

The background features large, overlapping organic shapes in a vibrant yellow, a deep forest green, and a rich maroon color, creating a dynamic and layered visual effect.

Sustainability 2020



Contents

01 Executive Summary

02 Fashion's Sustainability Progress Report

05 Clothing Consumption's 10-Year Growth

06 Shoppers Balk at Pricey Sustainable Fashion

08 Fashion From Fungi

09 The 5 Leading Sustainability Programs

11 Apple, Amazon, Toyota Influence Fashion's Future

15 Will COVID-19 Choke Supply Chain Sustainability?

20 Where Does Traceability Start and End?

24 Zeroing in on Zero Waste

29 H&M: Sustainability Will Play Even More Crucial Role

31 COVID-19 Makes the Case for Sustainable Tech

34 Obstacles Abound for Post-Consumer Textiles

36 Bangladesh RMG Sector Gets New Sustainability Tool

37 How Asos Cut Carbon Emissions by 30 Percent



Executive Summary

THE PANDEMIC HAS FUELED A CRITICAL NEED FOR SUSTAINABILITY

If 2020 has meant anything to fashion, it's that now, perhaps more than ever, the industry must finally figure out how to sustain itself.

COVID-19 kicked off the new decade and quickly sent supply chains into a state of shock, with stores shuttered, demand depressed, unpaid garment workers facing destitution without wages derived from retail orders now cancelled or unpaid. It's a crisis of unforeseen proportions, and one that further brings to light the systemic problems in garment supply chains.

For some, the pandemic will prompt further efforts to lessen fashion's impact and maintain some of the reversals in environmental damage resulting from the world's forced halt. For others, it won't, and their fates will be determined by the new world order the infectious virus has invited.

The varied approaches could create further polarization in the industry, Global Fashion Agenda chief sustainability officer Morten Lehmann says in 'Will COVID-19 Choke Supply Chain Sustainability?' on page 15. And it may reshape conversations around sustainability, giv-

ing a new face to the fight in 2021.

To get there, traceability and transparency will have to be forced to the fore. The pandemic, for better or worse, has revealed that too many companies remain unclear about what's going in their value chains, and many are at a loss for where to begin accounting for the spring product piling in warehouses and DCs while brick-and-mortar stores sit dark. In 'Where Does Traceability Start and End?' on page 20, we outline the necessary first steps forward.

And those first steps can't be taken without the technology to enable it, and fashion, as we highlight in 'How COVID-19 Makes the Case for Sustainable Tech' on page 31, may finally appreciate the need for platforms that provide greater insight into demand to help the industry evade its inventory—and, ultimately, waste—problem.

This year, Earth Day saw much of the world indoors, but the human break could give the environment a much-needed repair, temporary or not. And it could give fashion stakeholders an opportunity to rethink their efforts and output, which, we hope, will not be a temporary repair.

Tara Donaldson
Editorial Director
Sourcing journal

Fashion's Sustainability Progress Report

SARAH JONES, WITH REPORTING BY JASMIN MALIK CHUA AND TARA DONALDSON

—
“A problem as large and complex as climate change requires relentless collaboration across our industry.”

—Noel Kinder, Nike

While the fashion industry has seen some strides in sustainability since its eco-unfriendly ways have come under greater scrutiny, most agree there's much more to be done.

Here, we've tapped industry leaders to tell us what fashion is getting right and what it's getting wrong when it comes to lessening its environmental footprint.

WHAT FASHION IS GETTING RIGHT:



“There has been a real shift around engagement on pre-competitive issues and consensus building through collaborative efforts like

The Fashion Pact, which represents more than 30 percent of the fashion and textiles industry. Without a doubt, collaboration will help keep this positive momentum moving forward.”

—Marie-Claire Daveu, chief sustainability officer and head of international institutional affairs, **Kering**



“I'm proud to see a shift toward circular design and recycled materials—enabling growth while limiting the use of new materials, ultimately benefiting the environment. The vast majority of our environmental footprint is due to the natural resources that go into producing fashion. By moving to recycled content, driving innovations that support regenerative farming or bio-based synthetics, we can change the footprint of the industry.”

—Amy Roberts, senior director of CSR and sustainability, **The North Face**



“It's important that people understand the consequences of climate change, yet also see that there is hope in taking action. That's

why Nike is creating solutions and accelerating our efforts through Move to Zero, our journey towards a zero carbon, zero waste future. A problem as large and complex as climate change requires relentless collaboration across our industry.

—Noel Kinder, chief sustainability officer, **Nike**



“For many brands, the intent is definitely there, but it's difficult to truly understand your environmental and social footprint with-

out having control over your entire supply chain, from the creation of the fiber to the finished product. So, the shift that's happening in the fashion industry toward transparent and traceable supply chains is a significant step in a more sustainable direction.”

—Rami Helali, co-founder and CEO, **Kotn**



“Given the fashion industry is built on the fundamental premise of quick adaptation to change, the ability to accept the required

change for sustainability has been quicker and higher than other industries...The fashion/apparel industry has a big role to play in [the renewable] space as we are a big utilizer of resources. I am proud that in a short amount of time the industry has embraced changes in process, machinery and materials.”

—Siddharth Sinha, founder, **Vogue & Velocity Group**



“New methods in farming have reduced the need for chemicals that can get into the local watershed. Hemp fibers are now being used instead of or with cotton because of hemp’s low water needs. The industry is also using more Tencel fibers, which come from trees and [are] therefore more sustainable. Digital printing has also reduced water usage as well as waste, as you only print on the fabric that will be used for garments. Every aspect of this industry is working to be more sustainable as their customers demand it.”

—Sean Cormier, associate professor, chair, textile development and marketing department, **Fashion Institute of Technology**



“The biggest positive shift has been in the groundswell of awareness around the potential of circularity for clothing and apparel. The industry is still a long way away from achieving a joined up system of production, consumption and recirculation, but the potential benefits of circularity have generated dialogue, collaboration and inspired global commitments and industry targets. However, it’s one thing to make targets and another to actually get behind the technologies and innovations that can deliver them.”

—Cyndi Rhoades, founder and CEO, **Worn Again**



“As consumer demand shifts away from single use fashion and toward increased durability and re-use, more retailers are trying to figure out ways to offer resale experiences to their customers. While we know nine in 10 retail executives want to get involved in this circular approach to fashion, many do not have the infrastructure in place to do so. It’s more important than ever for retail and resale to work together to steer the fashion industry in the right direction.”

—Erin Wallace, vice president of integrated marketing, **ThredUp**

WHAT FASHION IS GETTING WRONG:



“The industry needs to lead by example. I think unfortunately that’s not always the case and so there is a lot of inconsistency across messaging and definition in the industry. Brands need to define their purpose before marketing their accomplishments.”

—Matt Scanlan, co-founder and CEO, **Naadam**



“There’s no better time than now to answer this question. I believe the industry has lacked scrutiny on supply chains and labor rights. It also still exercises excessive production and there is a lack of authentic dedication and commitment to change. I think recent events are putting these things in perspective and I’m excited to see the changes that come from realizations happening in real time.”

—Dana Davis, vice president of sustainability, product and business strategy, **Mara Hoffman**



“If we want to see true transformational change, everyone needs to participate and take bold action now. That means taking smart risks, re-thinking our business models, and doing more than following the first easy steps down the now well-beaten path towards sustainability. We need to bravely push forward and define what the new standards will be this decade.”

—Kathleen Talbot, chief sustainability officer and vice president operations, **Reformation**



“The industry is not yet at the point of agreeing on a simple way to communicate about sustainability with consumers. It has to be easy for consumers to understand so they can spend their money where it best fits their purpose.”

—Patricio Ibáñez, partner, **McKinsey &**

—**“Brands need to define their purpose before marketing their accomplishments.”**

—Matt Scanlan, **Naadam**

Company



"The fashion industry is rooted in tradition. Unlike Silicon Valley, fashion brands aren't built on a "move fast and break things" attitude. Their No. 1 priority is to design clothing that will sell to target consumers at a profit, often at any environmental cost."

—Saskia van Gendt, head of sustainability, **Rothy's**



"The textile industry should give up the widespread resistance against a legal regulation of the supply chains. In global value chains, sustainability is currently largely voluntary. This means that we have to accept that the products we use are manufactured under conditions in which people are exploited and environmental damage occurs. In addition, it places those companies that, in order to meet a higher level of corporate responsibility on a global scale, bear higher costs and effort at a competitive disadvantage."

—Jan Lorch, executive sales and corporate social responsibility, **Vaude**



"Companies need better engagement with their supply networks, they need better transparency, and they need to identify problem areas across a range of issues so they can partner with suppliers to resolve them. Businesses need to be able to make smart decisions about their supply network and track the impact of those changes so they can be more honest with their customers. All of this relies on collaboration through data."

—Jamie Barsimantov, chief operating officer and co-founder, **SupplyShift**



"I don't think we recognize the depths of change we need to deploy across the total chain. And I think we need to get our heads around the fact that this is not a piece-meal, siloed challenge. We're going to have to look at the whole chain and the way that we deliver that product to market, and understand the deep need for radical change."

—Liz Simon, chief sustainable transformation officer, **Fashion3**

—**"Their No. 1 priority is to design clothing that will sell to target consumers at a profit, often at any environmental cost."**

—Saskia van Gendt, Rothy's





What Clothing Consumption Could Look Like by the End of the '20s

JASMIN MALIK CHUA

Dressing an entire planet doesn't come without its toll. And as the world's population grows, so too, will fashion's environmental stakes.

If global population growth continues on its present trajectory, more than 8.5 billion people will need to be clothed at the close of the decade, the United Nations estimates.

As a result, overall apparel production and demand are expected to surge by 63 percent from 62 million tons in 2017 to 102 million tons in 2030—or the equivalent of more than 500 billion T-shirts—according to sustainability think tank Global Fashion Agenda (GFA) and management firm Boston Consulting Group (BCG).

Such an increase would lead to a corresponding expansion of fashion's water, carbon dioxide, chemical and waste footprints. While the volume of water consumed by the industry is already a capacious 79 billion cubic meters per year—or enough to fill nearly 32 million Olympic-size swimming pools—GFA and BCG anticipate it will leap by 50 percent by 2030, placing even greater pressure on water-scarce regions, like the cotton-producing hubs of China and India.

Fashion's carbon emissions are also projected to balloon to more than 60 percent to nearly 2.8 billion tons per year

by 2030. By GFA and BCG's calculations, this is proportionate to the amount of emissions generated by nearly 230 million passenger vehicles in a year.

Equally at risk of exploding is the industry's already outsize chemical footprint. Although cotton accounts for just 3 percent of the planet's agricultural land, its cultivation employs an estimated 16 percent of all insecticides and 7 percent of all herbicides. The Ellen MacArthur Foundation projects cotton production to grow at a rate of 1.5 percent year on year, but whether this will translate into the same increase in chemical use depends on a raft of factors, such as the adoption of organic cotton, regenerative agricultural systems and genetically modified crops.

