

THE

Ethical

CORPORATION MAGAZINE

SUSTAINABLE FASHION BRIEFING

August 2023

Can we stop fast
fashion from

SELLING OUR PLANET DOWN THE RIVER?



● From recycled bottles
to reused threads

● Cotton supply chain
feels the heat

● Brands struggle to widen the
circle with reuse models



Welcome to the August 2023 issue:

Sustainable fashion briefing

When I planned this issue of the magazine, I thought it would make for a light summer read, ahead of London Fashion Week in September. Instead, it's turned into one of the weightiest tomes of the year.

And little wonder, as there are so many threads to unravel in a \$1.5 trillion industry that is freighted with environmental and social impacts, stretching deep into a fragmented and largely opaque supply chain.

As Angeli Mehta reports in her opening article, the fashion sector is responsible for between 2% and

8% of global greenhouse gas emissions, depending on whether the energy mix of grids, and consumers washing and drying their clothes are taken into account.

Recent industry commitments to decarbonise scarcely scratch the surface of Scope 3 emissions, those in brands' supply chains and how their products are used and eventual disposed of, although they account for 96% of their carbon footprint.

Regulators are now stepping in to try to put on the brakes on cheap, throw-away fast fashion, >



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which has seen production double over the past 15 years to meet spiralling demand from consumers. And with only 1% of clothes being recycled into new textiles, the industry's attendant waste and pollution problems are ballooning.

As Amy Brown reports, new circular business models are all the rage, with resale, rental, repair and remake platforms proliferating. Among them are fast-fashion giants H&M and Zara owner, Inditex, which have set ambitious circularity goals. But such models still only account for 3.5% of the market.

And while brands have trumpeted their efforts to substitute virgin polyester with recycled PET from plastic bottles, Angeli Mehta reports that this practice, which accounts for 99% of all recycled content, may fall foul of the EU's proposed Green Claims directive. That's because it puts the apparel industry in competition with the drinks bottle industry, where the plastic could be recycled many more times. She digs deep into the challenges brands such as Adidas and Inditex face as they try to move away from using PET and virgin cotton and scale up the use of recycled threads.

Pollution from chemicals use, microfibres in oceans, pesticides use, deforestation and high usage of water are just some of the impacts the sector has on nature, yet fewer than a dozen of the Fashion Pact's 61 members have a biodiversity strategy. As Oliver Balch reports, there are now numerous efforts to right the imbalance between climate and nature in corporate management strategies, among them new guidelines from the Science Based Targets Network, which H&M, Carrefour and luxury brand Kering are test-piloting.

Sandy Ong reports from Singapore on how the new EU regulations will have a resounding impact on Asian manufacturers, which supply more than 70% of the EU's textiles. They will need access to tens of billions of dollars to adapt their processes.

Singapore-based Shein is squarely in the sites of environmental campaigners, who see it as a prime contributor to the mountains of discarded waste textiles exported to countries in the Global South.

The company, which churns out thousands of new designs a day, marketing directly to its millions of



AMMAR AWAD/REUTERS

social media followers, has no intention of slowing down, reportedly looking to double revenues by 2025. Catherine Early talks to the company about its efforts to become more circular.

The industry's social impacts is another area where the lights are flashing red. As Mark Hillsdon discovers, a decade after the Rana Plaza disaster in Bangladesh, industry collaboration has made garment factories safer, but there has been no concerted effort to address endemic long hours and low wages.

He also reports on a landmark lawsuit brought in the UK against Tesco and its social auditors by 130 Myanmar workers, who allege they were forced to work for illegally low pay producing F&F jeans.

Climate change is already making the lives of the 350 million workers in the cotton supply chain more precarious, and the impacts are only going to intensify. Catherine Early looks at nascent industry >

Afghan children carry cotton clumps in a field in Jalalabad, Afghanistan, in 2012.



efforts to help smallholder farmers become more resilient and adopt more regenerative practices.

Climate change is far from the only risk facing the cotton industry. Amid revelations about the state-imposed forced labour in China's Xinjiang province and Turkmenistan, a swathe of new regulations in the U.S. and Europe are forcing companies to, for the first time, take direct liability for human rights abuses in their cotton supply chains. Catherine Early reports on new tools to help supply chain transparency.

In the interview section, Sarah LaBrecque talks to Eva Karlsson, chief executive of Sweden's Houdini Sportswear, about her company's mission to operate within planetary boundaries.

And we have commentary from Adam Mansell of the UK Fashion and Textile Association about how the UK is paving the way for a more circular fashion industry in a cross-sector collaboration to dramatically increase textile-to-textile recycling.

Lewis Akenji of Hot or Cool Institute rounds off the issue by arguing that Shein is only the most

obvious manifestation of a prevailing ethos in the fashion industry that cares little about sustainability and labour conditions, and is focused on optimising profits. He says efforts by regulators to slow down fast fashion must not shift the burden to lower-income countries and consumers.

After a pause for a summer break, we'll be back at the end of September with our next briefing, on carbon removals. ●



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Magali Anderson
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Innovation Officer



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READ ONLINE

Burberry's London Fashion week show. The brand recently issued a sustainability bond.

HENRY NICHOLLS/REUTERS

Beneath the green gloss, fashion industry 'way off track' on cutting carbon from the catwalk

Lack of transparency is impeding decarbonisation progress in a sector that accounts for up to 8% of global emissions. [Angeli Mehta](#) reports





SAMUEL RAJKUMAR/REUTERS

A worker mans a conveyor where dyed and washed garments are flattened, steamed and ironed at a textile factory in India.

The records are tumbling this year as the world keeps getting hotter. Industries aren't doing enough to cut greenhouse gas emissions, and fashion is no exception. A plethora of labels and pledges hide the bitter reality that this influential industry isn't making anywhere near enough progress on taking carbon out of the catwalk.

This is put at anywhere between 2% and 8% of global emissions, depending on factors such as the energy mix of grids and whether consumers washing and drying their clothes is taken into account.

Yet the technologies to make a big dent in emissions inventories already exist and could be

The vast majority (96%) of fashion brands' total emissions are in Scope 3, which occurs in shipping and supply chains.

added to by materials efficiencies and cutting over-production. [An analysis](#) by McKinsey suggests reducing by just 15% the volume of stock that gets sold at a discount would see emissions fall 10% without impacting on value.

Indeed, McKinsey's analysis sets out a whole range of measures across the supply chain that would generate cost savings that would more than pay for investments in renewables and materials recycling. It estimates that almost 90% of abatement will cost less than \$50 per tonne – that's about half the recent price of a tonne of carbon on the EU emissions trading system.

There's no shortage of industry groupings that could move the sector forward, although with many of the same members. The 160 brands who've signed up to the [Fashion Pact](#) have pledged to have 50% renewables in their own operations by 2025, and 100% by 2030.

The collective target is within reach, but it's down to the efforts of about of a third of members, who already achieved the target in 2020. There is also a range of early-stage pilots aimed at developing lower-impact raw materials. The Sustainable Apparel Coalition (SAC) has a decarbonisation plan to realise a 45% reduction in the sector's emissions by 2030. From this year, it is asking brands and retailers to commit to setting science-based targets, something it says half have already done.

Setting a science-based target "should be non-negotiable for this industry", says Richard



FABIAN BIMMER/REUTERS





Wielechowski, who heads the textiles programme at financial think tank Planet Tracker. But, he adds, then comes the challenge of delivering. The Science Based Targets initiative (SBTi) requires emissions reductions of at least 4.2% a year to stay on a pathway aligned with keeping global heating within a limit of 1.5 degrees Celsius.

Some 96% of the total emissions of the fashion brands are in Scope 3, which occurs in the industry’s supply chain, and in their products’ use and eventual disposal.

However, the SAC has agreed that manufacturers must set targets only for Scope 1 and 2 emissions – those under their direct control or from the generation of electricity which the company consumes.

Some of the big manufacturers, like YKK, have set science-based targets, but Andrew Martin, SAC’s executive vice president, says many small to medium enterprises (SMEs) do not have the knowledge, skills or resources to set them. It plans to support them to do so, but Martin notes that “many manufacturers have a very limited ability to influence their Scope 3, which is largely determined by brand choices.”

