

# Tariff hikes trigger sourcing shakeup



**Circularity Updates** 

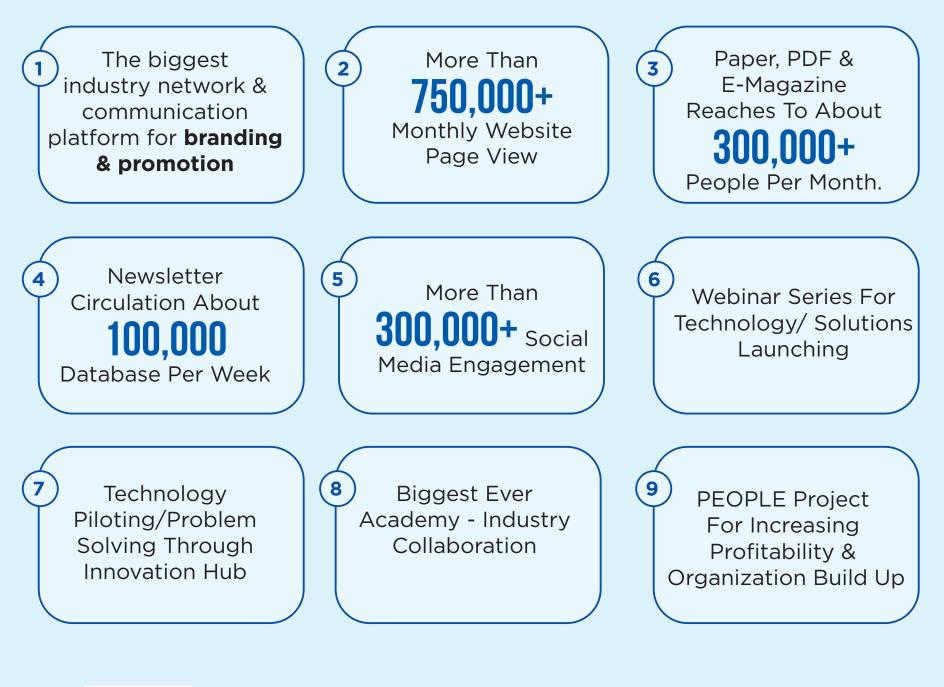
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#### TRADE



# Tariff hikes trigger sourcing shakeup

M A Mohiemen Tanim

#### Introduction

In a dramatic escalation of trade tensions, recent measures have pushed the United States and China into a new phase of tariff warfare. China has imposed a 125% tax on U.S. products, while the U.S. has responded with a 145% tax on Chinese goods. In an added twist, a universal 10% reciprocal tax is now levied on products from all other trading partners. These sweeping changes are reshaping the global landscape, particularly for the Textile & Apparel (T&A) industry—a sector that relies on a finely balanced international supply chain and competitive cost structures.

#### **Unpacking the New Tariff Regime**

#### Key Tariff Adjustments

#### China's 125% Tax on U.S. Products:

China's steep tariff on U.S. goods is designed both as a punitive measure and as a lever to recalibrate trade dynamics. For U.S. T&A manufacturers exporting raw materials, components, or finished products, this escalates costs in the Chinese market—a key consumer and production hub.

#### U.S. 145% Tax on Chinese Products:

The U.S. has ratcheted up its tariffs on Chinese imports to 145%, making it significantly more expensive for American buyers to source inexpensive textiles, fabrics, and apparel directly from China. This sharp increase serves to protect domestic industries while forcing importers to reconsider their sourcing strategies.

#### Universal 10% Reciprocal Tax on Other Countries:

The addition of a 10% tariff on goods from third-party nations adds an extra layer of complexity. This policy aims to reduce circumvention strategies—where companies might shift production to countries with lower tariff barriers—but it also impacts nations traditionally seen as emerging alternatives for sourcing T&A products, such as Bangladesh, Vietnam, and Turkey.

#### **Broader Trade Implications**

Collectively, these measures are designed to apply pressure on both sides, provoking shifts in demand and supply that extend beyond the immediate U.S.-China bilateral relationship. For the T&A industry, which often functions at the nexus of intricate global supply chains, the ramifications are multifaceted.

#### Impact on Global T&A Manufacturing

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### 1. Supply Chain Disruptions and Reshuffling

Diversification of Sourcing Networks:

Historically, the T&A sector has relied heavily on China for low-cost production and components. With the steep U.S. tariff on Chinese products, firms are compelled to seek alternative production bases. This migration, however, carries its own risks—new suppliers may lack the infrastructural efficiency, quality standards, or capacity of their Chinese counterparts.

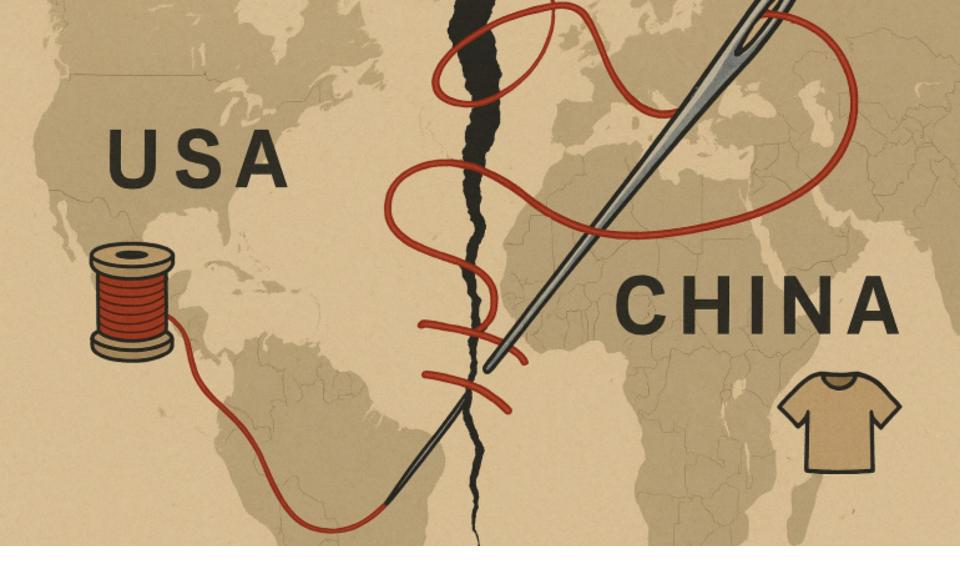
#### Supply Chain Realignment:

The imposition of a universal 10% tariff on other countries limits the freedom to shift entirely away from China. Manufacturers must now strategize around a "tariff triangle," where no single country can serve as a complete substitute. Businesses are increasingly evaluating the total landed cost of shifting production, balancing tariff levels against transportation costs, labor quality, and reliability.

#### 2. Cost Implications and Pricing Pressures

#### **Rising Production Costs:**

For T&A manufacturers, increased tariffs translate directly into higher production costs. The 145% tariff on Chinese inputs inflates the prices of raw materials and intermediate goods. Even when production is shifted, the universal 10% tariff adds a new cost element that further compresses profit margins, especially in an industry known for its slim margins.



#### **Consumer Price Sensitivity:**

The pass-through of increased costs to consumers is a critical concern. In pricesensitive markets, any significant uptick in retail prices due to tariff-induced cost rises can erode market share and dampen demand. Brands and retailers must balance the need to maintain profitability with the risk of alienating price-conscious customers.

#### 3. Market Shifts and Competitive Pressures

Regional Production Hubs Emerging:

Countries in Southeast Asia and South Asia (e.g., Vietnam, Bangladesh, and India) are in a position to capture market share previously dominated by China. However, these nations must invest in upgrading quality controls and boosting capacity to fill the gap effectively. Some manufacturers are already trialing "dual sourcing" strategies to hedge against further trade disruptions.

### Strategic Partnerships and Alliances:

In response to heightened tariff pressures, T&A companies are forming strategic alliances to share resources, innovate in supply chain management, and secure favorable pricing through long-term contracts. Collaboration with technology providers for improved logistics, real-time tracking, and demand forecasting is also on the rise, offering resilience against unpredictable tariff adjustments.

### 4. Innovation and Adaptation in the Industry

### Investment in Automation and Sustainability:

The economic pressures of tariff hikes are compelling manufacturers to enhance productivity through automation and lean manufacturing processes. Investments in robotics, digital workflow integration, and sustainable practices are seen as long-term solutions to mitigate cost pressures and differentiate products in a competitive market.

### Adapting to Fluctuating Demand Patterns:

With tariffs influencing export dynamics, T&A companies must be agile in responding to shifting consumer demands and regulatory landscapes. Flexible production methods, such as on-demand manufacturing and modular production lines, are becoming valuable tools for managing volatility.

### Strategic Considerations and the Road Ahead

Risk Mitigation and Scenario Planning

Firms must adopt robust risk management strategies and perform regular scenario planning to anticipate further tariff changes. Establishing contingency reserves, diversifying supplier bases, and investing in market research can help cushion the impact of sudden regulatory shifts.

### Policy Advocacy and Industry Collaboration

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Industry associations and chambers of commerce are increasingly engaging

with policymakers to advocate for more stable trade policies. By presenting unified data and case studies, T&A manufacturers can hope to influence future negotiations and lessen the punitive impacts of extreme tariffs.