Waste creation is easier to calculate. Overall, humankind produces 2.1 billion tons of waste per year, according to the United Nations Environmental Programme. Assuming today's current solid waste during production and at end of use, GFA and BCG predict that the fashion industry's share will increase by 62 percent between 2015 and 2030, with an additional new 57 million tons of waste generated annually.

The "vast majority" of clothing waste ends up in landfills or is incinerated, the organizations added. Globally, only 20 percent of clothing is collected for reuse or recycling.



TODAY

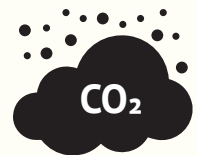
Volume of water consumed by fashion industry

79 billion
cubic meters per year

BY 2030

Will leap by

50 percent



BY 2030

Fashion's carbon emissions are projected to balloon to nearly

2.8 billion
tons per year



TODAY

Humankind produces

2.1 billion
tons of waste per year

BY 2030

An additional new

57 million
tons of waste generated annually



Shoppers Balk at Pricy Sustainable Fashion—Here's What Brands Can Do

SARAH JONES



Eco-friendliness may be the top factor consumers say guides them to a particular brand, but price premiums and a lack of trust in companies' responsibility claims may deter them from shopping sustainably.


Research from The Conference Board indicates that while consumers are increasingly interested in sustainability, attributes like cost, quality and function are typically the top considerations. After these needs have been met, only then does a brand's sustainability come into play as a differentiator and purchase driver.

While consumers might be fine with paying a slight premium for sustainability, there's typically something else

a product must offer as a value over its competitors to draw shoppers to a more expensive, if responsible, option. In fashion, this might mean increased fabric functionality or an appealing design, a middle ground Allbirds has been able to find, much to the appeal of its youth consumer cohort.

"When you have two of the very same products that have no other additional benefit and one is more sustainable than the other, if you then discover this one product is more expensive, then price is an issue," said Denise Dahlhoff, senior researcher, consumer research at The Conference Board and author of the report.

The survey, which polled more than 30,000 consumers in 64 countries on their sustainability views, found that



sustainability can provoke a positive emotion in consumers and drive loyalty. These emotional appeals can also be the key to reducing shoppers' price sensitivity when it comes to sustainable fashion.

With price the top barrier keeping consumers from choosing an environmentally sustainable option, the report suggests manufacturing models such as on-demand production—which lowers the cost of producing goods—could help improve the problem of prohibitively high price points. Additionally, if governments intervene with taxes or similar measures, this could also shrink the pricing gap over time.

While consumers also cite price as a significant issue when considering buying merchandise that was manufactured with fair wages and labor conditions, a lack of awareness or education was the No. 1 reason they cited as why they opted not to spend. Overall, consumers say they have a lack of trust or understanding of brands' sustainability initiatives, whether environmental or social, and that conducting their own research is too time consuming, which points to the importance of education and adequate communication.

One of the challenges companies have faced in their efforts to communicate ecological and social initiatives to consumers, is that sustainability has different definitions around the world.

Globally, environmental concerns, like pollution and climate change, are most associated with sustainability, while North American consumers are most apt to link sustainability with recycling efforts, and Europeans associate the term with a fair price.

Overall, respondents tended to rank environmental issues ahead of social ones. However, a disregard for social issues, like unfair labor practices, could cause consumers to boycott a company, even more than the support of a social cause they oppose. While environmental concerns have been in the spotlight, Dahlhoff foresees labor issues becoming

the “next big thing.”

One way companies can clarify their efforts and foster trust is to seek out third-party certifications, such as securing a fair-trade label to verify a responsible supply chain. Visualization is also key to getting a message across, translating figures into tangible ideas, such as comparing plastic saved to the size of a football field.

Brands can also choose to offer consumers unprecedented information, as Everlane does by opening the book on its costs and production.

“People want more and more transparency and getting a look behind-the-scenes of their favorite brands, and I think that’s a huge opportunity to be more transparent about that and differentiate yourself that way,” Dahlhoff said.

Consumer expectations for sustainability vary by sector, with clothing manufacturers coming in at No. 11 in a ranking of which sectors should care the most about environmental and social responsibility. Retailers ranked No. 15. But despite these lower expectations, businesses that operate in the fashion sector can’t afford to ignore sustainability. While consumers expect less of fashion producers and retailers, they also give them lower grades for sustainability performance compared to sectors like technology, food, airlines and automakers.

To improve consumer sentiment, the fashion industry has a number of opportunities to innovate. New businesses including resale, rentals, circular models and upcycling are all opportunities to raise the industry’s sustainability profile. As companies seek to develop new production methods, like fabric recycling, there is also a benefit to collaboration, even with competitors.

“Because you have to rethink everything and shake it up, I think it’s a huge opportunity,” Dahlhoff said. “And sometimes, you should probably think that way, not just make it sustainable but think of what are the other benefits that you can add in the process.”



“Emotional appeals can be the key to reducing shoppers’ price sensitivity when it comes to sustainable fashion.”



Fashion From Fungi

KATE NISHIMURA



Your next pair of leather boots could be made from fungi, if San Francisco-based MycoWorks has anything to say about it.

The sustainable material manufacturer is responsible for Reishi, a material innovation that relies on mycelium—the vegetative structure of a fungus or bacterial colony—to replicate the qualities of natural leather.

The company recently raised \$17 million in a 2019 Series A funding round led by DCVC Bio. The new capital will go toward bringing its non-plastic, non-animal-based material to market as a viable alternative to natural leather or “pleather.”

According to the company, Reishi is already being used by multiple European luxury and footwear brands, and Myco-

Works will be working to promote the use of its organic material.

The company currently operates two production facilities, and is planning to open a third commercial plant with a production capacity of 80,000 square feet of material per year. The accelerated growth of production capabilities will support the launch of new products already prototyped and tested with major luxury customers over the past 18 months.

“Animal leathers are synonymous with luxury and quality and, together with plastic leather alternatives, comprise a nearly \$80 billion global market as a staple of fashion and many other industries,” MycoWorks said. “Evolving consumer tastes have not been met with any new natural materials that achieve the quality standards of the luxury industry.”

Existing vegan leathers on the market are made from polymers, which are damaging to the environment and fail to replicate the aesthetic qualities or durability of traditional animal hides, the company said. By contrast, Reishi’s proprietary woven cellular microstructure emulates the organic collagen formation found in real leather.

“Just as alternatives to meat have recently taken the food industry by storm, consumers are also looking for natural, non-animal materials to wear,” MycoWorks CEO Matt Scullin said. With its “incredible strong skin,” he added, “Reishi is the only material that can meet the quality standards of animal leathers.”

Global luxury brands are currently lining up to bring Reishi-based products to market, DCVC Bio said. “MycoWorks meets the aspirations of luxury leather and meets the criteria for the new green economy,” Kiersten Stead, the firm’s managing partner, added.



THE 5 LEADING SUSTAINABILITY PROGRAMS YOU SHOULD JOIN NOW AND WHY

JASMIN MALIK CHUA

Collaboration isn't just a fashion industry buzzword. When it comes to bolstering sustainability, it's the only way for brands, retailers, suppliers and nonprofits to push forward together.

"Now, more than ever, it's clear that no company can fight a global crisis alone," said Amina Razvi, executive director at the Sustainable Apparel Coalition (SAC), a San Francisco-based trade group whose 240 members include boldface names such as Adidas, C&A, H&M, Levi Strauss and Target. "Partnership is leadership, and it will take everyone working together to prioritize the health and safety of people and the planet."

But not all sustainability initiatives are created equal. Less successful programs in the past might have exacted weak and vague commitments from companies or united stakeholders only in the most superficial sense.

The most effective ones are those that "force us to look beyond the impact of one business and look at the systemic issues of the fashion industry," said Hannah Phang, marketing and advocacy manager at Futerra, a sustainability-focused creative agency with offices in London, New York and Stockholm.

Here are five of the top united fronts they recommend.

1 / APPAREL IMPACT INSTITUTE

Spun off from the SAC in October 2017, the Apparel Impact Institute (All) leverages the Natural Resources Defense Council's Clean by Design mill-improvement program to clean up some of the most environmentally impactful segments of the apparel and footwear supply chain. Rather than leaving any one party hanging with the bill, the organization adopts a shared-funding model that splits the cost of improvements between brands, mills and public investments from HSBC and IDH Sustainable Trade Initiative.

"With a focus on energy, water, chemistry, and materials, All uses data-driven, science-based information to innovate and drive impact," Razvi said. "Companies can work with All to fund and scale collective initiatives that accelerate impact reduction."

2 / SCIENCE-BASED TARGETS INITIATIVE

The brainchild of CDP (formerly known as the Carbon Disclosure Project), the UN Global Compact, World Resources Institute and the World Wildlife Fund, the Science-based Targets Initiative is the one plus ultra of setting carbon reduction targets in alignment with the Paris Agreement to keep global warming below a further 1.5 degrees Celsius.

"It provides a clear framework for science-based target setting and supports companies every step of the way," Razvi said. "The initiative also offers tools, best practice guidance and sector-specific resources, and its technical experts independently review and approve targets, enhancing the credibility of company efforts."



/ UN FASHION CHARTER ON CLIMATE ACTION

In December 2018, the United Nations Framework Convention on Climate Change—also known as UN Climate Change—brought together fashion-industry giants like Adidas, Burberry, Gap, H&M, Inditex and Kering, with the goal of addressing the climate impact of the fashion sector across its entire value chain by going “beyond previous industry-wide commitments.”

Based on the goals of the 2015 Paris Agreement, the Fashion Industry Charter for Climate Action comprises 16 principles and targets, including decarbonizing the production phase, selecting climate-friendly and sustainable materials, promoting low-carbon transport, improving consumer dialogue and awareness, exploring circular business models, and working with the financing community and policymakers to catalyze scalable solutions.

“The Pact was presented to heads of state at the G7 Summit, which also helped to give some weight behind the importance of the signatories agreeing to take action,” Phang said.

/ TEXTILE EXCHANGE

With buy-ins from industry leaders like H&M, Inditex, Nike and Lenzing, Textile Exchange’s (TE) membership list reads like a who’s who of the garment and textile industry. As a global nonprofit, TE champions the use of environmentally friendly fibers by identifying and sharing best practices around farming, materials, traceability and end-of-life management in order to curtail the apparel and footwear industry’s impact on the planet.

“Textile Exchange’s Materials Impact Dashboard Guide is aligned with the Sustainable Apparel Coalition’s Higg Materials Sustainability Index, a reflection of how organizations collaborate with one another to support industry stakeholders,” Razvi said. “And it’s tracking progress made by the sector over the next 10 years.”