The coalition, which has been criticised in the past for a lack of transparency, says it will publish members commitments next year, although there’s no final decision on whether to disclose progress. Martin acknowledges that real change won’t come without “ambitious, harmonised regulation ... that will level the playing field for the whole industry.”

One brand that has been transparent about

its commitments is Swedish fast fashion chain H&M, which is now considered a sustainability leader on many indices. It ranked sixth on Fashion Revolution’s latest Fashion Transparency Index, scoring 71%.

H&M’s target is a 56% reduction in Scopes 1 and 2; as well as a 56% reduction in Scope 3 emissions by 2030, compared with a 2019 baseline. As is the case in most companies, H&M’s Scope 3 emissions are 90 times emissions in its own operations. Its latest report, for 2022, shows it’s so far cut them by 7% to around 5.6 million tonnes, compared with its 2019 baseline. And this progress doesn’t include the consumer use phase, which adds another 1.4 million tonnes.

DEARTH OF DATA

Keeping track of what’s going on in the industry and making comparisons is made harder by a lack of good-quality data, and a failure of many industry players to disclose what’s included, for example in Scope 3 emissions, or use of renewables in the supply chain.

Some companies report emissions intensity, which can mask an increase in carbon emissions as the business grows. Luxury brand Kering recently announced a shift away from this practice. Its chief executive François-Henri Pinault said: “if we want to truly decarbonise our global businesses, we need to move from carbon intensity reductions to absolute reductions.”

The supply chain that sits behind the shop >

The Botum Sakor national park in Cambodia. Illegal logging is being used to fuel garment factories in the country.

window is divided into tiers. Tier 4 at the bottom, produces raw materials such as polyester (derived from fossil fuels) and cotton, where fertiliser inputs (also from fossil fuels) ramp up emissions. More than half of all fibres now used are polyester – arguably its dominance has enabled the rise of fast fashion. Polyester recycling isn’t at scale, so the industry can only claim emissions reductions by turning to polyester made from recycled food-grade PET bottles. Hardly circular. (See [Can the fashion industry move from recycled bottles to reused threads?](#))

Raw materials become fibres at tier 3, fabric at tier 2 and garments at tier 1, with visibility on who supplies what [becoming poorer](#) the further down the chain. That’s why extensive efforts are underway to map supply chains in order to enable collaborations at a facilities level, and to understand workers’ rights and water and chemicals discharges. It’s also critical to tackling deforestation in supply chains, for example in Cambodia, where [UK researchers](#) identified garment factories fuelled by wood from natural forests.



It’s a challenge to deal with supply chain emissions, because brands don’t own the companies and a lot of pressure is on price

RICHARD WIELECHOWSKI, Planet Tracker

It’s at tier 2, where fabrics and trims are produced and finished that the [lion’s share – 52%](#) – of emissions derive. Here, pre-treatment, dyeing, printing and finishing treatments get carried out in water kept at high temperatures, usually fuelled by burning coal. Petroleum-derived chemistries, such as dyes, also contribute to emissions. There are two angles of attack: improving energy efficiency alongside the transition to renewable energy, as well as moving from wet to dry processes. As their name suggests, dry processes use very little water. A wide range of innovators are working on advances, from digitally controlled spraying and dyeing to ozone and laser finishing techniques.

If these could be scaled not only could coal be phased out, but along with it some of the chemicals that harm humans and ecosystems. Last year Fashion for Good launched a new consortium bringing together Adidas, Kering, PVH and Indian companies Arvind and Welspun to test these solutions with innovators.



VASILY FEDOSENKO/REUTERS

Scope 3 emissions occur in factories and workrooms many miles and continents away from where brands design and sell their clothing and, crucially, make their money.

“It’s a challenge to deal with the supply chain emissions, because they (brands) don’t own the companies and a lot of the pressure is still very much on price, rather than it being on delivering sustainable textiles,” says Planet Tracker’s Wielechowski.

He and colleagues recently [began to untangle](#) the industry supply chains to assess where profits are made compared to where environmental impacts occur. It wants to see investors start to pressure brands to invest in their supply chains, not only to improve their environmental footprint but to be able to substantiate sustainability claims – now coming under the spotlight of regulators in the U.S. and EU.

INVESTMENT CHALLENGE

Getting investment to where it’s needed has been challenging for a myriad of reasons. These include concerns around due diligence and governance in manufacturing countries of the Global South, the fact that many facilities are too small to attract the significant capital required and aversion to foreign-exchange risks. The opacity of supply chains makes it harder for investors to know where to apply pressure, says Wielechowski. Commitments to have suppliers use a proportion of renewables may be meaningless if enough clean energy isn’t available on the local grid. >

More than half of fibres now used are polyester.

BRENDAN MCDERMID/REUTERS



“This whole topic of decarbonisation has to be linked to purchasing practices,” asserts Ruth MacGilp, fashion campaigner at pressure group Actions Speak Louder. “If we continue to allow brands to have these irresponsible purchasing practices where they just flit around, finding the cheapest prices, and no responsible exit policies from contracts, it means that their suppliers aren’t necessarily willing or able to make an upfront investment to meet brands’ climate targets.”

She and Wielchowski agree that giving suppliers a guarantee of future volumes that would allow them to make the investments needed to swap out coal boilers (for example) would, in turn, encourage brands to risk-share because they will get a return on their investment by sticking with that supplier.

Actions Speak Louder is campaigning to get fitness brand Lululemon (a member of the SAC) to commit to phasing out coal and source only renewables across its supply chain by 2030. “That sort of public commitment sends a signal to the sector,” says MacGilp. “We know it’s not an overnight switch, but these big brands have a lot of influence” in countries like Cambodia and Vietnam.

While Lululemon says it’s committed to achieving net zero emissions by 2050, its most recent sustainability report shows Scope 3 emissions going in the opposite direction – almost double its 2018 baseline year.

But the brands won’t cut emissions by working alone. The Sustainable Apparel Coalition is bringing brands, retailers and manufacturers together in

Actions Speak Louder is campaigning to get fitness brand Lululemon to commit to phasing out coal and source only renewable energy.

peer groups to learn from each other as part of its decarbonisation plan.

“Their science-based targets will only be achieved in partnership with the supply chain,” says Martin at SAC. That means taking a much more holistic approach across a company. “So how are your buyers involved with decisions on purchasing related to the energy of a factory. It cannot be just the sustainability people looking at their supply chain, you need to broaden it out. You need C-suite buy-in; you need purchasing teams to be trained.”

MacGilp wants to see more initiatives such as Apple’s supplier clean energy programme, where the company has issued almost \$5 billion in green bonds for renewables development, as well as making direct investments.

Some fashion brands have followed – VF Corp, Chanel and Burberry, for example. Most recently, H&M’s 500 million euro sustainability-linked green bond was seven times over-subscribed. Interest payments are linked to meeting 2025 targets on cutting greenhouse gas emissions and using more recycled materials.

Fashion for Good and the Apparel Impact Institute [estimate](#) that just over \$1 trillion will be required to help the industry reach net zero by 2050. Around half of that figure is required to finance existing solutions. It says it is critical that all stakeholders, including industry and governments, work together so that investors are presented with opportunities that both have attractive returns and make a climate impact, as well as being understandable.

But investors seem unwilling to take risks on disruptive but untested technologies, which is why Fashion for Good has developed a \$19 million blended finance initiative. It has so far made three investments in companies in Bangladesh and India. The Apparel Impact Institute is trying to raise a \$250 million fashion climate fund. So far six investors have committed \$60 million, and the first grants are expected to be announced soon.

The upfront investments can’t come soon enough. When a brand openly acknowledges “we made too much”, as Lululemon does, on the sales page of its website, it’s time to imagine a new world where brands can boast “we made less” products, of higher quality and value. ●



Angeli Mehta is a former BBC current affairs producer, with a research PhD. She now writes about science, and has a particular interest in the environment and sustainability. [@AngeliMehta](#).

Brands struggle to widen the circle when it comes to sustainable fashion

New circular business models are all the rage, but are still far from getting to the necessary scale, writes **Amy Brown**



ANNA RINGSTROM/REUTERS

Look at just about any major brand and you'll find a commitment to move away from the make-take-waste linear economy that has defined fashion for the past 100 years and embrace a circular economy in which fashion is produced sustainably, made to last longer and repaired or recycled after use.