#### **Embracing Digital Transformation**

Digital platforms offer the potential to optimize inventories, streamline order processing, and improve transparency across the supply chain. By embracing digital transformation, manufacturers can better navigate the complexities introduced by the shifting tariff landscape, ensuring they remain competitive in a rapidly evolving market.

#### Conclusion

The recent tariff escalations—marked by China's 125% tax on U.S. products, the U.S.'s 145% tax on Chinese goods, and a universal 10% tariff on other countries—are sending shockwaves through the global Textile & Apparel manufacturing industry. While these measures aim to protect domestic interests and force a rebalancing of trade, they simultaneously inject significant uncertainty into global supply chains. The industry's response is likely to be multifaceted: diversifying sourcing locations, investing in automation, forging strategic alliances, and increasingly leveraging digital innovations. In this volatile environment, adaptability and proactive risk management will be crucial for survival and long-term success.

# 2025-2026 Your Best Strategic Plan for the **TEXTILE & GARMENT** Industry in Asia

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**MORE INFORMATION** 

### Ultrafabrics & Pantone launch the 'Simple Pleasures Palette'

Rahbar Hossain



Ultrafabrics, a high-performance fabric manufacturer, has collaborated with color authority Pantone to launch a new color collection titled "Simple Pleasures Palette." The collection is designed to merge functionality with emotional well-being through the lens of color psychology.

This capsule range comprises five soothing, yet dynamic hues that aim to evoke joy, comfort, and balance in interior design and fashion applications. Ultrafabrics' advanced polyurethanebased materials are used across sectors such as aviation, furniture, and automotive, making this launch significant for both aesthetics and sustainability. The Simple Pleasures Palette reflects a broader shift toward biophilic and emotional design principles, where color is used intentionally to enhance user experience. The collaboration also incorporates Ultrafabrics' proprietary TENCEL<sup>™</sup>-backed technology, which reduces carbon impact and improves moisture management.

Pantone, best known for its annual Color of the Year and influence across design industries, stated that this partnership redefines "quiet luxury" in material innovation. The collection is available globally and is expected to see immediate uptake in contract interiors and premium fashion accessories.

### "Corpcore" emerges as post-remote fashion trend

M A Mohiemen Tanim

After years of casual workfrom-home attire, a polished revival is sweeping fashion capitals—ushering in the rise of "Corpcore." A blend of corporate tailoring with modern comfort, Corpcore is defined by structured blazers, pencil skirts, pleated trousers, and button-downs updated with flexible, sustainable fabrics.

Luxury brands like Prada, Stella McCartney, and The Row have been quick to interpret the movement. Their Spring/Summer 2025 collections feature tailored silhouettes in relaxed knits, organic wool, and recycled polyblends. Even traditional officewear staples like shoulder pads and power suits are making a return—now reimagined for inclusivity and ease.

Behind this trend is the global returnto-office (RTO) movement. Data from



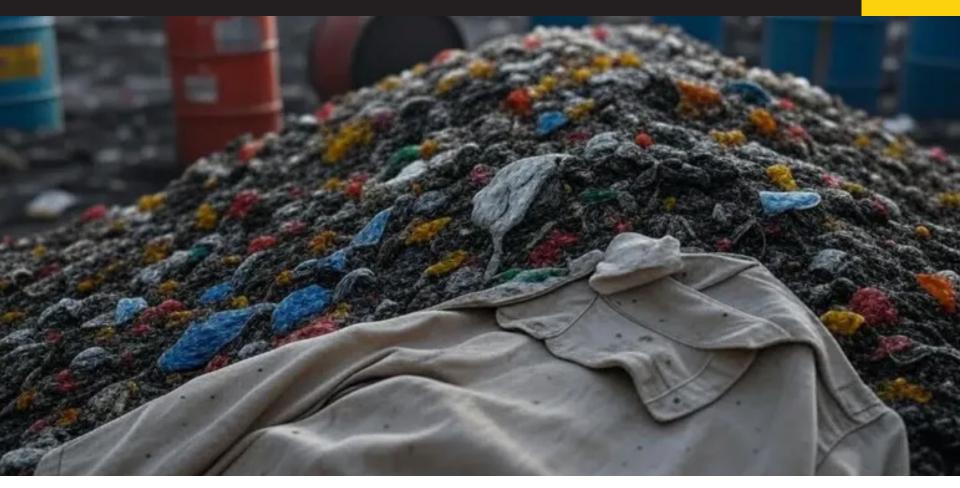
**Photo:** Calvin Klein Fall/Winter 2025 / Stella McCartney Fall/Winter 2025 / Jane Wade Fall/ Winter 2025 - The Impression

McKinsey suggests that over 70% of hybrid workers are spending at least three days in office as of Q1 2025. With this comes renewed demand for formalwear that doesn't compromise on comfort. Fast fashion brands like Uniqlo, Mango, and COS are also embracing the aesthetic, introducing wrinkleresistant separates, stretch-fabric suiting, and hybrid loafers. On TikTok, the #corpcore hashtag has surpassed 150 million views, proving its traction among Gen Z professionals.

Beyond aesthetics, Corpcore embodies shifting identity politics where dressing for success merges with sustainable values and diverse body representation. Industry analysts predict a 15–20% YoY rise in businesswear sales across global retail, with tailored categories leading.

Corpcore isn't a flash-in-the-pan trend it represents the evolving intersection of professionalism, comfort, and selfexpression in the modern workplace.

#### S U S T A I N A B I L I T Y



### New Mexico poised to ban PFAS in consumer products

#### Faysal

New Mexico is on the verge of becoming a national leader in the fight against toxic "forever chemicals" as state lawmakers have advanced legislation to ban certain perfluoroalkyl and polyfluoroalkyl substances (PFAS) in consumer products. Two key bills, having cleared both the New Mexico House and Senate, now await the signature of Governor Michelle Lujan Grisham, potentially making New Mexico the third state in the U.S. to implement a comprehensive PFAS product ban.

The legislation, spearheaded by House Bill 212 (H.B. 212), targets the intentional addition of PFAS in a wide range of everyday items, including cookware, food packaging, textiles, cosmetics, and firefighting foam. Known as "forever chemicals" due to their persistence in the environment and human body, PFAS have been linked to serious health issues such as cancer, liver damage, and developmental problems. The bills aim to phase out these substances in consumer goods over several years, with initial restrictions beginning as early as 2027 and a broader ban on most PFAS-containing products by 2032.

"This is about protecting our citizens from chemicals that linger in our environment and our bodies for decades," said Representative Linda Ferrary, a co-sponsor of H.B. 212, in a recent statement. "We have a responsibility to act." The proposed laws also empower the New Mexico Environment Department (NMED) and the Environmental Improvement Board to set rules, mandate product testing, and ensure compliance, while allowing exemptions for essential items where safer alternatives are not yet available. New Mexico's move follows similar efforts in Maine and Minnesota, which enacted PFAS bans in 2021 and 2023, respectively. Unlike many states that have targeted specific product categories, New Mexico's legislation takes a broader approach, aiming to eliminate intentionally added PFAS across multiple sectors. The state's Environmental Improvement Board will also collaborate with the New Mexico Department of Agriculture to address PFAS in pesticides and fertilizers, balancing environmental protection with agricultural needs.

Environmental advocates have hailed the bills as a significant step forward, though some express concern over enforcement challenges. "The ban is a great start, but without full chemical disclosure from industries, it's hard to ensure compliance," noted Alaina Mencinger, a reporter for The Santa Fe New Mexican. Recent regulations have already banned PFAS in fracking within the state, but advocates argue that trade secret protections still shield some industry practices from scrutiny.

The push for PFAS regulation comes amid growing evidence of

contamination in New Mexico. A 2024 study commissioned by the NMED found wildlife near Holloman Lake with PFAS concentrations among the highest ever recorded globally, underscoring the urgency of the issue. "The more we look, the more we find," said NMED Secretary James Kenney, highlighting budget constraints that limit the state's ability to fully assess the scope of contamination.

If signed into law, the legislation could reshape industries reliant on PFAS, prompting manufacturers to innovate and adopt safer alternatives. However, some business leaders worry about the economic impact, citing potential challenges in sourcing substitutes and meeting compliance deadlines. Supporters counter that the longterm benefits—cleaner water, healthier communities, and reduced healthcare costs—far outweigh the short-term hurdles.

Governor Grisham, a Democrat with a track record of supporting environmental initiatives, is expected to sign the bills, though her office has not yet confirmed a timeline. As of today, April 07, 2025, a petition circulating online urges her to act swiftly, reflecting strong public support for the measure.

New Mexico's bold stance on PFAS could set a precedent for other states, amplifying a national movement to curb the use of these persistent chemicals. For now, all eyes are on the governor's desk as the state stands poised to take a historic step toward a safer, cleaner future.

### SBTi launches draft corporate Net-Zero Standard V2

#### Sanjoy Kumar

The Science Based Targets initiative (SBTi) has released an initial draft of its revised Corporate Net-Zero Standard Version 2.0 for public consultation. This latest draft aims to accelerate corporate decarbonization by addressing key barriers to emissions reductions and providing new incentives for climate action.