/ SOCIAL & LABOR CONVERGENCE PROGRAM

A broader (and often preferred) definition of sustainability includes the promotion of a safe and equitable workplace. Based in Amsterdam, the multi-stakeholder Social & Labor Convergence Program (SLCP) seeks to spur this on by implementing the first industry-wide framework to assess social and labor conditions. Brands, retailers and suppliers can become signatories of the SLCP, supplying it with objective data that can help identify opportunities for improvement and track progress.

“The SAC’s verified Higg Facility Social & Labor Module has adopted the SLCP converged assessment as the industry-wide assessment for social labor impacts,” Razvi said. “The implementation of a single social and labor assessment in the apparel industry will align metrics and free up resources that have traditionally been spent on auditing, enabling companies to focus on industry improvements instead of compliance.”



Who's Influencing Fashion's Sustainable Future? Apple, Amazon—and Toyota

FASHION CAN LEARN A SUSTAINABLE THING OR TWO FROM INDUSTRY HEAVYWEIGHTS AND REVOLUTIONARY OUTSIDERS.

JOHN THORBECK

If you were in business school in the 1980s, you would have studied Japan. “Japan as Number One” was a bestselling book, and Japanese auto companies were the new standard for global excellence. That was all owed to quality, but what made Toyota and others unstoppable was that they inverted the cost/quality equation—they achieved higher quality at a lower cost. The ingrained American car maker mindset embraced the opposite, believing that quality cost more and consumers would pay for it.

By 1990, Toyota’s market value was twice that of GM, and it is now the world’s largest car manufacturer. The U.S. never recovered. Quality at lower cost was the consumer revolution that dethroned Detroit.

And it’s a scenario that’s relevant today, but the new revolution is sustainability.

That is true in autos (Tesla), but applies to all industries—including fashion. Like quality, sustainability is a word with many definitions, but it is the innovation challenge of our times. Will sustainable fashion only be achieved with higher costs and prices? Or, like the Japanese, will someone accelerate and scale sustainability with lower prices, inverting current economics? Toyota’s process is called the greatest innovation of the 20th century.

What will be the 21st century’s greatest innovation when it comes to sustainability?

Referring to the auto industry, Har-



vard’s John and Natty MacArthur University professor, Rebecca Henderson writes in her newly released book, ‘Reimagining Capitalism in a World on Fire,’ that one of GM’s executives, flummoxed and frustrated, took to demanding that consultants photograph every corner of Toyota’s premier NUMMI plant.

Did imitation work?

GM could duplicate many things, down to the square inch, but not the Toyota culture.

In 2020, what do retailers expect to gain from imitating fast fashion, subscriptions, rental, resale and recycling?



Sustainability is the challenge of our times because consumers demand it. The choice for fashion brands is not a better planet or products; it is to survive at all. Fashion firms are so used to cycles that they always count on the next upturn. But the stakes are higher now and unforgiving, with uncertainties in both supply and demand, which creates a unique vice-like pressure on revenue and costs. Fashion's bargaining culture always assumes a better bid somewhere, and that partnership means another 10 percent off.

That worn-out approach to cushioning risk doesn't mitigate it at all.

Consumers are not the only force for change—investors are, too. Their criteria for supply chains are evolving to Environmental, Social and Governmental (ESG) standards. The “do no harm” mantra for corporate social responsibility is over. Henderson illuminates this shift in Re-imagining Capitalism by describing work with Hiro Mizuno, chief investment officer of Japan's GPIF, the largest pension pool in the world. GPIF, alongside California State Teachers' Retirement System (CalSTRS)(U.S.) and USS (U.K.), published a letter to its investment managers on ESG criteria, with this paragraph:

“Skeptics that continue to question the growing role of sustainability within the global investment community should realize that they are quickly becoming the minority. With a large majority of research in a meta-analysis of over 2,200 studies showing a positive relationship between ESG investment and returns—and around 90% showing at least a non-negative effect—they should also be aware that the evidence is not on their side.”

Why is this important to fashion, an industry that just wants to go green, reinvent the store experience, personalize its data and loyalty programs, and cycle up again?

It's important because trillions of dollars of investment are in waiting for placement. Retailers must compete for capital, just like any other industry. But how will they attract capital if their transformation to profitability and sustainability

isn't convincing? Attainment is unlikely, save for the few who can overcome fashion's low-profit, low-growth and low-tech track record. It is high stakes for a famously insular industry that doesn't hear or heed outside learning or voices.

So what is the way forward? As Anna Wintour put it in a recent New York Times article, “At a time of crisis, we have to think of a radical reset.”

Awareness for change is high, as we know by all the shows and forums and claims for progress. Beyond CEO and celebrity PR, finance and fashion must each envision and achieve a more equitable, profitable and sustainable future. To get there, it will take a focus on five critical measures.

GENUINE PROCESS INNOVATION

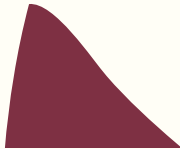
First, like Toyota, companies must focus on genuine process innovation, not technology fixes.

Speed and flexibility are primary drivers of productivity, but connectivity, visibility, digitization and automation are not the same thing. Technology did not differentiate Toyota—it was culture and commitment. The same can be said for Zara today. Process change is what Henderson calls “architectural innovation,” or how pieces of the puzzle are fitted in a new way. In fashion's alternative ‘AI’, the benefit must be end-to-end, shared with upstream partners and measured by market and social value.

LARGE-SCALE ORGANIZATIONAL CHANGE

We know our goals and competition, yet we do not succeed when it comes to large-scale organizational change, something Henderson has unique insight into. Why have Marks & Spencer, Gap, L Brands, Macy's, Kohl's, J.C. Penney and many more stalled or failed for a decade or more? These brands are all on shrink-to-success trajectories, uncompetitive in a global marketplace. They are the Fords and GMs of the 2020s. For the key to the

“The choice for fashion brands is not a better planet or products; it is to survive at all.”



alternative, to mobilize over strategize, Henderson articulates shared purpose as a motivator more powerful than shared value (advantage) and disruption (innovation). It is a cultural skill set rare among executives who rose to leadership via merchandising or finance. The great names in our trade have left the stage.

APPLE, AMAZON AND ZARA

Inspiration, whether the industry likes it or not, begins with Apple, Amazon and Zara.

What do they share in common? Their financial advantage is to mitigate inventory risk and maximize free cash flow by inverting the working capital cycle. Their differing processes for supply flexibility are more enduring and protectable than their products. In application to fashion, that means more than store trends and turns; it means value created across all tiers of the supply chain, from first to last mile.

In other words, a business model based on lowest-cost sourcing and volume buying is no longer competitive. It has been superseded by a model that unlocks internal capital to invest in growth and sustainability. Inventory excess has been a colossal obstacle but these three are not the perpetrators. However, what worked for Toyota's supply chain must be reinterpreted for fashion. The new narrative for fashion is a proven alternative for postponement drawn from the electronics industry and based on a decade of Stanford-based work. Its time has come.

COLLABORATE, BUT CAREFULLY

In this overhaul to the new, necessary model, companies should collaborate but choose partners carefully. Europe's lead in sustainability is real and evident, and Asia has a powerful supply base and rising demand. Focusing on location, with

efforts like near-shoring, is a limited response, as Nike and Adidas have demonstrated in abandoned, expensive ventures in manufacturing.

In choosing partners for sustainable practices, look for shared purpose above all; that is, cultural DNA that is more than mission statements. Values scale, and individuals matter. Find both.

What if H&M and Zara join hands to deploy talent and tools? Their family, founder and European values are closer than you think. What if Target and AFM (the \$100 billion private family holding company in France)—one U.S. retailer, one non-U.S., but two global networks—join hands across complementary merchandise? These four are \$250 billion in fashion goods, more than Amazon and Walmart combined.

Coalitions, and new collectives, will matter to global consumers hungry to embrace brands that represent practices and products that deliver social impact.

FINANCIAL AND SOCIAL CAPITAL

Finally, do not doubt that the key metrics in fashion's future are financial and social capital. What is your strategy to generate both? The achievement of work by Warren Hausman of Stanford University was to link supply flexibility to significant capital upside (market value) and to quantify its untapped economics. That capital link and opportunity gap are what ESG measures will illuminate as the essential engine for sustainability and profitability.

In the quest for sustainability, investors and consumers are forces for change. Fashion, as the most globalized, complex and inefficient supply chain, must reverse its fortune by inverting its formula for success. How will it reimagine a business model for a better future? As Henderson says in her new book, "Welcome to the world's most important conversation."



One of
Three Americans
wears clothes
by **HANSAE**



30,000
EMPLOYEES



540 LINES
PRODUCTION
CAPACITY



11
MILL
S

7 COUNTRIES

VIETNAM
INDONESIA
MYANMAR
USA
NICARAGUA
GUATEMALA
HAITI

24.5



MILLION PCS / MONTH

Our Webpage



『10% for Good』
Campaign



Hansae Co. Ltd, is a global leading enterprise in the apparel industry with 14 global corporations in seven countries (USA, Vietnam, Nicaragua, Guatemala, Indonesia, Myanmar and Haiti). We have six overseas offices, delivering garments to world's famous brands in USA, Europe, Japan etc. The company employs 600 employees in the Seoul headquarters, 30,000 workers in manufacturing locations and other cooperators, totaling about 50,000 employees that are striving to raise Hansae from OEM-ODM specialty company into 'Creative Fashion Design Enterprise'.

Visit www.Hansae.com for more information.

Will COVID-19 Choke Supply Chain Sustainability?

THE GLOBAL PANDEMIC HAS COME IN AND UPENDED EVERYTHING—AND IT MAY HAMPER PROGRESS IN GREENING THE VALUE CHAIN, TOO.

TARA DONALDSON

As the world waits while the Earth reclaims its time and the coronavirus pandemic puts a pause on all, questions in the fashion industry center on how businesses will be able to sustain themselves—both economically and environmentally. And what has become clear is that the latter may take a backseat to the former for companies that can't focus on future-proofing while they figure whether there'll even be a business to future-proof by 2021.

Companies with sustainability woven into the fabric of their being may know no differently than to carry forward with an eco-friendly status quo, but for those that have been prompted by society and stakeholders to outline 2020 sustainability goals, efforts may falter.

The state of sustainability may be as uncertain as everything else in the first half of the year that has marked a new decade and likely the start of a new normal for the world, but Morten Lehmann, chief sustainability officer for the Global Fashion Agenda (GFA), says fashion will have to change its makeup.


Sourcing Journal: With the COVID-19 pandemic impacting everything, what's happening to fashion sustainability?