That's an ambitious goal for an industry notorious for its waste. The statistics are alarming: production has doubled over the past 15 years while the amount of time clothing is worn has dropped 40%. Yet at the end of life, **less than 1%** of clothing is recycled. Every second a truckload of garments goes into either landfill or incineration, while tons >

H&M gowns for rent at a store in Stockholm, Sweden.



ERIC GAILLARD/REUTERS

of waste clothing also ends up dumped in countries like Ghana, Pakistan and Kenya, where they constitute an environmental hazard.

“Today’s fashion system is fundamentally broken. We take resources from the ground to make products that are used for a short amount of time and ultimately, they’re just thrown away,” said Chloe Anderson, programme manager for the Ellen MacArthur Foundation Fashion Initiative. “We’ve never produced more clothes and we’ve never worn our clothes less.”

The circular economy is guided by three principles: to eliminate waste and pollution, to keep products and materials in circulation, and to repair and regenerate nature. For fashion, that translates into products made to last from sustainably sourced materials, supply chains that use lower-impact



Today’s fashion system is fundamentally broken. We take resources from the ground to make products that are used for a short time and are just thrown away

CHLOE ANDERSON, Ellen MacArthur Foundation

production processes and integrate repair, reuse and recycling, and customers engaged in the circular journey.

The climate crisis has added urgency to the effort. Initiatives such as [The Fashion Pact](#), a chief executive-led coalition of 60 companies in the fashion and textile industry, and [Fashion for Good](#), a coalition of brands, producers, retailers, suppliers, non-profits, innovators and funders, have made circularity a cornerstone of addressing the industry’s outsized environmental impacts. The clothing and footwear industry is responsible for up to 10% of greenhouse gas emissions, more than shipping and international flights combined.

There is also a strong business case. By 2030, 23% of the global fashion market could be made up from circular business models, valued at up to \$700 billion, EMF estimates.

Today, resale, rental, repair and remaking are worth more than \$73 billion, or 3.5% of the market, and growing fast. This includes fast-fashion firms like H&M, which aims to be 100% circular by 2030, and Inditex, owner of Zara and the world’s third largest retailer. [Inditex shared](#) new targets in July, including that all its textile products will use more sustainably sourced fibres by 2030. Luxury brands like Ralph Lauren and Coach are part of the trend, too, alongside pioneers such as Patagonia and North Face.

The circular initiatives are laudable but are they sufficient to shift the industry and consumers away from disposable fashion and scale from 3.5% of the market to 23% by 2030? >

A clothes sale in Nice, France. Production of clothes has doubled in the last 15 years.

Consulting firm Kearney, which has been tracking circular fashion for the past three years, finds that [brands are not moving fast enough](#), with the average brand scoring below three on a scale of one to 10 when it came to circular apparel, both in their own actions and in the important task of educating consumers to demand sustainably produced fashion.

For example, a survey of consumers in Italy, France and the U.S. found that almost half could not say whether virgin materials were better or worse than recycled, and 30%-40% weren't aware they could return clothes for recycling.

At the same time, there is little interest in turning off the production tap. Inditex, for example, placed 621,244 tonnes of garments on the market last year, according to its 2022 annual report, 10% more than in 2021.



Take-back schemes, rental and other new business models are as effective as blocking a dam with a bandage unless issues of over-production are addressed

FASHION TRANSPARENCY

And Inditex is far from alone. The just-released Fashion Transparency Index 2023, an annual review of 250 of the world's largest fashion brands and retailers, ranked on a host of sustainability parameters, found that 12% of brands won't even reveal annual production volumes, and only two brands, Armani and United Colours of Benetton, disclose a commitment to reduce the number of new items they produce.

"Take-back schemes, rental and other new business models are as effective as blocking a dam with a bandage unless issues of over-production and over-consumption are addressed at the root," the Fashion Transparency report said.

REIMAGINING JEANS

Yet the potential of circular fashion innovation is evident from the Ellen MacArthur Foundation's [Jeans Redesign](#) programme, which targets a fashion staple that has outsized negative environmental and human rights impacts. These include use of forced labour (see [Brands scramble to address forced labour in cotton supply chains](#)) impacts, pollution of local waterways from the dyeing process and huge use of water and pesticides, in some of the most water-scarce parts of the world.

In 2019, more than 100 fashion brands, garment mills and manufacturers signed onto guidelines to design and construct jeans based on circular economy principles. [In the latest report](#), 70% of participants had designed 1.5 million jeans meeting the guidelines, with one in nine brands redesigning at least 40% of their jeans portfolio. More than a third of the companies applied the principles to >

A Patagonia repair shop. The market for resale, rental, repair and remaking is worth more than \$73 billion.



PATAGONIA



ANDREW WINNING/REUTERS



The industry’s dependence on blending natural fibres like cotton or wool with synthetic fibres like polyester and polyamide (nylon) presents a challenge in recovering and reusing textiles

other garments, including jackets, shirts, bags and hats.

The Jeans Redesign programme “is an entry point into this massive complex system that is the fashion system as we know it today”, Anderson said. “The participants have proved that redesigning jeans fit for a circular economy is possible.”

Netherlands-based MUD Jeans, an early participant, has a vision to become “the world’s first circular denim brand”. Its jeans are made from 40% recycled denim and 60% organic cotton and can be bought or leased. Customers can return the product when the denim is worn out, and MUD repairs the jeans or recycles them.

“For us, circularity starts with design,” said Lea Landsberg, sustainability manager for MUD Jeans. “But what happens to the product once it’s no longer worn is also important. Waste is only waste when it’s wasted. The materials that went into the jeans can be reused again, and that’s how we close the circle.”

MUD jeans pioneered its lease-a-jeans model in 2013. But today several brands have upwards of 40% post-consumer material in their jeans, including French luxury brand [Chloé](#), [Levi’s](#) and [Triarchy](#), Anderson says.

Yet the industry’s dependence on blending natural fibres like cotton or wool with synthetic fibres like polyester and polyamide (nylon) presents a significant challenge in recovering and reusing textiles. (See [Can the fashion industry move from recycled bottles to reused threads?](#))

“Boosting recycling is key to reduce the impact of our raw materials on nature,” an Inditex spokesman said. “However, today’s recycling technology is considerably constrained by both the fibres that can be recycled and the quality of the resulting fibre. Blends of different raw materials pose one of the biggest challenges for existing recycling systems as they cannot be shredded and turned into new fibres.”

It has taken an equity stake in U.S.-based firm [Circ](#), which has developed a technology to recycle ubiquitous polycotton using hydrothermal >

A woman walks past a Mulberry store in London. Part of brands’ task is to educate consumers.



Bert van Son, founder of MUD Jeans, which uses 40% recycled denim to make jeans that can be leased and returned.

MUD JEANS



Waste is only waste when it's wasted. The material that went into the jeans can be reused again, and that's how we close the circle

LEA LANDSBERG, MUD Jeans

processing, and in April released a collection of clothing made with 50% recycled polycotton textile waste and polyester garments with 43% recycled polycotton textile waste.

RECOMMERCE RENAISSANCE

Another area where there has been progress is in the number of companies repairing and recirculating garments to keep them in use longer.

Sometimes called recommerce, short for "reverse commerce", this approach is being led by firms such as [Vinted](#), the largest online international customer-to-customer marketplace in Europe dedicated to second-hand fashion. Using technology from carbon software firm Vaayu, Vinted showed that net carbon emissions avoided by the Vinted marketplace in 2021 were 453 kilotonnes of carbon dioxide equivalent (CO₂e), the same emissions as flying between London and Los Angeles and back approximately 275,000 times.

[Nike's Re-Creation](#) programme collects local vintage and deadstock pieces and materials and



JENNIFER SZYMASZEK/REUTERS

uses them to create new, locally designed and manufactured products. [Zara Pre-Owned](#) enables repair services, peer-to-peer sales and donation. Meanwhile, H&M offers direct online resell, reselling with partners like Reflaunt and ThredUp and purchases in second-hand markets like Sellpy.