### SBTI CORPORATE NET-ZERO STANDARD

Version 2.0 - Initial Consultation Draft with Narrative March 2025

#### Key Highlights of the Draft Standard

The revised standard is designed to enable more businesses to commit to net-zero targets while ensuring alignment with the latest climate science, regulatory requirements, and industry feedback. Some of the major updates include:

»Tackling Scope 3 Emissions

**Challenges:** Recognizing that value chain emissions (Scope 3) are the most significant challenge for businesses, the new standard introduces flexible

options such as green procurement and revenue-based targets for emissions reductions.

- **»Enhanced Focus on Action**: The standard differentiates between Scope 1 and Scope 2 emissions to address their unique decarbonization challenges, including a proposed shift to low-carbon electricity by 2040.
- »Scaling Carbon Removals and Climate Finance: Companies will have the opportunity to be formally recognized for investing in Beyond Value Chain Mitigation (BVCM) and for setting

interim carbon removal targets.

- **»Tracking and Communicating Progress:** New requirements will
  be introduced for assessing and
  reporting progress against set targets,
  ensuring greater transparency and
  accountability.
- »Simplified Requirements for Emerging Markets & SMEs: Mediumsized companies in developing markets and small businesses will have access to streamlined target-setting requirements, encouraging broader corporate climate action.

#### Public Consultation & Transition Pathway

The public consultation for Version 2.0 of the Corporate Net-Zero Standard will be open from March 18 to June 1, 2025. Stakeholders can access the draft through the SBTi's Consultation Guide and participate in an associated webinar to provide feedback. To facilitate a smooth transition from the current Corporate Net-Zero Standard (V1.2) and Near-Term Criteria (V5.2), SBTi will develop a transition pathway, ensuring companies remain confident in setting targets under the existing framework while the new version is finalized.

#### **Industry Leaders Weigh In**

Francesco Starace, Chair, SBTi, emphasized the importance of stakeholder engagement in refining the standard:

"The SBTi has always been at the frontier of climate action. By addressing

complex challenges and emerging issues, this draft standard lays the groundwork for companies to accelerate their journey towards netzero. Our goal is to produce a standard that is rigorous, practical, and beneficial for both businesses and the planet."

Alberto Carillo Pineda, Chief Technical Officer, SBTi, highlighted the significance of public consultation:

"This draft reflects insights gained from thousands of businesses, other standard setters, NGOs, policymakers, and regulators worldwide. We look forward to engaging with stakeholders to refine the standard further and maximize its impact at scale."

Dr. Kornelis Blok, Chair, SBTi Technical Council, underscored the framework's scientific rigor and practical application:

"The Technical Council has ensured this standard aligns with the latest research and global best practices. It will serve as a critical tool for corporates to make informed decisions and drive real change in their decarbonization efforts."

#### Looking Ahead

As the corporate sector faces increasing pressure to accelerate its climate commitments, the revised Corporate Net-Zero Standard aims to remove obstacles, encourage ambition, and promote transparency in emissions reductions. Businesses, policymakers, and other stakeholders are encouraged to participate in the consultation process and contribute to shaping the future of corporate net-zero action.

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#### S U S T A I N A B I L I T Y



### CFC 2025 highlights innovation & dynamic development in sustainable fibre

#### Daniel Brown

Cellulose Fibres Conference 2025 (CFC 2025), held on March 12-13 in Cologne, Germany, brought together global industry leaders, researchers, and innovators to discuss the latest advancements in sustainable fibers. The event, now recognized as a premier platform for the cellulose fiber industry, featured a comprehensive program focused on innovation, sustainability, and circular economy strategies.

#### Pioneering Developments in Cellulose Fibers

The conference explored the

evolving landscape of cellulose fibers, emphasizing the growing importance of sustainable alternatives to synthetic materials. Key discussions revolved around traditional wood-based chemical pulp as well as emerging sources such as agricultural waste, recycled textiles, and paper-grade pulp. Experts also highlighted the increasing demand for biosynthetics, marking their debut at CFC 2025. Panelists examined scalability, biodegradability, and performance in comparison to fossil-based synthetic fibers.

#### Industry Insights and Investments

CFC 2025 facilitated dynamic engagement among attendees, with sessions addressing fiber-to-fiber recycling, marine biodegradability, alternative feedstocks, and innovative technologies for fiber production. Rahul Bansal, Vice President & Head of the Global Nonwoven Business at Birla Cellulose, underscored the significance of the event, stating: "With the global shift towards plastic-free products, cellulose-based fibers and allied industries are witnessing an influx of investment in process development and innovation to improve sustainability. This conference plays a crucial role in fostering collaboration and knowledge sharing across the value chain."

Experts, including Andreas Engelhardt from The Fiber Year, reported that global investments in cellulose fiber production are increasing, with an annual capacity growth of 17 percent between 2024 and 2029, largely driven by Lyocell production. Additionally, CIRFS (BE) proposed a new standard encompassing all cellulose fiber types under a unified category, which gained broad support from participants.

### Recognition for Innovation in Sustainable Fibers

A major highlight of the conference

was the announcement of the Cellulose Fibre Innovation of the Year 2025 award winners, sponsored by GIG Karasek. The award celebrated three groundbreaking innovations:

- » SA-Dynamics (Germany) Developed biodegradable cellulose aerogel textiles offering superior insulation properties for both textiles and construction.
- » **Releaf Paper France (France)** Pioneered the transformation of urban fallen leaves into sustainable cellulose fibers for packaging materials.
- » Uluu (Australia) Introduced seaweed-derived biosynthetic textile fibers, aiming to replace synthetic polyester while eliminating microplastic pollution.

These innovations are expected to drive further advancements in the sustainable fiber market.

#### Networking and Collaboration

Beyond the professional sessions, the conference fostered extensive networking opportunities. The event's matchmaking tool facilitated over 50 scheduled meetings, strengthening industry connections and encouraging collaboration. One of the social highlights was an evening of traditional German bowling, adding a fun and interactive element to the conference experience.

### ACIMIT launches 'The Heritage' virtual exhibition on italian textile machinery

Matthew Davis

# The heritage SHAPING THE FUTURE with ACIANT

and uninterrupted evolution of the Italian textile machinery industry



ACIMIT, the Association of Italian Textile Machinery Manufacturers, has unveiled The Heritage, a virtual exhibition retracing the history of Italy's textile machinery industry. The initiative, developed in collaboration with the Italian Trade Agency and financially supported by the Italian Ministry of Foreign Affairs and International Cooperation, brings to life more than a century of industrial evolution through a digital platform.

The Heritage serves as the digital extension of the exhibition presented



at ITMA 2023 Milan, the world's premier textile machinery trade fair. Originally a photographic display that captivated national and international visitors, this online platform transforms the historical journey into an immersive and interactive experience.

Featuring contributions from numerous textile machinery companies, The Heritage showcases over 100 years of industry advancements through a visually rich gallery. The exhibition is divided into sections, including



Machineries, Entrepreneurs, Factories, World, Companies, Exhibition, and ACIMIT, allowing visitors to explore drawings and photographs of iconic machinery, significant trade fair moments, and vintage images of production plants that have shaped the sector. Marco Salvadè, President of ACIMIT, highlighted the importance of this initiative: "The primary goal of The Heritage, both at ITMA 2023 and now as a digital platform, is to showcase the history, values, and technological evolution of the Italian textile machinery industry. It is an evocative and engaging journey that illustrates how Italian manufacturing has evolved from the past century to the present."

Italy remains a global leader in textile



**Photo:** Savio Macchine Tessili Spa, Luciano Savio in Beijing, 1971



Photo: Testa, Exact insights, 1969

machinery, with nearly 300 companies operating in the sector. This leadership is driven by widespread expertise and continuous innovation. Salvadè emphasized that The Heritage is not a static exhibition but rather a growing and dynamic space: "This virtual platform will continue to evolve, enriched by ongoing contributions from companies providing images and testimonies that narrate the ongoing story of our industry."

By offering an accessible and engaging platform, The Heritage ensures that the legacy of Italian textile machinery continues to be celebrated and shared worldwide. The virtual exhibition can be visited at heritage.acimit.it.

### Pakistan's Textile Asia 2025 secures \$550mn in deals

Sayed Abdullah



Hosted by the Pakistan Readymade Garments Manufacturers and Exporters Association (PRGMEA) in collaboration with Ecommerce Gateway Pakistan, the event attracted participants from over 20 countries. Major players from China, Germany, Turkey, and South Korea exhibited advanced machinery, smart factory automation solutions, and ecofriendly processing technologies.

The event focused on transitioning Pakistan's textile base toward valueadded production and environmentally responsible manufacturing. Key MoUs included machinery imports for sustainable dyeing, zero-liquid discharge effluent systems, and digital workflow management for garment factories. A highlight was the "Innovation for Resilience" summit, where industry leaders discussed global trade realignments, reshoring trends, and AI-driven productivity. With Pakistan facing energy constraints and climate vulnerabilities, stakeholders emphasized the importance of digitalization and green investments to future-proof the sector.

xtile

Asia 20

Photo: Textile Asia 2025

According to the PRGMEA, this year's edition was the most commercially successful in Textile Asia's history. Many exhibitors noted increased interest in compliance-oriented vendors, traceability software, and energyefficient technologies—reflecting evolving expectations from Western buyers post-COVID.

As the country eyes a sustainable export recovery, Textile Asia 2025 provided critical momentum, underlining the sector's appetite for innovation and global collaboration.