Morten Lehmann: On some level, it accelerates the path we were already going towards, but on another it shows that the business model is not resilient to shocks, and it's not good to see that. The only positive thing is if this will enable the industry to be more resilient to future



shocks, if not from the pandemic, then climate change. Hopefully for the companies that are already on board with sustainability, they will find their way out of the crisis, they will get closer to the cause and their brand DNA and think 'How can we communicate navigating this crisis and be a company with a purpose navigating the future?' We will have to find a solution for the overstock and deadstock





challenge, which has gotten a lot worse with not being able to sell anything. It's one of the big problems of the industry and it's really expensive for the industry, but hopefully we can find a better way of organizing the industry instead of new seasons and new sales constantly throughout the year.

SJ: Are companies already adjusting themselves to the new world?

ML: Companies are really doubling down on new business models, so finding new and sustainable business models. Maybe this is a time where made-to-order can be scaled up. A lot of the tech exists, some say they can do it almost at the same price as standard production, so is this the time that we double down? Are we seeing customers that are more willing to not get the T-shirt the same day that they order it? There's a big upside of costs that might come from such a system.

For the companies where this is key to how they run their company, it will probably be a key to how they get out of the crisis as a better, more resilient future proof company, so I think we'll see both. Maybe even a polarization, so that the companies who didn't do anything, they will do even less because they just see it as a cost center. But for other companies who are leading, they will see this as a way out of the crisis and a way to differentiate themselves both toward the supply chain and how they partner with manufacturers and suppliers, but also how they engage with their customers.

SJ: What's going to happen to all of those 2020 sustainability goals?

ML: I think it will be very different from company to company how they navigate this. I think for many of them they see that some of those commitments they've set are also partly related to future-proofing their company and hence, just as relevant. The climate change is not going to disappear, we know that. Yes, it's looking better due to emissions right now, but it's just a blip in the big-

ger picture, so I think all these are just as relevant and for the companies who look beyond the next quarter, they know that and they know they are there for this business rationale behind those commitments, which is to be less dependent on fossil fuels and less dependent on resources, which will be scarce in the future. I think for the companies who understand that, they will continue to work just as hard on these commitments as before. And for the companies who don't understand how this will enable them to future-proof their companies, they might postpone them, take some of them out. Of course, it's realizing all these companies are fighting for survival, so for many, they will have to cancel some of these just because they just want to get to the next quarter. So also, it's of course realizing that some of them can't afford to even think about future-proofing...so it's not to downplay the fact that this will be the smartest thing for some of these companies to do because they're just trying to survive the next week even. For them, this will be the thing to do. This is what their closest stakeholders, shareholders will be asking them to do.

SJ: In what areas had fashion been making the most progress with sustainability?

ML: I think what has been both super negative but also super positive, has been that notion of equal partnership, which the industry has been struggling with for years as to how do we create a more equal partnership or a better relationship between brands retailers and further down the supply chain? And on the one hand, we're seeing the bad side of this where companies are not paying for their orders, but we are also seeing the opposite. My hope is that we will see an even closer relationship with brands and manufacturers knowing that we will see a consolidation—both on the manufacturers and brands level. So this will also be about finding out, OK who can have access to the right manufacturers after COVID-19, who will they want



—
“Hopefully we can find a better way of organizing the industry instead of new seasons and new sales constantly.”

to work with, and how dependent they are on solutions from manufacturers in times like this. What do you do with all the deadstock, the overstock? These are global problems and they're problems that brands can't deal with alone, but the closer relationship you have with your value chain, the better equipped you are, not only to handle these crises, but also to tackle immediate issues like overstock. What do you do with all your stock? Who will have the warehouses to keep it, how long can you keep it, and all the security concerns with that? I know we have seen a lot of the opposite, but I also see pieces where it seems like they are coming closer together realizing it's actually also our responsibility. We see more companies actually joining the international organizations, trying to come up with solutions for the unemployment that's happening in the manufacturing countries. So I see that rallying taking a joint responsibility for the workers in manufacturing countries is positive. I'm hopeful that we will see more of this.

SJ: What happens to things like water savings and emissions reduction goals?

ML: On many of these the business case is very clear...so there wouldn't be any reason not to continue with these unless it's a matter of taking all the teams working on these things and putting them into crisis management groups, which I guess will occur in some brands. The sustainability team, or maybe some of them, are being put into a COVID-19 crisis management group that is looking more at how to deal with stock. Maybe there's some reallocation of staff that means that they can't pursue that with the same energy that they did before even though the business case is pretty clear, so I'm sure that must be happening. And I'm sure also for some manufacturers, when they're trying to find the money to pay their employees and find ways to store the materials and find ways to secure their employees in the future, then this becomes the second, even though the business case in the

longer run is good. And, of course, this is the survival. Maybe that's too big a word, but in a country where poverty is rife and you're sending people into unemployment, then these, of course, are bigger questions than saving some water and greenhouse gasses.

SJ: How might COVID-19 change consumption patterns?

ML: I think it's already become apparent that it is discretionary. We don't need clothes. That's what we're seeing, and people are traveling less and they are buying especially less of the luxury bits that are mostly bought when people are traveling. I think people are realizing now what they need and what they don't need to a bigger extent than before. People are having an opportunity, many of them for the first time in their lives, to stop and think, rethink their lives. Perhaps that's a big word, but still people have never had so much time to stop and think, and in times of so much uncertainty, what do you do, what do you focus on? Are clothes some of the values that are closer to you and buying new clothes? And when you do buy clothes, do you think more about 'is this something that I really care for?' and then consider the longevity of the product and the brand behind that product? Is that a brand that I can stand behind or is it something I'm just buying for the next party? Perhaps we will see a future that's even more personalized, that you really buy what you believe in and what has shaped you from the COVID-19 experience in terms of how brands reflect on this and how they communicate. Then I think that the sheer knowledge of the overproduction, when that becomes more widely publicly acknowledged and known, people will consider that even more and consider buying less, and maybe we'll see brands reconsidering the cycle of fashion. How many collections, seasons do we need? Maybe some will come from consumers and maybe, also, this is the time for brands to reconsider how to go about these many, many seasons and redesigning fashion's value.

“The closer relationship you have with your value chain, the better equipped you are, not only to handle these crises, but also to tackle immediate issues, like overstock.”

SJ: What will sustainability in 2021 look like? Will the conversation have changed?

ML: I think for some, yes. [It will be about] do we use AI or others to predict what is needed out there so we can avoid the overstock challenge? Because that is so apparent the cost of inventory on this. And then of course, how can circular economy play a bigger part in some of the solutions? Because in the circular economy you don't have waste. Nothing goes to the landfill, it's all remade or up-cycled. But right now, the facilities, with the...millions and millions of pieces, we don't have anywhere near the capacity among recyclers, and that's in manufacturing countries, in the U.S. or Europe. What need to understand much more is what are the leverage points here, what is it that we could change, which levers can we pull to change some of these things and make circular economy part of the answer to this crisis we are sitting in.



PRODUCTION SHOULD FOLLOW DEMAND TO REDUCE FASHION'S FOOTPRINT

Apparel companies traditionally create merchandise and then hope there is demand, but this model is being questioned as over-production and waste come to the forefront of the sustainability discussion.

Hayato Nishi, senior business development at 3-D knitting firm Shima Seiki, says fashion needs to shift towards demand-driven production. "Technology and innovation will allow for better communication and increased production efficiency to change the 'make then sell' supply chain model to a 'sell then make' process," he said. Nishi spoke with Sourcing Journal about the benefits of real-time manufacturing.

What advantages does your just-in-time production provide?

Traditional processes need to knit out fabric yardage from yarn, [which is] then shipped to a garment factory to cut the individual panels, then sent to a sewing division to piece the panels together. In sharp contrast, one Shima Seiki machine can eliminate two stages in the supply chain, so brands can have better transparency by just understanding where their yarns come from, and where it is being knitted into a finished garment.

In addition, if the brands have access to the knitting data, they can even consider reshoring or localized manufacturing in the consumption region to minimize carbon footprint, shorten lead-times, reduce inventory and overproduction to produce in real-time.

What is the latest advancement that your company has developed to address the growing consumer demand for sustainability?

The latest version of our APEX4 digitalization system...allows designers to scan in their own yarns or create digital yarns to simulate various fabrics...The system also achieves 3-D simulation capabilities to virtually create a 3-D garment of a digital avatar. This allows brands to eliminate the massive amounts of fabric wasted in the sampling process, while eliminating the need to ship samples back and forth, reducing carbon emissions.

What are some of the hurdles standing in the fashion industry's way as it seeks to be more sustainable?

The biggest hurdle is change. The resistance to change a system and shift the mindset to truly become sustainable is difficult for many brands. These companies have spent decades to shift production overseas to decrease production costs and maximize profit. This model of supply chain is now the industry standard but comes at an unsustainable cost. If companies can shift their focus to pay more for better-sustainable products, they can educate their customers to show why they can expect more when paying more.



SOURCING at MAGIC



VISIT OUR WEBSITE:
[magicfashionevents.com
/en/shows/sourcingmagic](http://magicfashionevents.com/en/shows/sourcingmagic)



VISIT OUR SOCIAL MEDIA:
@SOURCINGATMAGIC





Where Does Traceability Start and End?

THE APPAREL INDUSTRY IS BEGINNING TO EMBRACE SUPPLY-CHAIN TRACEABILITY WITH INCREASING VIGOR—AND SO ARE CONSUMERS.

JASMIN MALIK CHUA

As a growing breed of conscious consumers places greater stock in how products are sourced, the apparel industry is beginning to embrace supply-chain traceability with increasing vigor.

In October, luxury juggernaut Kering partnered with cotton trade group Supima, textile manufacturer Albini Group and traceability firm Oritain to unveil the first 100 percent traceable organic cotton textile based on forensic science and statistical analysis. The following month, technology company Applied DNA Sciences claimed to have successfully implemented DNA tagging into one of the world's largest tanneries, allowing it to track the hide of an animal "from a farm to the product in a store." It followed up in December with a deal to authenticate the recycled polyester used by Reliance Industries, which supplies textiles to boldface brands such as Lee and Wrangler.

Similar efforts are poised to take place. In a 2019 McKinsey & Co. survey of sourcing executives, 65 percent said they expected to achieve full traceability from fi-

ber to store by 2025, through technologies like radio-frequency identification (RFID), blockchain and DNA tagging.

"Assuming all companies that rate traceability technology as likely over the next five years actually implement the relevant technologies, we would see RFID used by 71 percent of companies, blockchain by 52 percent and DNA tagging by 32 percent," the report's authors wrote. "That would require very rapid growth in adoption rates, however."

For an industry that has thrived for decades on competition and secrecy, exposing its inner mechanisms is far from intuitive.