There is also innovation in tackling the problem of unsold inventory. One in 10 items are never sold, remain in warehouses and eventually end up in landfills. End-of-season fashion platform Otrium has introduced data-made fashion, giving fashion brands an online outlet channel and the digital tools to connect their end-of-season collections with fashionistas. >

A stream contaminated with chemical discharge from the denim industry in Mexico.



According to ThredUp, resale models are growing up to 10 times faster than the traditional fashion market

According to ThredUp, [resale models are growing up to 10 times faster](#) than the traditional fashion market. In 2022, 88 brands launched resale programmes, and more than two in three retailers offering resale say it's integral to their long-term growth strategy.

But circular models still represent a tiny proportion of companies overall revenue, even for those that have been leading the way. For example, [Patagonia's Worn Wear](#), a programme to keep its products in circulation, accounts for only \$5 million of its \$1.5 billion revenue business annually.

The World Business Council for Sustainable Development cites a number of challenges facing the industry in trying to go from niche to scale on circularity, including "misaligned goals and incentives, fragmented supply chains and few examples of profitable circular business models at scale".

In June it launched the [CTI \(Circular Transitions Indicators\) Fashion Initiative](#), a scheme to develop industry-harmonised standards, metrics and best

practices to accelerate adoption of circular business models, with sector guidance to be published by the end of the year.

There is also a big push coming from regulators. The European Union (EU) [Textiles Strategy](#) would require all textile products placed on the EU market by 2030 to be durable, repairable and recyclable, and to a great extent made of recycled fibres, free of hazardous substances and produced in respect of social rights and the environment.

California's proposed [Responsible Textile Recovery Act](#) would require producers to establish a stewardship programme for collection and recycling of textiles. And in Australia, the [Seamless](#) project is advancing a voluntary national product stewardship scheme.

"The good news is that this is a market that's ripe for legislation, and we're starting to see that happen," said Valerie Boiten, senior policy officer for the Ellen MacArthur Foundation. "This is going to create a level playing field for brands to take the key steps needed for circularity." ●



Amy Brown is a Miami-based freelance journalist who writes about business and sustainability for The Ethical Corporation and TriplePundit. She was a ghostwriter for two business sustainability leadership books and a contributor to a book on business ethics.

Angeli Mehta talks to brands and startups about the challenges scaling up innovation in turning discarded textiles into new fibres

Can the fashion industry move from recycled bottles to reused threads?

INFINITED FIBER





There's probably enough clothing on the planet that there's no need to spin another new fibre. In the U.S. and EU almost 22 million tonnes of textiles are thrown out every year. The waste is found everywhere from the ocean to the Atacama Desert.

Much of what's discarded in the Global North is exported to become someone else's problem in the Global South. If we're to have a circular economy, the billions of tonnes of existing textiles will have to be recovered and recycled at scale. And that's a challenge that reaches into every part of the supply chain.



Extended producer responsibility doesn't solve the problems of textiles recycling, but it creates an environment where ... we are all working in the same direction, and trying to solve this very complex topic

VIVIANE GUT, Adidas

Brands and retailers have the power to make it happen, and regulation is pushing them.

Some U.S. states are advancing legislation on textiles recycling, whilst proposals launched by the EU in July will **make producers responsible** for the full life cycle of textile products, also known as extended producer responsibility. They'll have to cover the costs of managing textile waste, a measure aimed at incentivising them to produce less waste and design for circularity.

Ecodesign legislation is also in train, as part of an overall vision to have textiles on the EU market both recyclable and largely made of recycled fibres by 2030, while another proposal aims for common rules **on environmental claims** to prevent greenwashing.

Current legislation also means member states will have to collect textiles separately from 2025.

Viviane Gut, senior director sustainability at Adidas, says the proposed regulations, taken together, bring clarity to a situation where "every brand almost has their own definition of what is sustainable or circular. Extended producer responsibility doesn't solve the problems of textiles recycling, but it creates an environment where you are clear what you know, what you can do and what you should do. So we are all working in the same direction, and trying to solve this very complex topic."

Today just 1% of materials in clothing is recycled into new textiles. This stands in marked contrast >

Adidas has used PET bottles to produce polyester, including vests made from ocean plastics, as modelled by the 2020 New Zealand All Blacks rugby team.



CURE TECHNOLOGY



PATAGONIA

to the findings of [Sorting for Circularity Europe](#), a project developed by Fashion for Good. Its snapshot of textile waste across six European countries suggests 74% of post-consumer textiles – some 500,000 tonnes – was available and suitable for recycling. Potentially this is worth some 74 million euros if reintroduced into the garment industry's value chain.

And while it has a database of 100 mechanical and chemical recyclers worldwide, scale is lacking.

According to Textile Exchange, 99% of recycled polyester is made from plastic bottles, or PET, putting the fashion industry in competition with the drinks bottle industry, where (in theory) the plastic can be recycled many more times.

This practice may fall foul of the EU's proposed Green Claims directive, which says that claims that using recycled PET is environmentally beneficial would be misleading "if the use of this recycled polymer competes with the closed-loop recycling system for food contact materials, which is considered more beneficial from the perspective of circularity".

Adidas won't put a timeline on moving away from recycled bottles to recycled textiles. While using them contributes to reducing the company's carbon emissions, "We're well aware that this is not the end solution," says Gut. However, "there's simply not enough volume (of recycled fibre) out there to create products" or to test them. "There's no sense

in creating a product that falls apart when you wash it the first time, so it also needs to be durable."

Richard Wielechowski, who heads the textiles programme at financial think tank Planet Tracker, says it comes down to brands being prepared to invest in innovation.

"We desperately need development in this space, but it's not cheap. One of the problems is a lot of the virgin fibres are so cheap that they make being economically competitive by doing recycling really quite difficult," says Wielechowski.

"You could argue brands are currently chucking away what could be a valuable asset if there was actually a circular system that they could feed it back into." >

Dutch recycler CuRe Technology has to verify the composition of all materials coming into its pilot plant, including items such as zippers and coatings.



INFINITED FIBER



To effect change, brands like Inditex, Adidas and Patagonia are starting slowly with specific product categories, and working directly with recyclers

While the textile feedstock is there, the different materials have to be sorted and separated, and even then, what's labelled as cotton or polyester may be mixed with other materials like rayon or Lycra, have coatings, zippers or buttons and will almost certainly be dyed.

For Dutch polyester recycler CuRe Technology, this means verifying the composition of all materials coming into its pilot plant. It's created a dashboard of non-polyester components its process can and can't cope with.

Josse Kunst, the company's chief commercial officer, says CuRe is focusing first on pre-consumer textile waste, as well as post-consumer waste collected with brand partners. To make the move to publicly collected textiles, sorting needs to dramatically improve.

"If you go to textile collectors (and) say 'give me 100% polyester', you may be lucky if it's 80% polyester, simply because the sorting systems are not yet accurate enough. We can't put 80% in our plant and still think that chemistry-wise, it's 100%. It doesn't work like that."

Design is where the recycling process should really begin. "Designers have the biggest impact on circularity, but they tend not to know enough of chemistry and their impact on recyclability, so we already start wrong," Kunst suggests.

Adidas doesn't yet have specific briefs for circularity to give to its designers but is working with CuRe Technology and Finnish cotton recycler Infinited Fiber, alongside sorters and yarn manufacturers, in an EU-funded project, **T-REX**, to come up with a design approach that will fit with emerging technologies.

"We want to have an approach to how we design our products that we are sure all of them are able to be included in this big loop of different players – sorting and recycling and making new fibres," Gut says.

Kathleen Rademan, innovation director at Fashion for Good, says the sustainability challenge for the industry is huge: "It's like, if you run a giant restaurant, and somebody says 'Your whole menu has to change. Everything now needs to be orange and green, and you can only source from >

Inditex brand Zara has a capsule collection made with recycled cotton produced by Infinited Fiber.

this country', and you're creating these very strict parameters that you have to abide by."

Effecting change through the supply chain is also particularly difficult in the fashion industry, she says, because it "is an extremely dense, very fragmented industry with lots of stakeholders".