### Sheep Inc. secures £5mn series A investment

Luke Wilson



Sheep Inc., the innovative fashion brand known for its pioneering carbonnegative supply chain and premium Merino wool garments, has raised £5 million in a Series A funding round. The investment was led by Inside Out LLC, an impact investment holding company founded by environmental advocate and entrepreneur Suzy Amis Cameron. Inside Out includes seasoned entrepreneur Erik Stangvik and former Deloitte Partner Blair Knippel.

The funding will propel Sheep Inc.'s

mission to reshape the fashion industry by proving that superior quality and environmental responsibility can coexist. At the heart of this transformation is the brand's naturally carbon-negative supply chain and its proprietary Connected Dot technology, which provides customers with full transparency into a garment's journey from regenerative farms to final production.

Sheep Inc. has gained widespread recognition for fusing cutting-edge

technology with the highest quality Merino wool, sourced exclusively from regenerative farms. Every piece in its collection is meticulously crafted to ensure durability, setting a new standard in luxury knitwear and sustainable craftsmanship.

Inside Out LLC's Fashion, Textiles, and Home vertical, one of six divisions within the company, aims to drive significant environmental and social impact in the industry. This division brings deep expertise in sustainable business practices and responsible innovation. Inside Out's broader investment focus spans Science Research Technology, Food, Education, Media, and Wellness, further cementing its commitment to solving urgent global challenges.

As a flagship investment within Inside Out's Fashion, Textiles, and Home vertical, Sheep Inc. has the potential to expand its regenerative supply chain expertise and Connected Dot technology across Inside Out's wider portfolio. This partnership is expected to accelerate positive change beyond Sheep Inc.'s own brand.

"We are incredibly excited to partner with Inside Out," said Sheep Inc. Co-Founders Edzard van der Wyck and Michael Wessely. "Suzy, Erik, and Blair share our vision for redefining the fashion industry—environmentally, socially, and technologically. This partnership not only fuels our growth but accelerates our ability to set new industry standards."

> "Sheep Inc. stands at the forefront of responsible fashion," said Suzy Amis Cameron. "With its pioneering carbon-negative production, regenerative Merino wool, and innovative Connected Dot technology, Sheep Inc. is setting a new benchmark for transparency and quality. We are thrilled to support their expansion, knowing their commitment to ethical business practices aligns with our mission to drive meaningful change across industries."

This latest investment positions Sheep Inc. to lead the next era of sustainable fashion, driving environmental progress while maintaining an unwavering focus on luxury and craftsmanship.

#### S U S T A I N A B I L I T Y



### **Global Change Award**

An innovation challenge by H&M Foundation

### Top 20 finalists announced for the Global Change Award 2025

#### Luke Wilson

The prestigious Global Change Award has revealed its top 20 finalists for 2025, showcasing groundbreaking innovations to transform the fashion industry. These pioneering ideas selected from 476 submissions spanning 69 countries across six continents seek to decarbonize fashion while ensuring sustainability for both people and the planet.

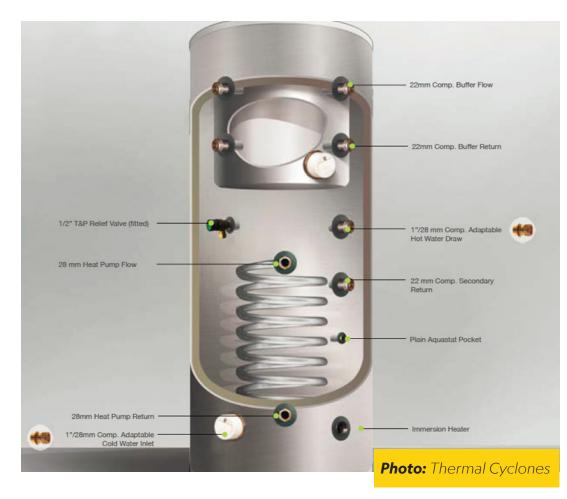
Organized annually, the Global Change Award recognizes bold, early-stage innovations that challenge conventional industry norms and present scalable solutions. This year's finalists have been categorized into four key themes: Sustainable Materials & Processes, Responsible Production, Mindful Consumption, and Wildcards. Each finalist is addressing critical issues in fashion's environmental footprint, from energy efficiency to material circularity.

#### Breakthrough Innovations in Responsible Production

The Responsible Production category highlights initiatives enhancing energy efficiency, waste management, and sustainable traceability.

**Thermal Cyclones (UK):** Developing nextgeneration heat pumps to replace gas and oil steam boilers, potentially reducing energy consumption by over 75%.

**DecoRpet (China):** Innovating PET recycling methods at lower temperatures for greater energy efficiency.



**FiberFlow (Germany):** Advancing mechanical separation technology for blended textiles, aiding material recovery.

**Pulpatronics (UK):** Creating metalfree, chipless RFID paper tags that are recyclable and reduce environmental impact.

Advancing Sustainable Materials & Processes

This category showcases innovations in alternative materials, low-energy textile treatments, and eco-friendly production methods.

**Brilliant Dyes (UK):** Introducing biodegradable, non-toxic dyes derived from cyanobacteria.

#### Decarbonization Lab (Bangladesh):

Researching low-emission dyeing, finishing, and material treatment techniques.

#### Nordic Blue (Denmark):

Pioneering enzymatic denim dyeing for a more sustainable fashion sector.

#### **CircularFabrics**

(Germany): Developing NYLOOP® technology to recover nylon from textile waste.

#### **Pneedles (Nigeria):**

Transforming plastic waste into buttons for the fashion industry.

Renasens (Sweden):

Employing waterless

technology to recycle blended textile waste.

**Reselo (Sweden):** Converting forest waste into 100% bio-based rubber.

**RubyLab (Spain):** Addressing textile landfill waste by recycling stretch fabrics into new polyamide textiles.

**Sequinova (UK):** Crafting biodegradable sequins to reduce microplastic pollution.

**Tera Mira (UK):** Developing a seaweedbased elastane alternative to combat plastic pollution.

**A Blunt Story (India):** Producing plastic-free shoe soles from agricultural waste.

Transforming Mindful Consumption

Innovations in this category focus on circular business models and sustainable garment lifecycle extensions.



**Photo:** Revival Circularity Lab is a community-driven hub transforming textile waste in Ghana's Kantamanto Market.

**Loom (UK):** Facilitating upcycling through a tech-powered platform connecting designers with consumers.

**NaCRe (Switzerland):** Breaking down protein materials like silk and wool into valuable amino acids.

The Revival Circularity Lab (Ghana): A community-driven initiative upcycling textile waste in Ghana's Kantamanto Market.

Wildcards: Game-Changing Innovations

The Wildcards category features unexpected solutions poised to accelerate industry-wide transformation.

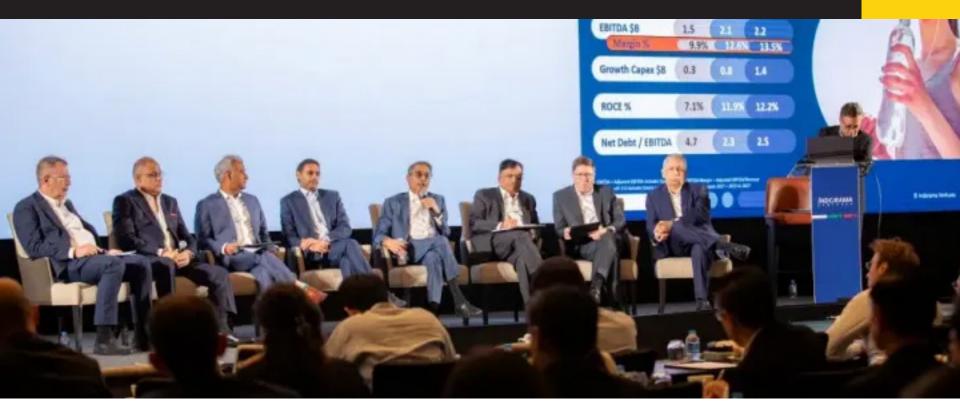
**Electric Skin (USA):** Creating biopowered textiles that generate

electricity from humidity.

**SiSource (India):** A digital registry bridging the textile, agriculture, and food value chains with environmental tracking.

The 20 finalists will now undergo further evaluation by the Expert Panel, which will provide guidance in selecting the final 10 winners. The winners of the Global Change Award 2025 will be announced in May, highlighting the next wave of sustainable innovations in fashion.

For more details on the innovations and changemakers behind them, visit Global Change Award's official website: https://hmfoundation.com/gca/



#### Indorama Ventures prepares for new growth era with IVL 2.0 strategy

ndorama Ventures Public Company Limited (IVL), a leading global producer of sustainable chemicals, is poised to enter a new era of growth as part of its IVL 2.0 strategy. The company outlined its plans to leverage significant expansion and consolidation opportunities driven by shifts in the global chemical markets, during its annual Capital Markets Day in Bangkok today.

Mr. Aloke Lohia, Group CEO of Indorama Ventures, addressed analysts and investors, highlighting the company's optimism for the future under its three-year IVL 2.0 optimization plan. The strategy aims to reposition the company amidst macroeconomic changes such as China's drive for self-sufficiency in manufacturing, the uneven effects of Peak Oil, and India's rapid economic growth. In line with this strategy, IVL reported an improved full-year EBITDA for 2024, showcasing the success of its focused management in navigating one of the most challenging downturns the industry has seen in recent years.



