Tissue & Hygiene, reports.



Wellness is playing an increasingly dominant role in product innovations across sectors. Facial tissues, a category leading pace of growth of all tissue categories, are transcending basic cleaning functionality to carry a stronger care proposition and become a part of self-care routines, driven by the blurring line between health and beauty, expanded use occasions and urban population, as well as strong consumer demand for wellness products that prioritise skin health.

This trend is most notable in Asia, where stringent beauty perceptions, increased incidences of colds, influenza, and seasonal allergies due to climate change and pandemic-induced weakened immunity, make sensitive skin a crucial pain point and support demand for facial tissues that offer sensitive skin benefits, multi-occasion solutions and convenience. According to Euromonitor's Voice of the Consumer: Beauty Survey, 49% of Asia-Pacific (APAC) consumers said skin health has a moderate or severe impact on their current health in 2023, up from 46% in 2019. In 2024, 17% of women in Asia reported extreme concern about skin health, versus 13% globally.

As the boundary between health and beauty softens, more beauty- and health-related ingredients will be researched to unlock their potential in facial tissues.

MOISTURISATION AND SPECIALISED BEAUTY BENEFITS LEAD INGREDIENT PREMIUMISATION AND USE DIVERSIFICATION

Such wellness mindset has driven a slew of premium facial tissue launches, intensifying competition and escalating the cost of capturing consumer attention. Beauty-inspired ingredients with natural origins and vitamins such as milk cream, hyaluronic acid, collagen, and prebiotics are emerging as premium attributes for facial tissues by consumers.

Natural, food-fortified ingredients offering moisturising, cushiony and wet resistant characteristic such as lotion, milk cream, and shea butter, have become particularly popular among use applications. As consumers become more sophisticated at skin care and the boundary between health and beauty softens, more beauty- and health-related ingredients will be researched to unlock their potential in facial tissues, with scientific-based

evidence. For instance, hyaluronic acid, collagen, glycerin and -biotics have made early debuts in facial tissues to tackle wrinkles, fine lines, and barrier protection apart from moisturisation.

In China, Hygienix, part of Shanghai Orient Champion Group, launched a facial tissue product dubbed "moist tissue," which contains hyaluronic acid to provide facial moisturisation across occasions requiring skin care, such as cold/flu remedy, make-up fixing or removal, facial oil absorption, and baby skin cleaning.

In Japan, the skincare concept has for decades been a strategy where well-known major brands maintain category presence and competitiveness. In 1993, Kawano Paper launched a tissue paper product containing moisturising ingredients based on glycerin and sorbitol and obtained patents in Japan and the US. More recently, Elleair Luxury Moisturizing Lotion Tissue launched in August 2023 contains moisturizing ingredients as well as glycerin, collagen, and hyaluronic acid, offering a moist and smooth texture without attracting oil from skin. Similarly, in Malaysia, brand Popi positions its facial tissues as moisturising lotion tissue infused with hyaluronic acid, coconut glycerine and food-grade lotion made from sustainably-sourced 100% virgin wood pulp, for all consumers with sensitive skin. The skinification trend also manifested in adjacent disposable facial cloths and facial wipes. Similar ingredient-led innovations are occurring in the adjacent facial cleansing wipes segment, and bode well for novel product formats such as disposable facial cloth, which may create adjacent pivot opportunities for tissue players.

In disposable facial cleansing wet wipes, a beauty-adjacent category, the wellness shift is manifested in the emergence of specialisation and multifunctionality. For instance, anti-ageing wipes is a growing niche segment featuring ingredients such as retinol, hyaluronic acid, or peptides renowned for their rejuvenating properties. The convenience of concentrating these ingredients into a single wipe makes anti-ageing skin care more accessible and easily adoptable in daily routines. This trend is anticipated to continue gaining relevance over the forecast period.

Disposable facial cloths, a novel product format, are gaining popularity in Asia, particularly China, with durability and skin care advantages and offering a potential growth adjacency for tissue players. The product is specially designed for facial cleansing and post-cleansing face wiping and toning.

As an alternative to washable facial towels, disposable facial cloths effectively addressed common health concerns such as bacterial growth and wrinkle generation through rubbing with one-time disposability and gentle fabric texture.

The price range for disposable facial cloths falls between \$1 and \$5 per 100 pieces, depending on

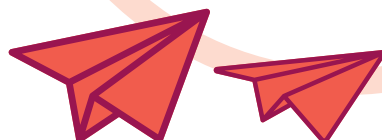
the choice of raw materials. In addition to 100% cotton products, some cheaper options incorporate viscose fibre and polyester. Local companies have taken the lead in educating the market and product development. Notable players in this category include Purcotton, which initially specialised in medical consumables, and Grace, a company originally focused on towels. While small local players drive the segment, multinationals such as Kleenex, Unicharm, and Tempo are also following suit.

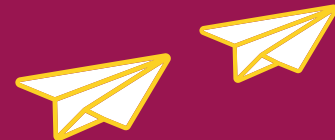
WINNING IN THE EVOLVING APAC FACIAL CARE MARKET REQUIRES A STRONG FOCUS ON MULTIFUNCTIONALITY AND ACCESSIBILITY

As the largest tissue region by dollar of consumption, Asia Pacific's leading status in retail tissue will be further solidified by its advance in facial tissues, which is expected to make up 46% of its total incremental retail tissue volume sales growth over 2024-2029, according to Euromonitor's tissue and hygiene research data published in February 2025. By 2029, facial tissues will make up just over 30% of the region's total retail tissue volume sales, up from 29% in 2024.

To drive further growth in the category globally, businesses need to align with the wellness trend, openly communicating information about ingredients and tangible benefits across key use occasions to build trust. Meanwhile, with lingering economic challenges limit consumers' discretionary spend, updating claims with wellness-focused language and positioning products as part of a multi-occasion, holistic lifestyle can further resonate with today's health- and budget-conscious consumers.

In disposable facial cleansing wet wipes, a beauty-adjacent category, the wellness shift is manifested in the emergence of specialisation and multifunctionality.





ADVERTISER'S INDEX

Amotek	amotek.com	19	Futura	futuraconverting.com	OBC
Andritz	andritz.com	2	Henkel	henkel-adhesives.com	23
Baosuo	baosuo.com	15	Infinity Machine & Engineering	infinitymec.com	7
Buckman	buckman.com	53	Tissue World Magazine	tissueworld.com	IBC
BW Converting	bwconverting.com	47	Tissue World Miami	tissueworld.com	38
Chromascape	chromascape.com	57	Toscotec	toscotec.com	11 & 29
Convermat	convermat.com	IFC	Wochenblatt Papierfabrikation	fibers-in-process.de	25
E80 Group	e80group.com	39			

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/



Tissue World

Magazine

Find out how we can
help your brand connect
with the Tissue Industry

Tissue World Magazine is the leading, independent publication and online resource for the global tissue industry. We're dedicated to publishing essential information, analysis, and opinion on breaking trends in business, technology, regional developments and sustainability, to keep tissue professionals up to date.

Connect with your community,
differentiate your brand and grow your
business globally by advertising with the
leading publication for your industry!



Find out more about
advertising opportunities.

Download our media pack:



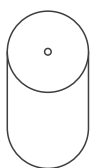
Keep up to date with the
latest industry news.

Subscribe to our bi-weekly
newsletter:



Seamless efficiency

From jumbo



to pallet



Managing the entire production process from the mother reel to the packaged and palletized product. An integrated solution that maximises industrial efficiency: the future of converting is now.

Visit us @

Tissue World | Düsseldorf

8 - 10 April 2025 | Messe Düsseldorf
Stand G10