That means brands are starting slowly with product categories that lend themselves to change, and working directly with recyclers. Patagonia sends used garments to Japan's Jeplan, whose chemical recycling process produces fibres for one range of fleeces; both Adidas and Inditex brand Zara have capsule collections made with recycled cotton produced by Infinited, while Zara also recently announced a collection made from recycled fibres from polycotton waste, developed by U.S. company, Circ. (See [Brands struggle to widen the circle](#))

Infinited's process to liberate the cellulose from cotton is similar to viscose manufacture, but without the hazardous chemicals that make viscose unsustainable, says marketing manager Tanja Karila. It can also handle lower-quality sorted textile waste, provided the cotton content is at least 88%.



Infinited's production uses a fraction of the water consumed in growing and processing new cotton while CuRe asserts a greater than 80% lower carbon footprint than virgin polyester

The company's first commercial plant, expected to require 400 million euros investment and slated for 2026, will be producing 30,000 tonnes of recycled fibre. Yet Infinited's analysis of brand sustainability commitments, as well as consumer demand, suggests 4.5 million tonnes of cotton-like recycled fibre will be required in 2030.

"So you can see the gap – even all the announced capacity from industry peers doesn't fulfil the demand," Karila notes. While Finland is already collecting textile waste, it expects to import from other countries as well as directly from brands' own take-back schemes.

A third of Infinited's projected offtake has already been bought up by Inditex, in a deal worth around 100 million euros.

Infinited is waiting for the results of an independently assessed life cycle analysis for its Infina fibre but can claim its production uses a



CHEN AIZHUI/REUTERS

fraction of the water consumed in growing and processing new cotton.

CuRe asserts a greater than 80% lower carbon footprint than virgin polyester – producing 0.3kg of CO2 per kilo compared with around 2.2kg CO2 per kg of new polyester fibre. CuRe's process doesn't break the polyester polymer right down into its monomer building blocks, but far enough to purify it, before reconstituting the polymer so it can be spun back into fibres. "The simple reason why is energy," explains Kunst. "We call it the 80:20 rule, breaking down polyester 80% costs you only 20% of the energy."

The challenge is convincing the yarn makers, some of whom are resisting anything but virgin fibre or recycled PET bottles, as recycled fibres are not an exact drop-in. There are also higher costs, which brands and consumers will have to bear.

Karila of Infinited points out that fibre makes up only a small proportion of final product cost – in the case of a 15 euro T-shirt, around 5%. "Rather than talking about cost, I would talk about value," she says. After all, recycled fibres enable brands to make some progress on the journey to meet water, biodiversity and carbon targets – externalities they've never had to price in before.

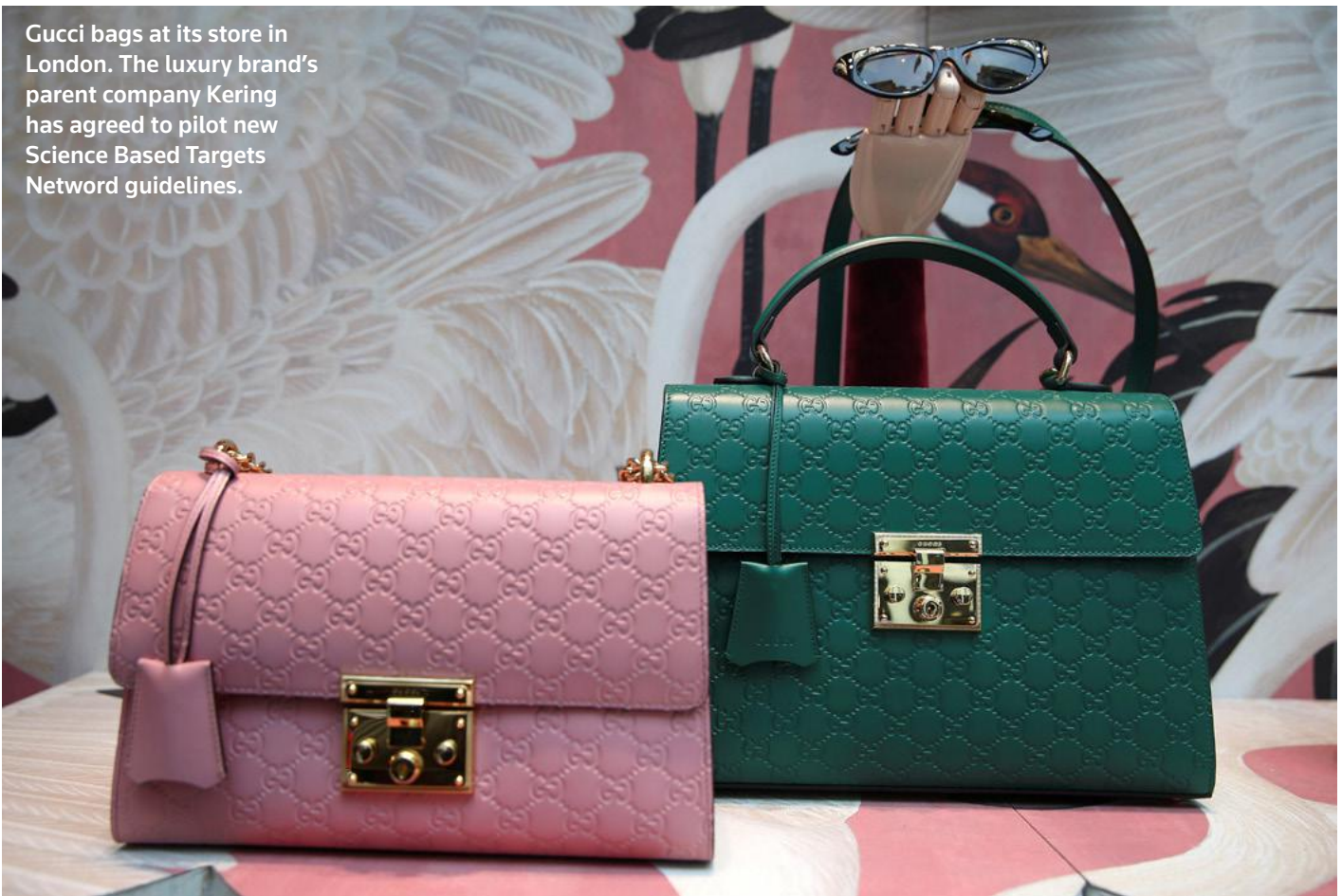
Gut envisages it will take until 2030 and beyond to achieve textile-to-textile recycling at scale. Until then, some means of stemming the flow of garments onto the discard pile has to be found. But as the latest [Fashion Transparency Index](#) finds, just two out of 250 brands investigated have made commitments to degrowth. Unless many more agree to make fewer garments the recycling challenge is only going to grow. ●

Sacks of polyester-making chemicals waiting to be shipped from a petrochemical complex in China.

Fashion begins to wake up to its impact on nature

New guidelines from the Science Based Targets Network and the Fashion Pact are trying to put nature risk on the sector’s agenda, writes [Oliver Balch](#)

Gucci bags at its store in London. The luxury brand’s parent company Kering has agreed to pilot new Science Based Targets Network guidelines.



NEIL HALL/REUTERS

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&M, Carrefour and Kering (which counts labels such as Gucci, Alexander McQueen and Yves Saint Laurent among its portfolio) are among a group of 17 companies that have agreed to pilot the new guidelines from the [Science Based Targets Network](#) (SBTN), which were formally launched in May.

Adopting a similar approach to the climate-focused Science Based Targets initiative, the SBTN’s guidelines lay out a series of principles for

establishing bona fide goals for reducing corporate impacts on marine and territorial ecosystems. Each company had pledged to announce their respective targets before the end of this year.

Unlike the other companies in the pilot, however, the three participating apparel companies have the benefit of a new [primer](#) designed specifically for the fashion sector. Developed by the sector-led [Fashion Pact](#), in conjunction with the Cambridge Institute for Sustainable Leadership and the environmental >



The fashion industry is highly dependent on natural ecosystems, and biodiversity is the glue that holds these ecosystems together

EVA VON ALVENSLEBEN, The Fashion Pact

charity Conservation International, the 30-page primer promises to assist fashion brands to “address nature loss, no matter where they are on their sustainability journey”.