But consumers aren't the only ones who will benefit from shining a light through these notoriously opaque—not to mention convoluted—supply chains. Every other stakeholder stands to gain, too. Producers can leverage origin verification to protect the value of their product, guard against commoditization and gain a competitive edge in the market. Brands are able to justify premium prices, ensure they're getting what they paid for and confidently include the provenance

of their goods as part of their retail narratives. Even nonprofits can take advantage of the added visibility to more easily vet social, environmental and animal-welfare commitments.

“Most importantly, for all the above stakeholders, traceability provides accountability,” said Rupert Hodges, executive director of Oritain, which the National Cotton Council of America named last year as the official traceability partner for its Cotton U.S.A trademark. “Before we could confidently trace the origin of fibers and materials, all claims relied on trust. By verifying origin, you can have confidence that environmental, social and governance claims linked to origin are accurate and robust.”

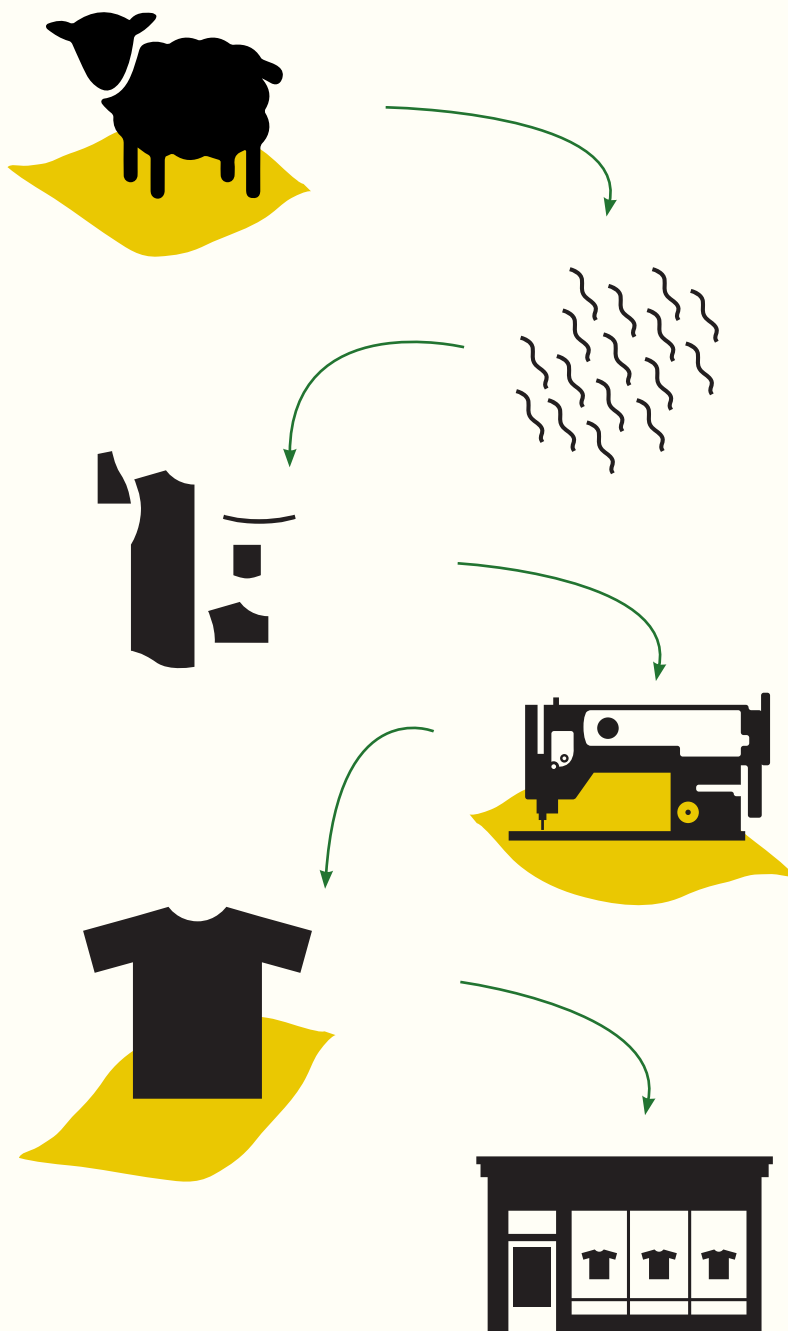
Creating a verification system can involve adding an external factor, such as a serial number, QR code or genetic and synthetic markers. Oritain prefers to mine the internal by using “forensic science, statistics and Mother Nature.”

“Nature instills all things with specific properties that are unique to where they are grown, reared or made,” Hodges said. “Our forensic science allows us to analyze these, and our statistics allow us to read that data and give that product its own ‘origin fingerprint’ that we can use to verify against any point in the supply chain.”

Though traceability and transparency are frequently conflated—and you can’t have one without the other—they’re very different concepts, he noted. Transparency is the visibility and accessibility of information, which is vital to understanding and mapping supply chains and pinpointing potential risks. Traceability, on the other hand, is then proving that the information you have on your supply chain is correct.

“Many companies operate a level of traceability but what they’re really offering is transparency—an insight into their supply chain,” Hodges said. “Without independent, scientific verification of the supply chain, you cannot be entirely certain of its integrity. And, of course, there are various levels of robustness or validity when verifying a supply chain.”

Still, transparency should come first, Hodges said. Only then can traceability follow.





Transparency in fashion has had its fits and starts, though it's growing in practice for the most part. According to grassroots group Fashion Revolution, 35 percent of the major fashion brands it reviewed in 2019 are publishing a list of their first-tier manufacturers, compared with just 12 percent in 2016.

"This progress is encouraging, but there is still so much we don't know about the people who make our clothes, from farm to retail," Fashion Revolution wrote in its report.

Traceability protocols can be applied to just about any fiber or material, whether they're high risk, as in the case of man-made cellulose like viscose, which can threaten ancient and endangered forests, or high volume, such as cotton, which can carry a heavy social and environmental toll if farmed irresponsibly.

Indeed, traceability is "inherently linked" to sustainability, said Géraldine Vallejo, sustainability program director at Kering, which owns brands including Alexander McQueen, Gucci and Saint Laurent and has pledged to achieve 100 percent traceability across its supply chain by 2025. (It's 88 percent of the way there, she said.)

While gaps in verification still abound, traceability is essential to ensure that environmental, social and animal-welfare best practices and standards are adhered to "from the very beginning of the supply chain," Vallejo said.

Besides its partnership with Supima, Albini Group and Oritain, Kering works with a host of startups to craft innovative tools and solutions around traceability that are either not widely adopted or may not have been considered before.

As with anything new, there are "always obstacles and growing pains to overcome," she said. Even during tests and pilots, challenges around viability, timing and scalability can loom large. But collaboration with peers can help surmount those obstacles. "Open sourcing, knowledge sharing and consensus building around new solutions is key to drive their adoption," Vallejo said.

Developing a clear-eyed strategy and approach, beginning with ambitious targets and timelines, is useful, too. And most of the time, businesses don't need to reinvent the wheel, she added. Adopting established international certifications,

Traceability in Food vs. Fashion

As a movement, fashion has always lagged several steps behind food. Think of drives to push organic or know your producer; traceability is no different. Part of it is because government regulations are in place to monitor human health and mitigate food scares. Another is the complexity of global apparel production, where every fabric, thread, button or zipper can hail from disparate sources in far-ranging geographies.

"Food traceability can be very simple: an apple leaves an orchard and is sold in a store," said Jesse Daystar, chief sustainability officer at Cotton Incorporated. "Putting the farm practice information to the side, that's two data points. But, if that apple is destined to be one of many ingredients in a juice, let's say, then there are multiple other locations and data points to be considered."

Clothing, he said, is more in line with the juice example. "Fibers from different origin points are frequently combined at a mill, then sent to manufacturers, then perhaps to cut-and-sew facilities in a different part of the world, and so on," Daystar explained. "That's a lot of data

that has to be compiled and then presented in a way that is useful."

Compared with food, traceability in the fashion industry has far to go, Vallejo admitted. Because leather, to give an example, is considered a relatively low-value byproduct (or "co-product," in Kering's words) of the food industry, there is no requirement for it to be identified back to the farm of origin. This, however, must change, she said.

"It is critical to change this system so that environmental and social impacts, and animal-welfare practices, can be verified and also so that fashion can become more sustainable as an industry overall," Vallejo said. "At Kering, we recognize these fundamental requirements and we are working within our supply chains to find practical and effective solutions to these issues."

The question of traceability has also been around longer than food, but "both industries are moving, which is important," Hodges said. "I think people forget that sometimes. Rightly so, we all want change to happen quickly, but I'm glad we're finally waking up to that and beginning to act."

incorporating these best practices into the supply chain, working with suppliers to ensure compliance, and setting up programs to promote traceability where there are gaps, are all critical to success.

Companies need to better engage with their supply networks—and data can help them get there, agreed Jamie Barsimantov, co-founder and chief operating officer at SupplyShift, which developed a suite of tools to help firms map and assess their supply chains. You can't track what you can't trace, after all, especially past the first tier.

"Businesses need to be able to make smart decisions about their supply network, and track the impact of those changes so they can be more honest with their customers," he said. "They need better transparency, and they need to identify problem areas across a range of issues so they can partner with suppliers to resolve them."



CORONAVIRUS SET TO ACCELERATE CONSCIOUS CONSUMERISM

Sustainability isn't going anywhere, and the importance of sustainable practices is only set to grow as younger generations grow their purchasing power. This heightened sense of awareness is happening not only at the end consumer level, but among buyers and sourcing professionals.

Informa's trade show SOURCING at MAGIC has seen this change firsthand. "We have seen a major shift in consumer behavior and interest from our buyers, specifically from our millennial and Gen Z attendees," said Kelly Helfman, president of WWD/MAGIC, Project Womens, Micam Americas and Sourcing shows presented by Informa. "As this consumer base matures, so will the demand for sustainable alternatives in apparel and footwear."

Here, Helfman discusses how the show is taking on its own sustainable practices and how COVID-19 could change buying behavior.

What are the latest advancements that your company has developed to address the sustainability issue?

Sustainability has consistently been a focus of SOURCING at MAGIC. Over the past two years, we have offered education from industry leaders on sustainable practices. We too as event organizers have tried to practice what we preach and have done a tremendous amount to cut our own waste down—for example, no paper directories, less carpet, recycled signage. In 2019, we introduced a gallery to showcase sustainable products and innovation from our exhibitors.

What societal cultural shifts need to happen in fashion to drive widespread change?

The shift in our culture is already happening, and COVID-19 is accelerating it by a million. Consumers today are preferring—and in some cases insisting—that their products are sustainable and they choose to have quality over quantity. COVID-19 will create less non-essential buying by the consumer. The consumer will keep demanding for brands to be more ethically transparent about their production model, which will force fashion to shift in order to survive. Moreover, the economic impact to produce at scale will need to be reduced.

What is fashion still missing when it comes to sustainability?