Photo: Mr. Aloke Lohia, Group CEO of Indorama Ventures

"We are now a fitter company than when we first launched IVL 2.0, and we're ready to compete with the best," said Mr. Lohia. "Our strategy not only prepares us for the current downturn but also aims to restore our historical growth trajectory. We are excited about the opportunities to substantially expand our business as we adapt to seismic, generational shifts in our industry."

#### IVL 2.0 Progress and Updates

During the event, senior executives provided updates on IVL 2.0's progress, emphasizing steps taken to refine operations, optimize assets, and integrate data-driven tools for improved business processes. All segments of the company experienced better performance in 2024, thanks to these strategic initiatives. However, despite these improvements, Indorama Ventures did not meet its deleveraging and cash conversion targets for the year and has acknowledged the need for further management actions to continue advancing its objectives.

#### **Strategic Growth and Partnerships**

Indorama Ventures, with over three decades of successful growth, is now shifting away from its traditional M&Adriven strategy. Mr. Lohia outlined several expansion projects that involve strategic partnerships with industry peers, a move designed to leverage the company's renewed platform, systems, and expertise under IVL 2.0. This new approach aims to build dominant positions and expand scale in highgrowth markets, particularly in India.

As part of its strategy, Indorama Ventures recently acquired a 24.9% stake in EPL Limited, an Indian specialty packaging company. This acquisition marks a significant step in the company's transition to a partnershipsled growth model, which Mr. Lohia explained as a critical element of IVL 2.0.

Additionally, the company plans to spin off its Indovinya downstream chemicals and Indovida packaging units to allow them to operate as independent, highgrowth businesses, unlocking their full potential.

#### Looking Ahead

Indorama Ventures continues to expand its global footprint, building on its past successes, including over fifty acquisitions over the last two decades. With its new partnerships-led growth model, the company remains confident in the organic growth potential of its existing operations, aligned with macro-consumer trends for more sustainable and essential products.

"We've transitioned from an M&Aled approach to one that emphasizes strategic partnerships, leveraging mutual scale and network effects," said Mr. Lohia. "Our growth strategy will be supported by continued financial discipline, including efforts to deleverage our balance sheet."

#### S U S T A I N A B I L I T Y



### WWF launches deforestationfree leather fund

#### William Moore

The World Wildlife Fund (WWF) has announced the launch of the Deforestation-Free Leather Fund, a pioneering initiative aimed at enhancing the sustainability of leather supply chains through targeted financial support. The fund seeks contributions from brands, retailers, leather processors, and manufacturers to drive improvements in traceability and responsible sourcing, particularly in regions at high risk of environmental degradation.

Leveraging over 25 years of expertise in supply chain sustainability, WWF intends to use the fund to invest in projects that reduce deforestation and ecosystem conversion linked to leather production. The initiative will initially focus on Brazil, a key player in global beef and leather markets, with plans to expand to other South American beefproducing countries in the near future.

#### Industry Leaders Join the Movement

Recognizing the environmental impact of leather production, WWF is calling on companies in the fashion, automotive, and furniture industries to take collective action in mitigating deforestation-related risks. Tapestry, Inc., a prominent New York-based house of lifestyle brands, including Coach and Kate Spade, has emerged as one of the first major contributors to the fund.

Tapestry's commitment builds upon its previous sustainability efforts, including a \$3 million philanthropic grant by the Tapestry Foundation in 2022 to improve traceability in the Brazilian leather supply chain. The company's Vice President of ESG and Sustainability, Logan Duran, emphasized the importance of industry-wide participation, stating, "We believe strongly in the importance of sustainability in leather manufacturing, and this commitment reaffirms that belief. We invite other companies, both within and outside our industry, to join us in these efforts."

#### Strategic Goals and Investment Areas

The Deforestation-Free Leather Fund will channel investments into three key areas:

#### **Enhancing Traceability Systems:**

Expanding existing initiatives and supporting new efforts to establish end-to-end tracking mechanisms in cattle supply chains.

#### Farm-Level Sustainability Investments:

Providing direct financial support to help farmers and ranchers adopt deforestation-free practices and improve cattle production methods.

#### Farm Regularization for Market Access:

Assisting producers in formalizing operations, rehabilitating degraded land, and meeting sustainability benchmarks to secure market entry.

The initiative aims to tag and individually track 1 million cattle within its first three years while supporting the recovery of 45,000 hectares (111,200 acres) of degraded farmland during the same period.

#### **Funding and Governance**

WWF will oversee the governance and management of the fund, targeting an initial \$10 million in corporate contributions to finance the first three years of operations. Companies will be asked to contribute based on annual revenue (for brands and retailers) or the number of hides processed annually (for leather processors and manufacturers).

This collaborative effort aims to strengthen global supply chains while reinforcing corporate commitments to deforestation-free sourcing and sustainable business practices.

#### About WWF

WWF is a leading global conservation organization operating in nearly 100 countries. With over five decades of experience, WWF is committed to implementing science-based solutions to protect biodiversity, combat climate change, and promote sustainable resource use.



### How Al is revolutionizing creativity in textile print pattern design

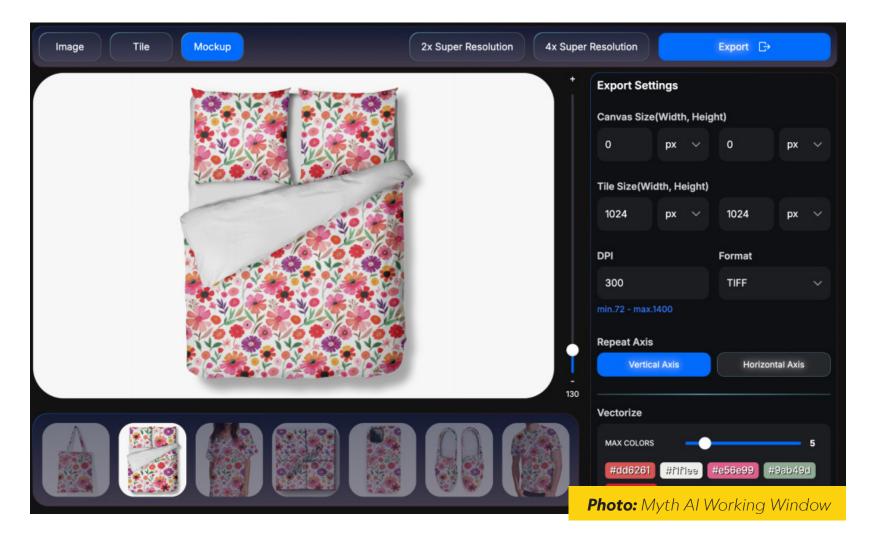
Md Muddassir Rashid

In an era where creativity is increasingly intertwined with technology, AI is making significant strides in textile design. One company leading the charge is MYTH AI, a trailblazer integrating artificial intelligence with print pattern creation. At the helm of this innovative venture is Özgecan Üstgül, the CEO and founder of MYTH AI, who has spent several years in business development and sustainable fashion.

In this exclusive interview with TexSpace Today, Özgecan delves into the journey that led her to combine AI with textile design, shedding light on how her technology is revolutionizing the creative process. From speeding up design timelines to ensuring originality and diversity, MYTH AI is not just changing the way print patterns are created—it's redefining the entire creative landscape. We also explore the potential impact of AI-driven design in other industries, including interior design and automotive, as well as the future of textile innovation.

TexSpace Today: Could you share the journey that led you to create MYTH. AI? What inspired you to combine AI with textile print pattern design? Could you please provide an overview of how it generates print designs?

Özgecan Üstgül: MYTH AI was founded with the vision of revolutionizing the creative process in textile print pattern design. The idea originated from my experience as the cofounder of the sustainable fashion brand Women&Women, where I saw firsthand the industry's need for faster, more efficient, and sustainable design processes. As a designer, I recognized the challenges of balancing innovation,



tradition, and market demand. The industry was constrained by timeconsuming manual processes, limited access to diverse inspiration, and sustainability concerns. Al provided the perfect solution to accelerate creativity while maintaining artistic integrity.

MYTH AI generates print designs using proprietary AI models that analyze brand identities, market trends, and artistic preferences. Our AI can create hundreds of unique patterns in seconds, far surpassing traditional design methods in speed and adaptability. It also ensures that each design meets a minimum of 70% originality, backed by blockchain-based ownership certification.

TexSpace Today: What distinguishes AI-generated patterns from traditional design methods? What role does AI play in harmonizing creativity with market trends? Özgecan Üstgül: Al-generated patterns stand out for their speed, adaptability, and ability to analyze vast datasets. Traditional design methods rely heavily on human intuition and time-intensive processes, while Al can synthesize global fashion trends, historical motifs, and brand-specific aesthetics instantly.

Al acts as a bridge between artistic creativity and data-driven market insights. MYTH Al's algorithms learn from seasonal trends, cultural shifts, and consumer behavior, ensuring that every generated pattern is both visually compelling and commercially viable. Designers can refine Al-generated patterns, blending human artistry with machine efficiency.

TexSpace Today: How does MYTH.AI guarantee diversity and originality in its generated patterns? How do you verify that?