Underpinning the advisory framework is a five-step management process: to assess (ie identify material impacts and dependencies on nature); interpret and prioritise (define locations for action); measure, set and disclose (determine relevant baselines and targets); to act (i.e. develop “grounded action plans”); and track (i.e. reporting against progress).

The verdict of the Fashion Pact is that the SBTN pilot itself marks an important milestone in the integration of nature and its protection into

corporate policies and business strategies. At present, only about a dozen of the organisation’s 61 members even have a biodiversity strategy.

“This really helps to set the industry on a path (that promotes) an ambition on measurable actions that have the potential to become a global standard,” says Eva von Alvensleben, the Fashion Pact’s executive director and secretary general.

The case for such action is indisputable. As the Fashion Pact concedes, the \$1.5-trillion apparel industry is currently responsible for contributing to the depletion of nature and, as a consequence, a reduction in the environmental services and raw materials on which the industry itself relies.

With the sector predicted to grow by one third over the next four years, those impacts and associated business vulnerabilities will only increase unless targeted action is taken, says von Alvensleben.

“The fashion industry is highly dependent on natural ecosystems, and biodiversity is the glue that holds these ecosystems together,” she states.

One ecosystem is not the same as another, however. Obvious as this point may be, the huge differences in animal, plant and microbe life from one place to another has presented a stumbling block for both global standard setters and international brands. >

The SBTN calls on companies to map their supply chains against a list of eight ‘high impact’ commodities, including leather.

The SBTN's solution is to call on companies to map their supply chains against a list of eight "high impact" commodities. The apparel sector is exposed to all eight, but three hold particular relevance: cotton, leather and cellulose, which derives from dissolved wood pulp and is used to create regenerated fibres such as viscose, lyocell and acetate.

Participating companies are then required to cross-check the source of their supply of these commodities with areas at risk of deforestation, marine pollution or other forms of biodiversity depletion.

The process is designed to determine the high-risk geographies that individual companies should prioritise, explains Virginia Borchardt, programme coordinator for sustainable fashion at Conservation International.

"Prioritisation can be a challenge, right? Companies have a lot of priorities to manage when it comes to being a positive force for people and planet (so) this guidance gives a general framework for how to start assessing your impact, prioritising and garnering resources," she states.

An onus clearly lies on companies to drill down into the specific issues at play in their designated priority areas, she adds. Only when the specific risks are properly understood, can meaningful interventions be designed and implemented.

Here, data promises to play a critical role. Even at

the initial mapping stage, the availability of geo-located information on both nature hotspots and commodity production offers a level of visibility that would previously have been impossible.

Trase offers a case in point. A partnership between the Stockholm Environmental Institute and the U.S. non-profit Global Canopy, Trase offers a set of online tools that bring together disparate, publicly available data to create a "wall-to-wall map" of where commodities such as soy, palm oil, timber and beef are driving forest clearance. Similarly, the Fashion Pact has developed its own benchmark risk analysis.

When it comes to traceability, however, Borchardt is cautious about the perfect becoming the enemy of the good. "You don't need full visibility to take action now ... We know where the greatest needs are for prioritising nature so companies shouldn't delay."

It's wise advice. For all the extensive preparatory work and consultations done by both SBTN and Fashion Pact, companies' ability to accurately measure and manage their impact on biodiversity remains far from an exact science.

As Nicole Rycroft, executive director of Canopy, aptly notes, biodiversity is not as "KPI friendly" as carbon. As a result, she argues, "biodiversity has slipped through the cracks (despite) the incredible overlap between carbon-rich landscape and biodiverse landscapes." >

Wood chips stacked at a factory for making pulp, which is used in the production of viscose.



ANTON VAGANOV/REUTERS



ENRIQUE CASTRO-MENDIVIL/REUTERS

In a sense, the development of SBTN in parallel with SBTi marks an attempt to right this historic imbalance between climate and nature in corporate management strategies.

But neither SBTN nor the Fashion Pact has a monopoly on corporate guidance on how best to measure and manage impacts on biodiversity. Running alongside the SBTN framework, for instance, is the [Taskforce on Nature-related Financial Disclosures](#), which is set to publish its recommendations in September.

Related sector-level initiatives are also under way. In July the brand-led Textile Exchange released a [new management framework](#) to judge the outcomes of corporate efforts to promote regenerative agriculture, often cited as a key solution to the protection and restoration of biodiversity, and explicitly references SBTN’s methodology on nature-based risks in its own framework.

The step-change required in the fashion industry is illustrated by the latest [Fashion Transparency Index](#) report, which says that despite the industry being exposed to high deforestation risk, particularly in their Brazilian cotton and leather supply chains, just 12% of the 250 brands it assessed published a time-bound, measurable commitment to zero deforestation, 3% fewer than last year, and only 7% publish measurable progress towards achieving zero deforestation.

By comparison, one third of the companies (198 in total) that submitted information to CDP’s latest [Global Supply Chain report](#) at least estimate their contribution to deforestation or land conversion. Of these, 148 assess the deforestation footprint of their entire commodity chain.

The hope of the Fashion Pact is H&M, Carrefour and Kering can kick-start that change by not only setting clear nature targets, but demonstrating meaningful action to deliver on them, and that the rest of the industry will follow their lead.

Having a commonly agreed science-based methodology and a comparable set of performance metrics should act as a “huge accelerator”, says von Alvensleben.

“We need to work collectively to avoid the risk that we had in other areas where everyone is doing their own thing and we’re not making progress at the scale and the speed needed.” ●

A Blue-crowned Motmot in Peru’s southern Amazon region. Only a fraction of the Fashion Pact signatories have a biodiversity strategy.



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The EU wants more sustainable textiles

CAN ASIA PROVIDE THEM?



CHINA DAILY VIA REUTERS

As the bloc looks to transition to a circular textile business model, Asian suppliers say they will need help to adapt. [Sandy Ong](#) reports from Singapore

Among the biggest seismic shifts set to transform the global textile industry in coming years is the new European Union Strategy for Sustainable and Circular Textiles.

First proposed in May 2022, the framework was

formally passed in the EU parliament this June. "It's a masterplan that describes what it would take to get Europe to become sustainable in textiles," explains EU parliament member Pernille Weiss, who is a shadow rapporteur of the new strategy. >

An employee arranges bobbins at a textile plant in China.



BRIAN SNYDER/REUTERS



The new strategy is a big deal. If Asian companies want to sell their products in Europe in the future, they have to comply with many components of the strategy

SHENG LU, University of Delaware

The framework proposes that by 2030, all companies selling textiles – clothes, mattresses, car upholsteries, and the like – will have to meet certain standards in order to sell their wares to customers in the EU. This includes making sure products are durable, free from hazardous substances, and comprise mainly recyclable fibres. Human rights must also be protected at all stages along the supply chain, and manufacturers will now be responsible for the waste their products generate, with a ban on destroying unsold or returned textiles.

The strategy remains non-binding for now, but the next steps are “to recast and update current

directives and regulations so that they echo what we have suggested in the strategy,” in addition to creating new ones, says Weiss. She and her colleagues are currently studying up to eight such legislative acts, including the [textile labelling regulation](#) and [Waste Framework Directive](#), with “the first wave of the new lawmaking processes” expected after the EU elections next summer.

The changes will have a resounding impact throughout Asia, whose manufacturers supply more than 70% of the EU’s textiles. “The new strategy is a big deal,” says Sheng Lu, an associate professor of fashion and apparel studies at the University of Delaware in the U.S. “If Asian companies want to sell their products in Europe in the future, they have to comply with many components of the strategy.”

A spokesperson for H&M, one of Europe’s largest fashion retailers, said the company welcomed the EU’s new move. “The way fashion is produced and consumed needs to change, this is an undeniable truth,” they said. “We support efforts that aim at driving progress towards a more sustainable fashion industry.”

The Swedish giant says it is [working with its 605 product suppliers](#), located mainly in China and Bangladesh, to enact changes that will bring imports in line with the new strategy. H&M sources from 1,183 tier 1 factories, employing 1.3 million >

Ramatex, which produces clothes for brands such as Nike, is investigating how to produce clothing that doesn’t shed microfibres.

people, most of them women. “There is a critical need for collaboration between brands buying from Asian manufacturers and the manufacturers themselves,” said H&M.