When we think of fashion, we need to think of it as an entire carbon footprint—from the fuel used to ship goods across the world, to packaging, to water consumption, to the labor workforce—all to produce a single product. We need to consider the true cost of fashion. We have just peeled back the first couple layers of the onion and we have a lot more work to do as an industry.

Zeroing in on Zero Waste: Can the Fashion Industry Get There?

THE APPAREL INDUSTRY MAY HAVE A LONG WAY TO GO WHEN IT COMES TO WASTE, WHETHER ZERO OR NOT.

JASMIN MALIK CHUA

The world is drowning in textile waste. For many in the apparel and footwear industry, “zero waste” might be the only way forward.

The concept, though far from new, has gained increased traction in recent years. Just last September, Nike declared it was moving toward a future where “waste doesn’t even exist.” Its rival, Adidas, is trialing a first-of-its-kind sneaker that’s designed to be ground up and melted back into raw materials for a brand new shoe, leaving not a single scrap behind. Even fast-fashion juggernaut Zara says it plans to—by 2025—transition to zero landfill waste. H&M, meanwhile, has invested in several textile-to-textile recycling start-ups, such as Re:newcell and Infinited Fiber Company, which promise to take what was once old and turn it into new.

The focus isn’t surprising in light of increasing consumer scrutiny, particularly by ethically conscious younger shoppers, into corporate practices. When Burberry said in 2018 it had burned tens of millions of dollars of unsold clothing and cosmetics to maintain its “brand value,” the public hew and cry was immediate and vociferous, leading the luxury house to walk back the practice. The same year, H&M drew attention for admitting it was roosting on a \$4 billion stockpile of unsold clothes. (It, too, fought to fend off accusations it was setting still-wearable



merchandise ablaze).

But consumers, who are amassing twice as many clothes as they did 15 years ago but hanging on to them half as long, per McKinsey & Company, are also contributing to fashion’s waste problem. The Ellen MacArthur Foundation estimates that one garbage truck of textiles is land-filled or incinerated every second. The average American throws out 70 pounds of textiles per year, much of its still reusable, according to the U.S. Environmental Protection Agency. In Britain, households bin



an annual 300,000 tons of clothing, says the English nonprofit Waste & Resources Action Programme (WRAP).

“We’ve got a fundamental business model problem in the apparel industry as it’s based on style obsolescence and consumption as the key driver,” said Stacy Flynn, CEO of Evrnu, a Seattle company that “molecularly regenerates” discarded clothing fibers into something called NuCycl, which hit the market last year in the form of a limited-run Adidas by Stella McCartney hoodie. Pivoting to zero waste, on the other hand, means spurning the fashion industry’s linear take-make-dispose model and “harnessing waste as a resource.”

Because waste is generated at multiple touch points, an important distinction must be made between proactively eliminating waste and reactively eliminating waste, said Gwen Cunningham, lead of the Circle Textiles program at Amsterdam-based nonprofit Circle Economy. Textile-to-textile recycling is an example of the latter. The former includes intentionally designing products using zero-waste techniques or promoting their longevity through resale, repair and rental.

“Both approaches are needed, as the industry must simultaneously tackle the very large and very real textile waste mountain that we currently have, while also ensuring that we curb the generation of new waste streams,” she said.

Still, “zero waste,” both in theory and in practice, can mean different things depending on the angle of approach—or even whom you ask.

“From a design perspective, it’s possible to creatively design garments so that there is no textile waste during the production process, but there’s no guarantee of zero waste once those garments reach their end of use,” said Cyndi Rhoades, founder and CEO of Worn Again Technologies, a London-based innovation firm that breaks up polyester-cotton blends in clothing castoffs into polyester resin and cellulosic pulp.

She doesn’t use the term to describe her process, since nylon, elastane, dyes, finishes and other non-polyester and cel-

lulose materials emerge as waste.

“At Worn Again Technologies, our focus is less on the concept of zero waste and more about the principles of circularity and the replacement of virgin raw materials with circular resources,” she said.

Not that there is a regulated definition of zero waste. While most people agree on the broad strokes of the concept—creating a product that results in no waste at the end of the supply-chain process—the term may be open to interpretation.

“Some people misuse ‘zero waste’ for using deadstock fabrics to reduce waste going to landfills, but if they use traditional processes, there is still waste created in the process,” said Hayato Nishi, sales and senior business development manager at Shima Seiki, a Japanese manufacturer of flat knitting machines that generates garments out of whole cloth without the need for cutting or stitching. On average, between 5 percent and 20 percent of fabrics wind up on the cutting-room floor.

A digital workflow, coupled with localized made-to-order production, can also trim the fat from the cut-and-sew end, said J. Kirby Best, founder and CEO of OnPoint Manufacturing, an on-demand apparel maker in Alabama.

“We can test and sample and visualize in 3D so that nothing is actually made, nothing transported and no fabrics are wasted, and then flow that information into websites and make the product orderable,” he said. “And then when a person orders it, it flows into on-demand manufacturing and then it’s shipped directly to the customer. So you cut out all the middleman all the second, third, fourth handling in between.”

A more expansive definition of zero waste—or at least close to zero waste—might even require better demand forecasting to give customers what they want when they want it.

“Most pre-consumer waste are from garments that are made in the wrong style, in the wrong size, in the wrong color or shipped to the wrong store,” said Edwin Keh, CEO of the Hong Kong Research Institute of Textiles and Apparel. “These then eventually become

“We’ve got a fundamental business model problem in the apparel industry and it’s based on style obsolescence and consumption as the key driver.”

—Stacy Flynn, Evrnu

obsolete stock that are either disposed of at a loss or in the case of luxury, destroyed. Here the waste is not only the material, but also the labor and the logistics involved.”

Zero waste aside, even regular waste reduction remains a throbbing pain point for the industry at large.

“Apparel companies are wasteful because there have been few reasons for them not to be wasteful,” said Saskia van Gendt, head of sustainability at Rothy’s, which 3D-knits its shoes and bags using recycled polyester and reclaimed ocean waste. “Yes, there are companies breaking this trend with efficient production processes, but this isn’t the norm yet.”

Old-guard brands and retailers that haven’t incorporated sustainability from Day One have struggled to shrink their waste footprint.

Signatories of the Sustainable Clothing Action Plan 2020 (SCAP 2020), a joint commitment to reduce British fashion’s impact, for instance, have exceeded water targets and are “well on the way” to meeting their carbon targets. Yet waste—both in terms of supply-chain waste and increased recycling and reuse—remains a “harder area for [them] to influence,” according to a January update by WRAP, the England-based nonprofit coordinating the effort.

Textile consumption in the country has increased 3 percent since 2013 and take-back hasn’t helped, it noted. Neither have burgeoning take-back and recycling efforts been able to keep up with the volume of purged garments.

Together, Asos, Topshop owner Arcadia Group, Marks & Spencer, Next, Primark and other signatories have reduced waste across the product cycle by only 1.4 percent since 2012, which means it’s “unlikely” they’ll meet the 3.5 percent target by December 2020, WRAP said.

Companies that home in on textile recycling as their primary solution are in for an uphill battle, according to the Fibersort Consortium, a group of textile stakeholders behind the world’s first automated technology to allow large volumes of mixed post-consumer textiles to be sorted based on fiber composition.

VENDOR-CLIENT COLLABORATION NEEDED TO OVERCOME SUSTAINABILITY’S STICKING POINTS

Achieving sustainability throughout the supply chain requires brands and retailers to work together toward specific targets.

According to HANSAE CEO Kim Ik-hwan, one of the obstacles standing in the way of fashion’s environmental progress is a lack of sustainable capabilities, and he encourages companies to share their skillsets and extend this knowledge to fashion brands. “Once both parties discover each other’s needs and make collective efforts, it will be possible to scale up the level of sustainability of the fashion industry,” he said.

Sourcing Journal talked to Kim about how HANSAE is using a collaborative approach to further responsible fashion.

From your perspective, is the term sustainability retaining or losing its buzzworthiness?

Many companies are mentioning sustainability, but the meaning of the word itself is weakened since each company has a different definition and goals to achieve sustainability. The word is still buzzworthy only for those companies that take actions with passion and a specific plan. In this perspective, HANSAE is working on specific and realistic actions as a result of clear understanding and distinct vision on sustainability.

What can fashion brands do to establish better transparency within their complex, global supply chains?

From a vendors’ perspective, it is crucial that buyers set clear and specific goals. For instance, they may set up three-year or five-year plans based on a distinct target. Those plans should include achievable steps on a yearly basis entailed by reviewing and improving such steps. Once these goals are set up, then buyers and vendors can maximize their synergy with vibrant communication.

What is the latest advancement that your company has developed to address the growing client demand for sustainability?

We are cooperating with a number of companies throughout the world. One makes fabrics out of recycled plastic and another makes naturally degrading polyester. Also, we are developing “Recycled Sequin,” which is growing in demand in kids’ and adult fashion.

What is fashion still missing when it comes to sustainability?

End consumers must retain a higher level of awareness. To be specific, they need a clear understanding on why sustainable fashion matters...For that purpose, the buyers must advertise their philosophy or strategy on sustainability with tangible examples showing how they can affect the lives of customers and communities, rather than exploiting it as a marketing point.



Key obstacles for the widespread adoption of such materials include the difficulty of separating fiber blends, the limited scalability of current textile-to-textile recycling technologies, the dearth of investor or government incentives and the still-niche market demand for textiles containing recycled content.

Case in point? Though the recycling sector has boomed—between 2014 and 2019, the number of facilities certified by the Recycled Claim Standard increased nine-fold, and those certified by the Global Recycled Standard ballooned by 360 percent—just one-third of recyclers can process more than one material composition.

All of which is to say, the fashion industry has a long way to go when it comes to waste, whether zero or not.

“Fashion and apparel companies are often huge organizations with decades of ritual and routine so it won’t happen overnight,” said van Gendt. “However, there are bright spots of hope with newer companies taking the care to build sustainable products and major players starting to change their way.”

Keh envisions a world where zero-waste fashion is more than a pipe dream, but only if the industry adopts a “broader view” of the problem that attacks it on multiple fronts: design, production, business models and end-of-life management.

“The challenge for most brands is the investments and changes necessary to get us there,” he said. “This requires strong leadership, a compelling vision and a sense of urgency.”





Digitalization in the Manufacturing Language

Reduce physical waste and implement sustainable processes by digitalizing developments from planning, pattern design, colorway evaluation to production, and sales promotion.




Flat Knitting

The APEX is capable of designing an engineered knit structure, intarsia and jacquard pattern, while capturing the yarn's realistic characteristics to achieve a high quality simulation. The APEX also improves the development process by providing a vast database of over 1500 structures, that are converted into real-time data for SHIMA SEIKI knitting machines.