Photo: MYTH.AI at Première Vision

Özgecan Üstgül: MYTH AI ensures diversity through its ability to generate infinite design variations based on different styles, themes, and color palettes. Our proprietary AI models are trained on ethical datasets, allowing them to produce unique outputs rather than replicating existing designs.

Originality is verified through blockchain-based ownership certification. Each design is analyzed to confirm at least 70% differentiation from previous patterns, ensuring uniqueness. Additionally, our system cross-checks designs to prevent unintended repetitions or similarities to copyrighted works.

TexSpace Today: How do print pattern designers interact with MYTH.AI? Does it serve as a collaborator, an inspiration tool, or a competitor? Do you see AI as a way to enhance a designer's work or as a potential disruptor to the traditional print pattern design jobs? Özgecan Üstgül: MYTH AI is designed as a collaborative tool rather than a competitor. It enhances the work of designers by providing rapid ideation, inspiration, and efficiency. Designers can input their concepts, and AI refines and expands them, accelerating the creative process by 90%.

Instead of replacing traditional jobs, MYTH AI empowers designers by reducing repetitive tasks, freeing them to focus on innovation. The future of textile print design lies in the synergy between human creativity and AIdriven augmentation.

TexSpace Today: Beyond fashion and textiles, what other industries can benefit from Al-driven pattern generation? Have you seen demand for MYTH.AI's technology in unexpected sectors, such as interior design, automotive, or packaging?

Özgecan Üstgül: While MYTH AI is revolutionizing the fashion and

textile industries, our technology is highly adaptable. We have seen growing interest from interior design, home decor, automotive upholstery, packaging, and even digital media.

For example, interior designers use MYTH AI to create custom wallpapers and furniture textiles, while the automotive industry is exploring AIdriven seat fabric designs. Packaging companies leverage our AI to develop visually distinct and trendresponsive wrapping materials. The versatility of our AI ensures that design innovation extends beyond traditional applications.

#### TexSpace Today: Bangladesh is one of the world's largest textile and garment producers. How do you see AI-driven print pattern design fitting into this highly competitive and labor-intensive industry?

Özgecan Üstgül: Bangladesh's textile industry is highly competitive, and Aldriven design can be a game-changer by increasing efficiency, reducing costs, and enhancing creativity. MYTH AI allows manufacturers to rapidly generate new designs that align with global trends, giving them a competitive edge in a fast-paced market.

Moreover, Al-driven automation reduces material waste and lowers carbon footprints by optimizing production processes. This is crucial for sustainability efforts in a labor-intensive industry. By integrating Al, Bangladesh's textile sector can maintain its global leadership while embracing digital transformation.

#### TexSpace Today: What's next for MYTH.AI? Are there any upcoming innovations, partnerships, or expansions you can share?

Özgecan Üstgül: MYTH AI is rapidly expanding, with plans to enter new markets and industries. We are working on advanced AI features, including personalized design recommendation engines and real-time trend analytics.

We are also forming strategic partnerships with leading textile manufacturers and fashion brands to integrate AI-driven design into large-scale production. Additionally, we are enhancing our blockchainbased ownership certification system to reinforce design originality and intellectual property rights.

Our vision is to make AI-powered design the standard in the creative industry, empowering brands, designers, and manufacturers to innovate faster and more sustainably.

As AI continues to reshape the creative landscape, MYTH AI stands at the forefront of this transformation, proving that technology and artistry can coexist in harmony. Through its groundbreaking approach, the company is not only accelerating the design process but also empowering designers to push creative boundaries while maintaining sustainability and originality.

### Hohenstein expands support for GTS to ensure transparency

Arif-Uz -Zaman



Hohenstein, a globally renowned research and testing institute, has announced its formal support for the Global Textile Scheme (GTS), an initiative focused on enabling structured data exchange within the textile value chain. This partnership aims to address longstanding inefficiencies in communication and traceability between manufacturers, brands, certifiers, and consumers.

The GTS Initiative proposes a standardized digital framework that enables different stakeholders to share and retrieve data on product content, certification status, compliance, and environmental attributes. Hohenstein's involvement adds scientific rigor and testing validation to the scheme, helping to ensure that all exchanged data remains verifiable and reliable.

This collaboration is particularly timely as the industry faces increasing regulatory scrutiny, such as the EU's Digital Product Passport requirements. Brands will soon need to disclose detailed material compositions, environmental impacts, and recyclability-tasks that GTS aims to simplify and automate. Hohenstein's technical contribution includes aligning its testing methodologies with GTS formats, creating APIs for digital integration, and advising on lifecycle data tracking. This partnership is expected to improve textile transparency, accelerate digital transformation, and empower conscious consumption across global markets.

### Precision 4D knitting powers the next wave of european innovation

In 2025, Europe is witnessing a significant leap in textile innovation with the emergence of 4D knitwear. It'san intelligent textile category that not only fits but adapts, transforms, and performs over time. Unlike traditional 3D seamless garments, 4D knitwear integrates shapememory yarns and stimuliresponsive polymers using precision knitting algorithms that program how specific zones of a fabric will behave when exposed to motion, heat, or moisture. Recent developments from research labs in Germany and the Netherlands have introduced thermoresponsive sports sleeves that tighten around joints during physical activity, and medical-grade compression wraps in Italy that automatically adjust pressure based on swelling Faysal



patterns post-surgery. Meanwhile, Dutch brand MorphKnit debuted its climate-adaptive outdoor jacket at TechTextil 2025, featuring vented knit zones that open with rising humidity. Powered by advanced flatbed knitting machines like Stoll ADF and Shima Seiki WHOLEGARMENT, the algorithms enable stitch-level control of tension, structure, and yarn placement, facilitating garments that change shape and function over time. These

innovations are not only revolutionizing smart fashion and technical wear but are also in line with EU sustainability goals, promoting zerowaste production, longer product lifespans, and compliance with the upcoming Digital Product Passport regulation. As 4D knitwear gains traction in both luxury and performance markets, it's clear that precision knitting is no longer just about fit—it's about adaptability, intelligence, and resilience in design.

## Maximizing Textile Print Efficiency with M&R's DS-4000™ Digital Hybrid System



M&R's DS-4000<sup>™</sup> Digital Squeegee® Hybrid Printing System is revolutionizing the textile printing industry with a unique blend of digital and screen printing technologies. Designed to meet the growing demands of the modern apparel market, the DS-4000<sup>™</sup> combines the precision and quality of digital printing with the high-speed efficiency and flexibility of traditional screen printing. This hybrid approach offers a compelling solution for textile manufacturers seeking faster turnaround times, reduced waste, and superior print quality.

Key Features and Benefits of the DS-4000™

The DS-4000<sup>™</sup> Hybrid Printing System utilizes a powerful combination of digital print heads and traditional squeegee technology to create detailed, vibrant prints on a variety of fabrics. One of its most significant advantages is its versatility. It supports multiple fabric types, including cotton, polyester, and blends, providing manufacturers with the flexibility to produce diverse apparel lines, from basic garments to high-end fashion.

#### Equipped with advanced high-

resolution print heads, the system is capable of producing crisp details and rich color gradations, making it ideal for intricate designs and small print runs. This is particularly advantageous for brands and manufacturers focused on custom or short-run orders, as the system reduces setup times and eliminates the need for costly screen changes, traditionally required for complex designs.

#### Enhanced Productivity and Operational Efficiency

One of the standout features of the DS-4000<sup>™</sup> is its ability to seamlessly handle both short and long production

runs with consistent results. By combining the speed and efficiency of traditional screen printing with the precision of digital printing, the DS-4000<sup>™</sup> optimizes workflow, reducing bottlenecks and enhancing productivity. Its automatic registration system ensures perfect alignment between the screen and digital print heads, minimizing errors and eliminating costly downtime.

The system also incorporates intuitive, user-friendly controls that allow operators to quickly adjust settings, making it easier to scale operations and maintain print consistency across large orders. This flexibility ensures manufacturers can easily respond to changing market demands, whether for mass production or custom, one-off designs.

Sustainability and Eco-Friendly Impact In addition to its operational benefits, the DS-4000<sup>™</sup> offers a more sustainable approach to textile printing. By merging

Screen Printed Underbase





#### Variable Data Using Same Underbase

digital and screen printing techniques, it significantly reduces ink waste and consumption, contributing to a more eco-friendly production process. This eco-conscious design supports the growing global emphasis on sustainability within the textile industry, making it an attractive solution for manufacturers focused on reducing their environmental footprint.

The M&R DS-4000<sup>™</sup> Digital Squeege® Hybrid Printing System is more than just a printing tool; it is a comprehensive solution for the future of textile printing. With its ability to deliver highquality prints across a variety of fabrics, reduce waste, and improve production speed, the DS-4000<sup>™</sup> is setting new industry standards for versatility and efficiency. As demand for customization, quality, and sustainability continues to grow, M&R's DS-4000<sup>™</sup> provides manufacturers with a competitive edge that is poised to reshape the textile printing landscape.