Textile-exporting countries are aware that the clock is ticking. “Sustainability has become the topmost priority for Europe, one of the most important export markets for Indian garments,” says Naren Goenka, chairman of India’s [Apparel Export Promotion Council](#). The country exported \$4.8 billion worth of textiles to the EU in the first 10 months of 2022 alone.

“It’s high time for India to gear up – sustainability is no more a choice for us,” he says.

Some firms in the country have already been making strides in this direction. For instance, Chetna Organic, a farming co-op in Yavatmal, west India, has been growing cotton organically without the use of synthetic chemicals or pesticides since 2004. Today, it comprises more than 15,000 farming families.

In Sri Lanka, garment producer [Hirdaramani Group](#) has achieved net-zero carbon emissions across its manufacturing division, and is now working towards slashing its water consumption by 50% while upping its use of sustainable raw materials to 80% by 2025.

Singapore-based Ramatex, which manufactures sportswear in factories across Asia for brands

such as Nike and Under Armour, has been part of a research programme convened by the nonprofit Forum for the Future investigating how to produce clothing that doesn’t shed microfibres.

In Taiwan, meanwhile, textile producer Yee Chain is working with its sportswear clients to figure out how to reduce fabric waste in the footwear manufacturing process, which can see up to two million out of the 48 million pairs of shoes it produces annually being destroyed.

“Obviously the production needs to be better,” says Yee Chain’s sustainability manager Martin Su. “There’s a lot of things that can be done in a less polluting way or one that uses less resources and power.”

AN UPHILL CLIMB

Unfortunately, these firms are the exception rather than the rule. “There are some glimmers on the horizon, manufacturers who have invested in new technology and are doing well,” says Nicole van der Elst Desai, a Singapore-based textile innovation expert who consults for [Forum for the Future](#). “But I think for the majority, we see that they have not been exposed that much and have been doing business as usual.”

A key roadblock in the path to meeting the new EU standards is having sufficient knowledge and know-how, she says. “Producers first have >

Garment workers stitch shirts at a textile factory in the southern state of Andhra Pradesh, India.



SAMUEL RAJKUMAR/REUTERS

to understand how they can contribute proactively to reducing the impact of the industry.”

This includes discerning which raw materials are sustainable and suitable for use, how to source them and set up supply chains; what kind of machinery is needed for processing them into fabrics; how to scale; and, finally, how to dispose of textiles appropriately at their end-of-life. On top of this, producers will have to digitalise certain aspects of their operations, such as improving information capture systems to meet the new supply-chain transparency requirements.

Lu at the University of Delaware says transitioning to a circular business model will require both technical and financial advice, as well as legal support “to interpret the new regulations,” he adds.

And that points to another big challenge – finding the financial wherewithal to do so. According to one 2020 [estimate from Fashion for Good and Boston Consulting Group](#), transforming the \$2 trillion industry would require \$20 billion to \$30 billion of funding every year. A quarter of this is to support raw materials innovation and improvements, a third for overhauling sourcing, processing, and manufacturing processes, and 20% for handling textile waste.



Players in the supply chain are often asked to bear the risk, costs and efforts of innovating, with little guarantees that they’ll be able to capitalise on their investment

FASHION FOR GOOD

Fashion companies should themselves be developing and commercialising innovation in circular solutions, but R&D for the fashion industry is extremely low, at less than 1% of sales, the Fashion for Good report said.

“This creates a situation in which players in the supply chain are often asked to bear the risk, costs and effort of innovating, with little guarantee that they will be in a position to capitalise on their investment,” the report said.

Edwin Keh, chief executive of the Hong Kong Research Institute of Textiles and Apparel, which has won numerous international awards for its



ANN WANG/REUTERS

innovations in garment-to-garment recycling, points out that using raw materials that are recyclable or sustainably sourced is much more costly than polyester, the synthetic fibre derived mainly from petroleum that’s found in more than half the world’s textiles. Incorporating sustainable materials into new textiles can drive up costs for Asian manufacturers, which in turn, can decrease their competitive edge.

“Why are people outsourcing in the first place? It’s because they want the cheapest possible product into the EU,” he says.

Instead, EU retailers might turn to nearshoring or onshoring, says Keh, referring to the practice of relocating supply chains closer to final markets. “So, places like Turkey or any of the eastern European countries, which are not the cheapest but are EU-esque, will be a lot easier for suppliers to deal with.”

Lu agrees. “Asian suppliers are very good at making cheap products in large quantities. But in the new era where we’re talking about slow fashion, consumers may want fewer products in smaller quantities but using more sustainable materials, which means Asian countries might not be the ideal place to source products anymore.” ●

A shoe factory in Nantou, Taiwan. Yee Chain, a Taiwanese footwear manufacturer, is working on reducing fabric waste.



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FRANCIS MASCARENHAS/REUTERS

A migrant worker sleeps among looms in a factory in Mumbai, India.

Workers' rights failings test fashion firms' commitment to change

The industry is safer a decade after the Rana Plaza disaster, but long hours and low wages persist. **Mark Hillsdon** reports

The garment industry in Bangladesh has changed since 1,134 people were killed when the Rana Plaza factory in Dhaka collapsed on April 24, 2013.

On the back of initiatives such as the Bangladesh Accord (now the International Accord), which brought together trade unions, brands and the

government, the industry is much safer with stricter governance, ensuring that the label "Made In Bangladesh" is now viewed as a badge of honour.

Sadly, this is one of the few highs in the fashion industry's attempt to address human rights and poor pay across its labyrinthine supply chains. >



ANDREW BIRAJ/REUTERS



Just three companies, Gucci, OVS and Tom Tailor, report on the number of workers in their supply chain receiving a living wage

FASHION REVOLUTION

Fashion has made no concerted effort to change, says Jenny Holdcroft, a deputy director at the Shift Project, an organisation that advises companies on implementing the United Nations Guiding Principles on Business and Human Rights.

Things reached a new low during COVID-19, she says: "The pandemic was a dark time for fashion brands." Not only did they stop making orders, they also stopped paying for those they'd already placed, protecting their own profits rather than supporting suppliers. Brands have since been called out for cancelling orders at the last minute, too, and introducing draconian payment terms that have left factories floundering.

The glacial progress of change was further exposed last month, with the publication of the [Fashion Transparency Index](#), which revealed that 99% of major fashion brands were still not disclosing the number of workers in their supply chain who were being paid a living wage. Published annually by industry activists the Fashion Revolution, the index analyses and ranks 250 of the world's biggest fashion brands and retailers based on their public disclosure of human rights and environmental impacts.

Just three companies – Gucci, OVS and Tom Tailor – reported on the number of workers in their supply chain receiving a living wage, which is generally defined as the minimum income necessary for a worker and their family to meet basic needs, including some discretionary income.

[Research](#) carried out by Fashion International and other partners across selected countries with substantial links to the textile industry shows that in most regions, workers are earning less than a living wage. Further research, published as the [Industry We Want](#) wage gap metric, estimates that the average gap between minimum wages and living wages in 28 key garment producing countries is 48.5%, a 3.5% increase on 2022.

There was further embarrassment for the >

A rescue worker stands in front of the rubble of the collapsed Rana Plaza building, in Savar, 30km outside Dhaka in April 2013.

industry when in July the Good Clothes, Fair Play campaign said that it had asked the latest AI technology to write a series of fake job adverts, based on real working conditions in the sector. The campaign group said that ChatGPT had refused to create the copy on the basis that the conditions it was being asked to describe were too exploitative.

There are few options open to workers who do look to pursue claims for compensation. Twenty workers' unions from Asia are currently pursuing Nike for failure to comply with Organisation for Economic Co-operation and Development rules for responsible business, after the company cancelled orders in 2020. The unions argue that Nike breached OECD regulations by failing to help workers whose incomes had collapsed as a result of its operations.

Although not a legal case, the union hopes the potential reputational damage will force the company to act, especially given that the company's own code of conduct states: "Acting with integrity is about more than reading a set of policies and checking a box. It's about always acting ethically."

COLLABORATION THE KEY

Holdcroft believes greater industry collaboration is another way of addressing human rights abuses in the textile supply chain. In a previous role at IndustriALL Global Union, she helped to develop the Bangladesh Accord, which covers fire and building safety in the country's textile factories.