Weaving

The APEX can be used to digitally design textile patterns including stripe, check, dobby, jacquard and multiple layer weaves. Three-dimensional weaves such as crepe and seersucker, and raised nap are also possible.



Circular Knitting

The APEX can be used to design circular knit fabrics including stripes and Jacquard patterns. A variety of structures can be applied for single-knit fabrics, such as jersey or tuck patterns; as well as for double knits.



Print

The APEX is equipped with the capability to design prints easily with pattern variation tools and produce various colorways in a full-color specification using the built-in PANTONE database and chromameter. The automatic colorway feature can instantly produce a variety of color schemes by using a custom color palette, inspiration image, theme and more.



3D Modelist

The APEX goes beyond only 2D simulations and allows you to virtually render apparel or sock designs. Custom avatars ranging in age and gender can be created while allowing the user to add their engineered knit, print or woven fabric in a high-quality simulation.



H&M: Sustainability Could Play ‘Even More Crucial Role’ in Facing Retail’s Newest Challenges

THE CORONAVIRUS HAS CAUSED CHAOS IN THE INDUSTRY, BUT SOME BRANDS ARE STILL COMMITTED TO SUSTAINABILITY.

KATE NISHIMURA

Even amid the chaos caused by the coronavirus, some brands are holding fast to sustainability commitments made during brighter days.

H&M Group released its Sustainability Performance Report for 2019, highlighting the company’s efforts to combat climate change and promote circularity in its supply chain.

According to the report, H&M group used 97 percent recycled or sustainably sourced cottons in 2019, and has committed to continuing on that trajectory. The company said it will not source any “conventional” cotton for its collections this year, or at all moving forward.

More than half (57 percent) of H&M’s materials are now either recycled or sourced more sustainably, and the company says it’s on track to meet its goal of reaching 100 percent by 2030.

Additionally, all of the fast-fashion firm’s 600 textile and leather suppliers are now enrolled in the Zero Discharge of Hazardous Chemicals program.

Building upon refinements to its supply chain, H&M said it’s exploring new circular business models and has launched programs related to customization, repair, renewal, rental and re-commerce over the past year, as well as beginning the switch to reusable packaging.

More than 29,000 tons of garments



—
**“Looking ahead, not
only our industry
will continue
changing rapidly,
but also the world
as a whole.”**

—*Anna Gedda, H&M*

were collected for recycling or reuse, the company said, and experimental new materials were created from algae, pineapple and other fruits.

In March, H&M partnered with Swedish company Re:newcell to release Circulose, a “climate-friendly” material derived from old jeans, T-shirts and other discarded cotton apparel.

“I am proud of all the progress we did in 2019,” Anna Gedda, the company’s head of sustainability, said in a statement. “Looking ahead, not only our industry will continue changing rapidly, but also the world as a whole.”

Gedda went on to acknowledge that 2020 began with an unprecedented challenge in the form of the COVID-19 outbreak, an issue that is impacting companies and societies worldwide.

Despite the disruption the pandemic has caused to the world’s retailers, and more broadly, the global economy, she insisted that sustainability efforts shouldn’t be pushed to the back burner.

“I am confident that the long-term vision we always had, and will continue having, on sustainability will play an even more crucial role in facing these challenges,” Gedda said. “It will be more important than ever to continue our journey towards a circular economy and sustainable consumption while creating prosperity through job opportunities.”

The company’s efforts over the past year have landed it a top-five spot on Fashion Revolution’s Fashion Transparency Index, and H&M said 1,332 of its supplier factories, mills and processing facilities reported to the Higg Index Facility Environment Module in 2019.

Highlighting H&M’s action with regard to climate change, water conservation and deforestation prevention, environmental reporting group the Carbon Disclosure Project included the company on its 2019 A List of top performers.

In light of the international health crisis that has prompted a nosedive in consumer demand, H&M has also promised to honor orders from its network of international suppliers and manufacturers. Despite having temporarily closed 3,441 stores in key markets across the globe due to COVID-19, the company is, for now, taking these orders.

“We will stand by our commitments to our garment manufacturing suppliers by taking delivery of the already produced garments as well as goods in production,” H&M confirmed to Sourcing Journal. “We will of course pay for these goods and we will do it under agreed payment terms. In addition, we will not negotiate prices on already placed orders. This is not only the case in Bangladesh, but for all production countries.”



How COVID-19 Makes the Case for Sustainable Tech

THE CORONAVIRUS CRISIS IS FORCING FASHION TO FACE THE REALITY THAT IT NEEDS TO CLEAN UP ITS ACT—AND TECHNOLOGY WILL BE CENTRAL TO THAT QUEST.

JESSICA BINNS

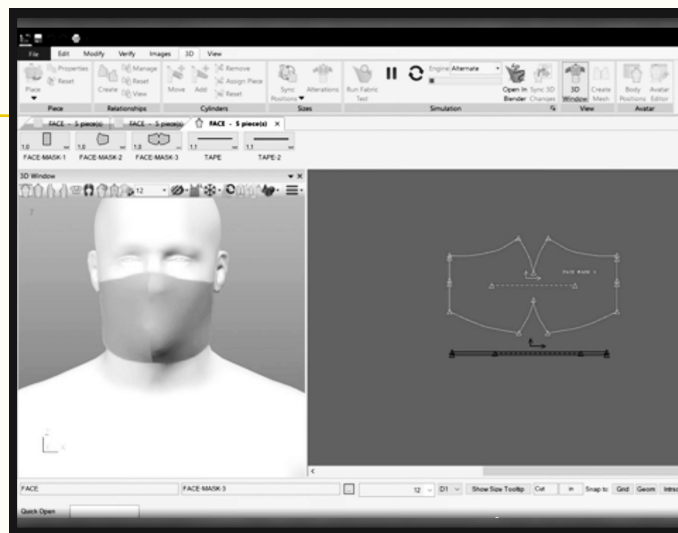
Inventory management has long been a thorn in fashion's side, but a coronavirus pandemic that has despoiled brick-and-mortar clothing and shoe stores in a matter of weeks is bringing renewed urgency to an evergreen source of concern.

But inventory isn't the only component of a notoriously wasteful industry driving brands to look at planet-friendly tech. The outbreak is pushing across-the-board aspects of digitization to the fashion fore.

INVENTORY IMPERATIVE

COVID-19 has made virtually every store-based seller of fashion and footwear think long and hard about all of the unsellable goods sitting in darkened stores and piling up at warehouses and distribution centers.

Compounding the problem: many retailers still lack actionable visibility into where within their supply chains their merchandise is stationed (or transiting) at any given moment, according Retail Systems Research (RSR). Asked where they have "a lot" of transparency on their goods, most retailers in an RSR survey pointed to the inventory available in their distribution centers. At 58 percent, the result doesn't inspire a tremendous amount of confidence, but it's a 6 percent improvement over 2015's findings, RSR revealed in its "The Retail Supply Chain: Designing New Ways to Satisfy Demand" benchmark on the state of the retail supply chain.



MASK PHOTO CREDIT: DARREN BEAMAN, ADRIAN JULES, CUSTOM CLOTHIER

Lacking these insights, retailers, especially those that sell trend-driven apparel, often fail to efficiently move merchandise at the highest price, driving staggering markdowns and the "disposal of excess inventory," said Fuse Inventory's Divya Vaid, which not only erodes margins but can also lead to the kind of wasteful ways that have afforded apparel its planet-polluting reputation.

When the forecasting and ordering components of inventory management are executed smartly, brands can "alleviate the need for drastic measures to offload stale goods," said Vaid, a senior business analyst for Fuse, which bills itself as the "inventory planning solution powering the next generation of commerce."

Though COVID-19 is creating product

pileups for the vast majority of Western fashion sellers, myriad factors can drive inventory challenges, even when a historic pandemic isn't to blame. Fashion retailers all too often make the terrible mistake of "misinterpreting consumer demand," Divya noted, "and simply buying too much."

Brands, just like the social-media generation, suffer from a "fear of missing out," Divya added, driving many to buy too deeply into new collections "in hopes that their marketing efforts can sell through all the inventory." But as the saying goes, "hope is not a strategy."

One hundred percent sell-through stands as retail's holy grail, yet it's a goal that remains out of reach for many, thanks to months-long lead times that mean missing out on trends or forecasting models gone awry.

Fuse aims to solve these problems by helping to wean emerging brands from their reliance on spreadsheets, instead offering a single source of truth for all things supply chain—from wholesale accounts and e-commerce to brick-and-mortar retail and third-party logistics providers. Brands onboarded to the Fuse platform have slashed their overstocks by 70 percent, Vaid pointed out.

Despite the prevalence of order and SKU-management tools, Vaid claims rapidly rising brands are faced with paltry options for "true demand forecasting based on statistical algorithms and industry best practices."

New York City-based digitally native shoe label Margaux, which built its brand on making size-inclusive feminine footwear in the \$155-\$375 direct-to-consumer sweet spot, used Fuse to discover which sizes in its range of 3-13.5 in narrow, medium and wide widths drove a mismatch of supply (too much) to demand (too little). Overstocked in slow-moving SKUs, Margaux found itself tying up tens of thousands of dollars in capital that could have been devoted to profit-driving product.

"Our predictive forecast accurately captures demand, seasonality and trends," Vaid said. "With the appropriate variables accounted for, retailers can rest assured knowing they bought the right amount of

inventory, every time—thus, eliminating the need for harmful disposal."

Though uncertainty clouds retail's post-pandemic future, the global crisis is serving as a painful wake-up call, said Benjamin Kelly, co-founder and CEO of Singuli, an inventory optimization platform built from learnings gleaned at subscription innovator Birchbox.

Decrying the unsustainable excess seemingly built into the fashion enterprise, Kelly said by attaching attributes to product data and closely examining customer behavior, brands can begin to plan future products from an evidence-based background. Chosen by digital natives like Dia&Co., M.Gemi and Rockets of Awesome, Singuli offers a model that educates brands on the perks and pitfalls of price elasticity, helping to ensure they're never sacrificing more margin than necessary by showing how a product performs with varying discounts, for example.

So far, Kelly says results show Singuli's forecast error rate clocks in at half that of what brands were achieving without the startup platform. With smarter, more accurate insights, brands are equipped to buy more tightly, rid their inventory of excess and slash stockouts, he added.

As the dust remains yet to settle from the trauma of COVID-19, Kelly believes this wave of disruption could ignite the localization movement, marked by supply chains that are less reliant on interminable lead teams and bulk buying and more prone to rapid replenishment—yet another step toward operating sustainably and in tandem with consumer demand.

More than ever, fashion desperately needs technology that offers situational awareness on the inventory front. Many brands that thought they had a handle on their merchandise are now learning otherwise. "Now we're seeing what a supply-chain shock can do," Kelly said.


DIGITAL'S NEW URGENCY

And the crisis is proving to be a much-needed wake-up call for brands that have dragged their feet on embracing the digital revolution.