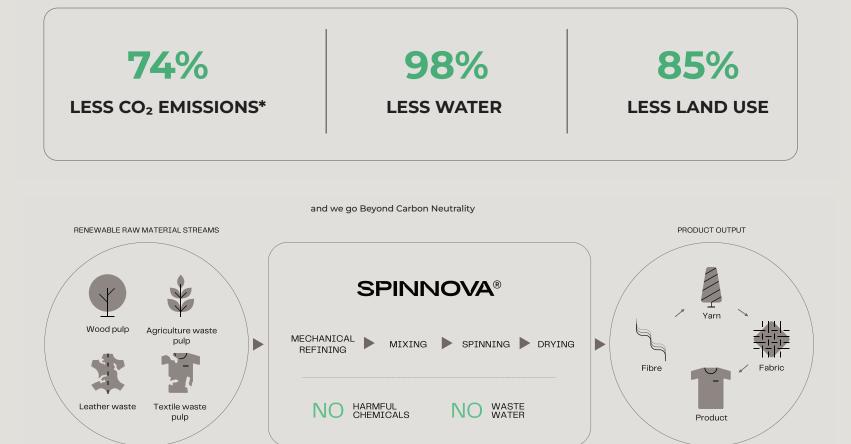


**Digital Printed Colors** 



## SPINNOVA®

SPINNOVA® is blended with other preferred fibers, and maintains the look and feel that consumers love SPINNOVA® fibres can be processed with innovative and traditional methods. Properties of the fibres are comparable to other natural cellulosic fibres. SPINNOVA® fibres are soft on the hand, breathable with hand-feel comparable to cotton.



RECYCLABLE

\*Figures are third-party life-cycle assessments for SPINNOVA® fibre made from eucalyptus wood pulp and compared to conventional cotton, which values are global averages from external databases. The figures include raw material supply, transportation of raw materials, and manufacturing of the product (cradle-to-gate).





## HAVN receives US Air Force contract to develop EMF-blocking textiles

Najmus Sakib



**Photo:** WaveStopper<sup>™</sup> is directly inspired by spacesuit technology and blocks 99% of wireless radiation (cellphone, 4G/5G, Wi-Fi, Bluetooth), tested and certified in military-grade laboratories. WaveStopper<sup>™</sup> is then woven into the perfect, healthiest garment you'll ever wear: soft, lightweight, breathable, antimicrobial, and UV blocking.

HAVN Technologies, a U.S.-based advanced material firm, has been awarded a contract under the Small Business Technology Transfer (STTR) program by the United States Air Force. The project focuses on developing textiles that can effectively block electromagnetic fields (EMFs), which pose risks to human health and sensitive equipment in defense and healthcare settings.

The awarded project will fund HAVN's development of flexible, lightweight, and durable EMF-blocking fabrics using proprietary material blends and advanced weaves. These textiles aim to shield against a broad spectrum of EMF radiation, offering applications for military uniforms, medical shielding environments, and electronic infrastructure.

The initiative reflects a growing intersection between smart textiles and defense innovation. As digital devices and wireless systems proliferate, the ability to mitigate EMF exposure is becoming critical across sectors. HAVN's technology is expected to contribute to the U.S. military's ongoing efforts to modernize gear while safeguarding personnel from environmental risks. This contract provides HAVN the opportunity to partner with academic institutions for R&D, and with defense textile manufacturers for field trials. If successful, it could pave the way for scaled deployment across government and commercial markets.

#### AUTOMATION



Photo: An imaginary Chinese 'dark factory', generated by Al

## China enters new era of 'Dark Factories' with no lights, no workers

#### M A Mohiemen Tanim

China is on the cusp of a manufacturing revolution with the emergence of "dark factories," fully automated facilities that operate without human workers or traditional lighting. Powered by artificial intelligence (AI), robotics, and advanced sensors, these plants represent the next step in the nation's aggressive push toward industrial automation, positioning China as a global leader in technological innovation.

A "dark factory" is a production site where machines handle every task assembly, inspection, and logistics eliminating the need for human presence. Without workers, there's no need for lighting, heating, or breaks, reducing energy costs and boosting efficiency. While fully operational dark factories are still rare globally, China's rapid adoption of automation suggests they are becoming a reality. The International Federation of Robotics (IFR) reported that China installed 290,367 industrial robots in 2022, accounting for 52% of the world's total, outpacing the U.S. and Japan combined.

This transformation is driven by the "Made in China 2025" initiative, launched in 2015 to make China a hightech manufacturing powerhouse. The strategy emphasizes robotics, AI, and

smart factories, with the government investing heavily in subsidies and infrastructure. By 2023, China's robot density-robots per 10,000 manufacturing workers-reached 392, surpassing the global average of 141, according to IFR data. Companies like Foxconn and BYD are at the forefront, with Foxconn replacing 60,000 workers with robots in a Kunshan factory in 2016 and planning to automate 30% of its operations by 2025, as stated by Chairman Terry Gou in 2021. BYD uses robotic systems for EV battery and chassis assembly in plants like those in Shenzhen and Xi'an, further advancing toward workerless production. Recent reports suggest that some Chinese factories are piloting "lightsout" operations, where precision manufacturing occurs in near-darkness using infrared sensors, LIDAR, and machine vision, eliminating the need for traditional lighting. The International Energy Agency (IEA) estimates that such automation can lower industrial energy use by 15-20% by removing human-centric infrastructure needs. China's National Bureau of Statistics reported a 1.7% drop in industrial energy consumption in 2022, partly due to these automation gains, aligning with the country's 2060 carbon neutrality goal.

Rise of dark factories raises significant challenges. Manufacturing employs over 100 million people in China, per World Bank data, and automation threatens widespread job losses. Oxford Economics projected in 2017 that 12 million Chinese manufacturing jobs could be lost to robots by 2030. A 2023 strike in Guangdong, reported by China Labour Bulletin, highlighted worker fears of robotic replacements, underscoring potential social unrest if retraining programs lag.

Globally, China's progress intensifies competition. The U.S., with a robot density of 274 in 2022, and Germany, at 415, are accelerating their automation efforts, but China's state-backed investment—Bloomberg reported \$1.4 billion in robotics R&D in 2023 gives it an edge. The IEA notes that industrial automation could reduce CO2 emissions by 10% in heavy industries, though the environmental cost of producing robots remains a concern.

As of March 2025, dark factories in China are likely operating in pilot phases, particularly in high-tech sectors like electronics and electric vehicles. These facilities, running 24/7 with precision machines and no human workers, mark a shift toward a future where production occurs in near-darkness, driven by Al and robotics. Whether this heralds a new era of efficiency or amplifies social and environmental challenges will depend on China's ability to balance innovation with adaptation. sdc

## society of dyers and colourists

Photo: An imaginary Chinese 'dark factory', generated by AI

## SDC launches Global Colourist Award 2025

#### Abrar Hossain

The Society of Dyers and Colourists (SDC) has officially opened entries for the Global Colourist Award 2025, a prestigious international award recognizing outstanding talent and innovation in the coloration industry. This initiative celebrates earlycareer professionals who have made remarkable contributions to the field within their first ten years.

The award is a benchmark of excellence, acknowledging creativity, technical expertise, and knowledge across multiple sectors, including textiles, dyes and pigments, leather, food, paint, production dyeing, shift dyeing, and printing. It aims to highlight the diversity and depth of skills shaping the future of color science and its applications.

#### **Key Dates and Eligibility**

Entries for the Global Colourist Award 2025 opened on February 1, 2025, and the deadline for submissions is June 30, 2025. The winner will be announced in mid-September, with the award being officially presented at the SDC Day of Celebration in October 2025 in the UK.

#### **Recognition and Opportunities**

The winner of the Global Colourist Award will receive: » A £1,000 cash prize, generously



### SINGAPORE 2025

28 - 31 October 2025 | Singapore Expo

Grow Your Business with Cutting-edge Textile Technologies at the Region's Leading Exhibition

sponsored by Advanced Chemical Holdings Ltd.

- » A fully funded trip to the UK to attend the awards ceremony.
- » Exclusive coverage in The Colourist magazine, showcasing their achievements and impact on the industry.

The award is open to professionals working in various areas, including development, application, testing, color management, and quality control. Whether a production dyer, a pigment specialist, or a printing colorist, if the applicant is within the first ten years of their career, this is a significant opportunity to gain international recognition.

#### Last Year's Winner

In 2024, Joanna Kay ASDC of Heathcoat Fabrics Ltd. won the award for her innovative dyeing process improvements and contributions to bridging the gap between design and technical knowledge. Her perseverance in achieving Associateship of the SDC while managing full-time work set an inspiring precedent for future nominees.

Reflecting on her achievement, Kay shared: "I was, and still am, incredibly grateful for this recognition and the support I received throughout my journey. The award reinforced my passion for color science and motivates me to continue pushing the boundaries of innovation in the industry."

#### Industry Support and Vision

Dr. Graham Clayton, CEO of SDC, emphasized the significance of this initiative, stating: "The Global Colourist Award is an important initiative that showcases the remarkable talent emerging in the coloration industry. We are proud to recognize and celebrate the achievements of early-career colorists who are shaping the future of our sector with their innovation and expertise."

#### How to Enter

The application process is now open. Interested individuals and those wishing to nominate deserving candidates can find detailed submission requirements and eligibility criteria on the SDC website.

## T2T Alliance formed to enhance EU textile recycling policies

Oliver Taylor



A new industry coalition, the T2T Alliance, has been established to promote textile recycling within the fashion sector. The alliance comprises textile recyclers Circ®, Circulose, Syre, and RE&UP Recycling Technologies, aiming to advocate for enhanced policies and ensure that textileto-textile recyclers' interests are considered in forthcoming textile regulations, especially within the European Union.

Presently, only 0.3% of the fashion industry operates on a truly circular model, as reported by Circle Economy. The majority of textiles continue to be disposed of in landfills or incinerated, highlighting the necessity for largescale textile recycling to achieve sustainability. The T2T Alliance is striving for a closed-loop recycling system that encompasses post-industrial, preconsumer, and post-consumer waste, aiming to guide the industry toward genuine circularity.

The alliance has already contributed to the European Commission's recent report on eco-design, advocating for the integration of recycled content and recyclability as fundamental requirements in textile production. This initiative aligns with the growing emphasis on sustainable practices within the fashion industry.



# UKFT launches reuse & recycling membership

#### Benjamin Harris

The UK Fashion & Textile Association (UKFT) has unveiled a new initiative to accelerate sustainability within the UK fashion and textile industry. The newly introduced Reuse and Recycling membership is a dedicated category that supports textile collectors, sorters, graders, mechanical recyclers, upcyclers, and recycling innovators. This strategic move builds upon UKFT's ongoing efforts to advance circular fashion solutions through collaborations such as ACT UK (Automatic-sorting for Circularity in Textiles) and the Circular Fashion Innovation Network (CFIN). It also complements UKFT's recent partnership with the Textiles Recycling Expo, reinforcing its commitment to fostering collaboration among industry players, policymakers, and sustainability

advocates.

#### Strengthening Industry Support for Textile Reuse and Recycling

UKFT's latest membership category offers tailored resources and guidance for businesses navigating the evolving textile reuse and recycling sector. The initiative aligns with the growing industry demand for sustainable practices and aims to drive innovation and responsible growth across the supply chain.

"By opening up our membership to the Reuse and Recycling sector, we are reinforcing our commitment to environmental responsibility and business growth for the entire fashion and textile supply chain here in the UK," said Adam Mansell, CEO of UKFT. "This

**45** 

new category is designed to equip members with the tools, knowledge, and networks needed to thrive in an evolving industry."

#### **Exclusive Membership Benefits**

The Reuse and Recycling membership offers several advantages to businesses operating in the textile sustainability space, including:

#### » Personalized Business Support:

Access to expert advice on business strategy, sustainability, compliance, HR, funding, and training.

- » **Industry Resources:** Exclusive reports, market insights, and guides on best practices and emerging trends.
- » **Networking Opportunities:** Invitations to industry events, conferences, and roundtable discussions.
- » Policy Influence: Representation in key policy discussions with DEFRA, WRAP, Textiles 2030, and the Environment Agency to advocate for the needs of textile reuse and recycling businesses.
- » Showcasing Business Innovations: Exposure through UKFT platforms, newsletters, and social media to highlight members' contributions to circular fashion.

#### Driving Innovation and Collaboration

Members will also have the opportunity to participate in key sustainability projects, such as the Autosort for Circular Textiles Demonstrator (ACT UK) and the Circular Fashion Innovation Network (CFIN). These initiatives aim to advance the adoption of automated sorting technologies and circular business models, positioning the UK as a leader in textile sustainability. To further shape the future of textile reuse and recycling, businesses can apply to join the Reuse and Recycling Advisory Group, which will play a pivotal role in shaping policies and industry strategies.

"By joining the Reuse and Recycling membership, businesses can stay competitive, connected, and at the forefront of textile sustainability," Mansell added. "This new area is a catalyst for positive change, helping our members drive innovation and environmental responsibility in the fashion and textile industry." How to Join

Interested businesses can apply for the Reuse and Recycling membership by downloading and submitting the application form available on the UKFT website. For more details, email reuseandrecycling@ukft.org or visit www.ukft.org.

#### About UKFT

The UK Fashion & Textile Association (UKFT) is the UK's largest trade association for fashion and textiles, supporting brands, designers, manufacturers, and retailers. UKFT promotes sustainable growth across the industry and plays a crucial role in shaping policies, advancing skills,

## Vietnam records strong FDI growth

#### William Moore

Vietnam's economic momentum in the manufacturing and textile sectors has been bolstered by a robust surge in foreign direct investment (FDI), with \$10.98 billion registered in Q1 2025 alone—marking a 34.7% year-over-year increase.

This impressive figure reflects the country's continued attractiveness as a destination for global investors, particularly as companies seek alternatives to China for production. The Vietnamese government's ongoing reforms, including streamlining investment procedures, enhancing infrastructure, and promoting digital transformation in manufacturing, have made it a hotspot for FDI. In the textile and apparel industry, major players from Japan, South Korea, and Europe have either expanded their existing operations or established new facilities in northern provinces such as Bac Ninh, Hai Duong, and Thanh Hoa. These regions are known for offering favorable logistics access and government support. Vietnam's Comprehensive and Progressive Agreement for Trans-Pacific Partnership



(CPTPP) membership, along with free trade agreements with the EU and UK, continues to boost its profile as a trade partner. Duty-free access to key markets is enabling Vietnamese exporters to scale production while ensuring competitive pricing.

Another contributing factor is Vietnam's investment in human capital and green manufacturing practices. New training centers, digital manufacturing labs, and eco-industrial parks are emerging as key enablers of sustainable growth. Industry experts believe that if Vietnam sustains this FDI growth, it could evolve from a low-cost manufacturing base to a hub for innovation and sustainable production. In the long term, this could position the country as one of Asia's top three textile powerhouses, alongside China and India.

#### ENERGY

### Al makes drilling cheaper, faster in energy sector

#### Desk Report

Artificial intelligence is transforming oil and gas drilling, delivering dramatic improvements in cost, efficiency, and operational safety. Companies like BP and Devon Energy are leading the charge by integrating AI into nearly every stage of the drilling process. At the heart of this transformation is Al's ability to analyze real-time sensor data from drill heads, geophysical scanners, and pressure gauges. Algorithms process this data to adjust drilling parameters on the fly, helping engineers avoid hazards, reduce downtime, and extract resources more efficiently.

Traditional drilling operations relied heavily on manual interpretation of subsurface data-a time-consuming and often error-prone process. Today, Al models trained on historical drilling patterns and geological data can predict the optimal drilling path, anticipate mechanical failures, and prevent costly interruptions. For example, BP's use of machine learning in its Gulf of Mexico deepwater projects has reduced drilling time by 20% and cut operational costs by millions of dollars. Similarly, Devon Energy's Alenabled rigs can steer drill bits with unprecedented precision, accessing complex shale reservoirs previously



considered unreachable.

These advances are also having ripple effects across the textile value chain. Lower production costs for oil-based feedstocks such as polyester, nylon, and spandex may help stabilize raw material prices in global apparel manufacturing.

Moreover, Al's success in energy extraction underscores its broader potential in predictive maintenance, smart logistics, and process optimization—critical functions in both textile production and supply chain operations.

While critics point to environmental concerns, proponents argue that AI allows producers to do "more with less," using fewer resources and reducing unplanned emissions. As energy and textiles both seek to decarbonize, cross-sector learnings in AI application will be key to achieving more sustainable outcomes.

## Al-Powered HVAC drives energy cuts in manhattan office tower

Jack Thompson



In downtown Manhattan, a pilot program at 45 Broadway is proving that artificial intelligence can slash commercial energy use—starting with air conditioning. The building partnered with a leading smart building tech firm to embed Al in its HVAC (Heating, Ventilation, and Air Conditioning) systems.

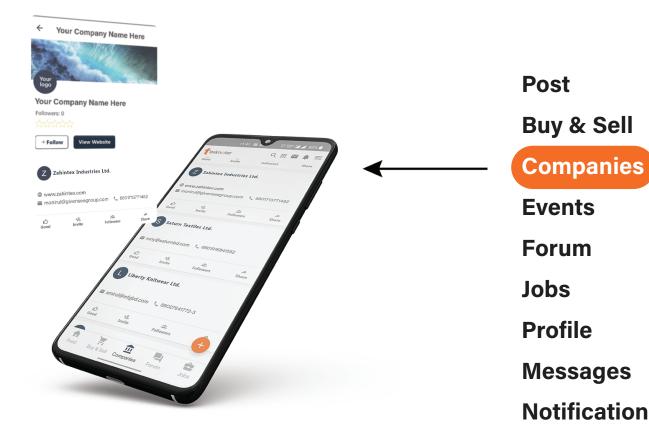
The Al solution processes real-time data on occupancy, weather forecasts, indoor humidity, and thermal load. It then makes micro-adjustments to dampers, fans, and compressors, ensuring comfort with minimal energy waste. The result? A verified 15.8% reduction in HVAC-related energy consumption over three months. This success story is part of a broader trend. According to the International Energy Agency (IEA), HVAC accounts for up to 40% of a commercial building's energy use. With urban emissions under scrutiny, Al-driven HVAC is now a strategic priority for facility managers worldwide. What sets the 45 Broadway case apart is its seamless integration with legacy systems—no need for a full hardware overhaul. The software layer uses sensors and cloud analytics to interface with existing building automation.

Textile mills and garment production units—often large energy consumers in hot, humid regions—are taking notes. By adopting similar AI cooling strategies, they could cut costs and align with ESG targets.

As carbon taxes and sustainability benchmarks tighten, AI-enabled energy optimization is quickly moving from pilot to standard practice in textile and industrial zones.



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