As fashion team members are now iso-

70%

Amount by which Fuse platform users have slashed their overstocks



lated in their individual homes far away from their collaborative office spaces, digitization, says Gerber Technology marketing vice president Ketty Pillet, is becoming an absolute imperative for any brand or retailer hoping to ride the wave of these turbulent times.

Though adopting digital design and production tech tools might be a matter of sheer survival, it's also an important step toward fashion's sustainability makeover. Made-to-measure custom clothier Adrian Jules, for example, whittled the number of samples necessary to make its suits and other tailored goods by 75 percent—meaningfully conserving raw materials and minimizing waste by onboarding Gerber's 3D pattern making and virtual sampling tech.

"We are proponents of technology here at Adrian Jules, and we really see Gerber's AccuMark 3D assisting not only in sustainability but giving us flexibility when we need to develop patterns," said Alexa Roberti, director of sales for the men's wear clothing maker.

Because many apparel companies already work in 2D, upgrading to 3D isn't such a huge leap, Pillet said, and can be a great starting point for firms attempting to infuse environmentally minded technology into their processes.

Beyond easy-to-onboard software like 3D design tools and mission-critical product life cycle management platforms, Pillet believes clothing labels traumatized from COVID-19's devastating toll on supply chains will accelerate interest in on-demand manufacturing, which was already on the rise before the outbreak struck.

Mass manufacturing of high-volume goods like T-shirts and underwear will never fully relocate from the production

powerhouses in Asia, she said, but brands are beginning to appreciate the attractive upsides to leveraging an end-to-end tech stack to conceptualize, customize, cut and create unique trend-right capsules or one-offs in a matter of days, not weeks or months. On-demand, in addition to purchase-activated manufacturing tech, minimizes inventory levels, and therefore inventory waste, further bolstering a brand's sustainability profile, she added.

Plus, Pillet believes Made in America and its smaller carbon footprint achieved by making and shipping closer to home will matter to COVID-scarred consumers—and therefore to brands hoping to align with new customer values.

But even more important, Pillet said, is that many apparel makers pivoting to produce personal protective equipment are using collaborative digital tools for the first time—and likely won't be able to stomach reverting to their manual, unsustainable processes after the coronavirus crisis abates. Face masks, for example, must fit perfectly to be effective at keeping out harmful particles, elevating the impact of a cutting-edge full-stack production system. In pre-production, perfect markers drive perfect nesting, maximizing fabric utilization while limiting off-cuts. Smart cutting tools, she added, help to avoid having to execute recuts—which means throwing away deficient masks that could otherwise aid in saving lives.

An integrated solution of hardware and software enables clothing companies to avoid the kinds of errors that create excess and waste. Pillet sees the uptake of digital fashion tools continuing in the pandemic's aftermath now that many have "discovered" how uncomplicated working in 3D, for example, can be.

"Digitization...is becoming an absolute imperative for any brand or retailer hoping to ride the wave of these turbulent times."

—Ketty Pillet, Gerber Technology





Report: Obstacles Abound for Post-Consumer Textiles Seeking End Markets

JASMIN MALIK CHUA

Despite a surge in the number of brands incorporating recycled materials into their products, sorted post-consumer textiles still struggle to find suitable end markets that preserve their highest value, a recently released report claims.

The barriers range from socio-cultural to regulatory, according to the Fibersort Consortium, a group of textile industry stakeholders behind the world's first automated technology to allow large volumes of mixed post-consumer textiles to be sorted based on fiber composition.

Northwest Europe alone generates 4.7 million metric tons of post-consumer

textile waste annually, noted the consortium, which includes partners like Circle Economy, Procotex, Salvation Army Re-Share, Smart Fiber Sorting, Worn Again, and Valvan Baling Systems.

The problem is accelerating consumption and disposal practices, which are causing textiles entering the market to “reach their end-of-use rapidly,” the report noted. The average person in the Netherlands, for instance, disposes of 40 clothing items every year. Yet fewer than 1 percent of textiles produced are currently recycled into new ones. Instead, roughly half is downcycled, incinerated or landfilled.

Key hurdles for the market readiness



and uptake of such materials include the difficulty of separating fiber blends, the available textile-to-textile recycling technologies, the potential (and incentives) for further development of these technologies, and the market demand for materials containing recycled content.

While the recycling sector has boomed—between 2014 and 2019, the number of facilities certified by the Recycled Claim Standard increased nine-fold, and those certified by the Global Recycled Standard ballooned by 360 percent—just one-third of recyclers can process more than one material composition.

Some 60 percent of recyclers use mechanical technologies, which require color sorting and the physical removal of trims and hardware, resulting in “low financial viability” and poor price parity with virgin materials. As such, recycled content from post-consumer sources remains low. “Most chemical recycling still remains at pilot scale, with the exception of post-industrial textile waste for certain materials such as polyamide,” the report noted.

Denim provides one exception, however. The denim industry, according to the report, has adopted both mechanically and chemically recycled post-consumer cotton yarns into collections, and jeans can contain an average recycled content of between 15 percent and 40 percent.

“The consistency of denim fabrics allows for less uncertainty in the feedstock

of the recycling processes, although accurate sorting of the material remains key to identify high percentages of non-cotton materials such as elastane or polyester,” the authors of the report wrote, pointing to collaborations such as Mud Jeans and Recovertext, Evrnu and Levi Strauss, and G-Star and Artistic Milliners.

Another issue? The lack of traceability on most textiles, which risks reintroducing textiles into the system that could threaten product safety due to chemical contamination. It is of “primary importance,” the report emphasized, that recycled textiles comply with brands’ and manufacturers’ restricted substance lists (RSL), the European Union’s REACH 2020 regulations, and more extensively with ZDHC’s RSL. “Therefore, traceability of materials and components can be identified as a priority to enter the market,” the authors noted.

Still, the opportunities to scale the use of recycled textiles are manifold, as evidenced in the growth of textile-to-textile recyclers and recycling technologies, the number of manufacturing facilities certified by standards proving recycled content and the increasing number of brands working to deploy recycled content into their (albeit niche) collections.

“Nevertheless, further research, development and piloting remains to be done in order to fully understand and solve the barriers that still remain regarding recycling post-consumer textiles,” the report noted.

“Just one-third of recyclers can process more than one material composition.”



Bangladesh RMG Sector Gets New Web Tool to Increase Sustainability

JASMIN MALIK CHUA

A new web tool is poised to help Bangladesh's readymade garment sector improve its use of resources, like water and energy.

Launched by the International Finance Corporation (IFC) at a Partnership for Cleaner Textile (PaCT) meeting in Dhaka, the PaCT Portal will leverage data-driven monitoring and real-time analytics to help garment factories make more informed decisions about water and energy consumption, and, in turn, result in greater efficiency and savings.

"It can play a big role in leading the industry towards sustainability and achieve results that are right for the industry, the planet and our future generation," Nishat Chowdhury, program manager for PaCT, said.

Bangladesh's \$30 billion clothing sector accounts for more than 80 percent of its export earnings and 16 percent of the country's gross domestic product. It's the world's second-largest apparel exporter after China, and employs nearly 4 million workers in 4,800 factories.

PaCT says its multi-stakeholder partnership, which boasts support from Australia, Denmark and the Netherlands, has to date helped the industry save 25 billion liters of water and 2.5 million megawatt-hours of energy a year.

"The textile industry in Bangladesh continues to be a priority for IFC," said Wendy Werner, country manager for Bangladesh, Bhutan and Nepal, at IFC,



which is the private-sector arm of the World Bank. "Through programs like PaCT, we hope to contribute towards improving sector competitiveness by promoting resource efficiency through innovative ways and evolving with global trends."

Five leading brands and retailers—Gap Inc., Levi Strauss, Puma, Tesco and VF Corp.—have partnered with PaCT to adopt the tool, along with Jeanologia, Radiant Alliance and EMKAY, which will serve as technology providers. PaCT also named the Bangladesh Garment Manufacturers and Exporters Association (BGMEA), the country's trade union for factory owners, as its implementing partner.

"It can play a big role in leading the industry towards sustainability..."

*—Nishat Chowdhury,
PaCT*



Here's How Asos Cut Per-Order Carbon Emissions by 30%

JESSICA BINNS

Asos is striving to do good for the environment.

The youth-oriented fashion e-commerce giant has slashed the amount of carbon emissions it generates through the fulfillment operations per order by 30 percent in the five years since committing to this eco goal in 2015-2016.

What's more, per-order carbon emissions have shrunk for the past three consecutive years, Asos said in its Carbon Report, culminating in an 18 percent improvement for fiscal 2018-2019, thanks in large part to its 1-million-square-foot Atlanta fulfillment center going online—which has allowed the merchant to minimize the number of orders it flies in from the U.K. Opening the stateside warehouse has enabled Asos to offer convenient—if carbon-heavy—options like next-day delivery for coastal U.S. shoppers.

Despite Asos' expansion from 12.4 million active customers and 1.44 billion pounds (\$1.84 billion) in revenue in fiscal year 2016 to 20.3 million active customers and 2.73 billion pounds (\$3.5 billion) in turnover through fiscal year 2019, per-order emissions declined even as the company overall emissions increased. For example, its absolute carbon footprint climbed by 4 percent from 83,993 tons to 87,384 tons between 2012 and 2018. Yet the e-tailer's carbon footprint per ton shrank by 14.6 percent from 25.35 to 21.64 over the same frame.

According to Asos CEO Nick Beighton, 2015's Carbon 2020 initiative has relied on the "delivery of six big ambitions" that limit "grams of carbon dioxide per customer order," and minimize one of



online shopping's biggest drawbacks: environmental harm.

"Those ambitions focused on reducing emissions relating to our customer deliveries and returns, order packaging, energy efficiency, reducing energy consumption, and switching to renewable energy sources," he wrote in a foreword to the Carbon Report.

Asos recently took another step toward reducing its footprint by converting to a fully digital returns process. Shoppers will no longer receive printed returns labels inside their parcels, a move the company said will eliminate the roughly 64 million inserts it sends annually, equal to saving 8,450 trees.

With orders and group revenue both up 20 percent in the four-month period ended Dec. 31, 2019, and youth culture demanding action on the environmental front, a growing Asos business has every incentive to keep its greenhouse gases under control.





JULY 8 / 2020

FASHION'S BUSINESS MODEL FOR
SUSTAIN
ABILITY

{ Now Virtual }

Tickets on Sale Now





Sustainability 2020 is a Sourcing Journal Media publication, which features a compendium of the most noteworthy stories published by the media company focused on the upcoming supply chain sustainability landscape, as well as original reporting on related topics exclusively for our partners:

HANSAE
fashion worldwide

SOURCING
MAGIC

SHIMA SEIKI U.S.A. INC.