More than 200 brands came together "pooling their resources and collective energies with a single focus and purpose ... people do not die in garment factories in Bangladesh anymore".

According to the Bangladesh Garment Manufacturers and Exporters Association (BGMEA), the value of Bangladeshi clothing exports has nearly doubled since the tragedy, as brands' confidence in the country has grown. A similar accord has now been launched in Pakistan.



When asked to write a series of fake job adverts, based on real working conditions in the garment sector, ChatGPT refused on the basis that it would be too exploitative

GOOD CLOTHES, FAIR PLAY CAMPAIGN

However, Holdcroft says it is disappointing that the response to other problems in the industry, such as long hours and low wages, "remains very fractured", with too many brands concentrating on their own supply chains.

"Everybody knows that it is only structural >

Garment workers demand due wages in the wake of lockdowns in Dhaka, Bangladesh, following the outbreak of COVID-19.



MOHAMMAD PONIR HOSSAIN/REUTERS



SAMRANG PRING/REUTERS



The key is that labour costs are ring-fenced and non-negotiable, and there is a commitment to fair payment terms. H&M ensures suppliers are paid within three days of a garment being shipped

PAYAL JAIN, H&M

reform that will make any difference; it's a total supply chain issue, it's not an issue of the individual supply chains ... because they're all completely enmeshed," she says.

However, 19 brands have signed up to [ACT on Living Wages](#), an agreement between trade unions and brands to drive higher wages across the sector. It recognises, says Holdroft, that "doing it factory-by-factory won't work." Next, Primark, Tesco, Inditex and H&M are among the signatories.

Payal Jain, head of sustainability at H&M, says joining ACT fitted in with an approach that is moving away from social auditing (See [Tesco accused of 'outsourcing its responsibility' by garment workers](#)). She said H&M is now placing more emphasis on "local teams which are the eyes and ears on the ground ... that constantly give us feedback."

She agrees that industry, unions, suppliers and workers all need to work together: "When you walk

into a garment factory there are multiple customers, so we alone as a brand cannot decide the wages."

ACT operates in three countries, Turkey, Bangladesh and Cambodia, and is based on five principles. The key, says Jain, is that labour costs are ring-fenced and non-negotiable, and there is also a commitment to fair payment terms. H&M now ensures suppliers are paid within three days from the garment being shipped.

Other pillars include assurances around better planning and forecasting, staff training around purchasing practices and a commitment to a responsible exit when relationships with a supplier end.

However, H&M continues to use factories in Myanmar, which was also part of ACT until the country's military government clamped down on trade unions. While other brands such as Marks & Spencer and Primark have since stopped working in the country, H&M is "constantly evaluating" the situation says Jain.

The Fashion Revolution report says workers' ability to join together to negotiate with their employers remains the main channel available to achieving better wages and working conditions. But high volumes of fashion continue to be sourced from countries with the most stringent restrictions on workers organising. This includes Bangladesh, where just 3.5% to 4% of garment factories have a union presence, and Sri Lanka, where it stands at 5%, and unionised workers are increasingly being targeted and dismissed, Fashion Revolution says.

And while 85% of major brands have policies supporting freedom of association, just 15% disclose the number of supplier factories with independent, democratically elected trade unions. And only >

Employees work at a factory supplier of the H&M brand in Kandal province, Cambodia.



ANDREW BIRAJ/REUTERS

Relatives show pictures of missing garment workers after the collapse of the Rana Plaza building in Dhaka, which killed 1,134 people.

three of 250 brands struck collective bargaining agreements that gave workers wages higher than those required by local law.

“Clearly isolated, voluntary efforts from brands to implement living wages in their supply chains are insufficient in addressing this seismic injustice,” Fashion Revolution said.

Maya Thomas-Davis from campaign group Labour Behind the Label says the new EU Corporate Sustainability Due Diligence Directive looks set to offer stronger enforcement around human rights in the supply chain, and provide a “reputational incentive” for brands not to be dragged through the courts.

Germany, Japan and the U.S. have all produced new corporate guidance on human rights in the last few years, and several brands, among them Primark and the White Company, are backing a call from the Corporate Justice Coalition for a new Business, Human Rights and Environment Act.

It took a huge tragedy before the sector acted in Bangladesh, and while the country’s garment workers now enjoy safer working conditions, around the world sweat shops proliferate, human rights violations go unreported and the fashion industry continues to generate vast profit.

As Thomas-Davis says: “Fashion has got a long way to go to ensure that the workers who actually produce all of the profit that these brands are enjoying are not the ones paying the price.” ●



KRISTA MAHR/REUTERS

Workers conduct a safety assessment at a knitwear factory close to the site of the Rana Plaza disaster.



Mark Hillsdon is a Manchester-based freelance writer who writes on business and sustainability for The Ethical Corporation, The Guardian, and a range of nature-based titles including CountryFile and BBC Wildlife.

Tesco accused of outsourcing its responsibility by garment workers

UK supermarket giant Tesco is embroiled in a landmark lawsuit in the UK brought by 130 workers from Myanmar at the VK Garment factory in Thailand, claiming that they were forced to work 99-hour weeks for illegally low pay producing its F&F jeans between 2017 and 2020.

The lawsuit, alleging “negligence and unjust enrichment”, was raised at Tesco’s June AGM by the pressure group Labour Behind the Label, which asked why Tesco had not cut ties with its social auditors, London Stock Exchange-listed Intertek Group, which is also being sued, for allegedly failing to report the abuses at the factory.

The company maintains that auditing is an important part of the due diligence process, which it had developed in consultation with stakeholders, but it is only one of the tools it uses. Others include insight from on-the-ground colleagues, worker voice and a partnership with the global union federation of trade unions, IUF “to ensure we have an accurate assessment of our supply chain and ensure our human rights standards are applied right through the system,” Tesco’s CEO, Ken Murphy, said at the AGM.

An Intertek spokesperson said: “As a matter of company policy, we do not comment on client relationships past or present.”

But Labour Behind the Label, a network of trade unions and workers’ rights organisations, describes social auditing as a fig leaf. The group’s Maya Thomas-Davis accused Tesco of having “outsourced not just production, but their responsibility, too”.

She says the industry can’t be relied upon to regulate itself. “Fundamentally, a lot of these social auditing companies are for-profit businesses who have an incentive to produce reports, with short turnarounds, that don’t really go into sufficient depth ... ultimately they are commercial companies catering to the needs of their clients.”

As a bare minimum, social audits they produce should be published, rather than just shared with a small group of company executives, which would enable workers to challenge abuses and violations. “Without transparency, workers themselves have no information to act on; it’s impossible to hold anyone to account because there are so many degrees of separation,” she says.

Equally important, is that auditors conduct interviews



with workers away from the factory floor, and the intimidatory gaze of management.

In a written response, Rona Starr, chief executive of the Association of Professional Social Compliance Auditors (APSCA), defended her industry, arguing that audits’ effectiveness require them to be used as part of wider engagement by the buyer so “that the audit sits as a verification mechanism, rather than as a means to try and catch a supplier out”.

She agrees that costs can be an issue, especially around the level and depth of worker interviews. The ultimate effectiveness of audits, she says, “comes down to the buyers being prepared to invest in building compliance in their supply chains and willingness to invest in helping a supplier raise their performance.

“Social audits are not (foolproof). All inspection efforts can miss things, (or) have them hidden ... (but) the more buyers give to support audit enhancements efforts, the more confidence shareholders can have in the reports.” ●

Mark Hillsdon



Farmers harvest cotton in a field in Qaha, Egypt.

MOHAMED ABD EL GHANY/REUTERS

Can the cotton industry protect its workforce in a changing climate?

Around 350 million people worldwide rely on cotton for their main source of income. However, global warming is exacerbating already precarious livelihoods. **Catherine Early** reports

Cotton is ubiquitous in human lives, with approximately half of all textiles made of the material, according to the International Institute for Sustainable Development (IISD). The fashion industry uses around two-thirds of cotton fibres produced worldwide, giving it immense influence over the livelihoods of the 350 million people who work in the cotton supply chain.

Major producing countries include India, United States, China, Brazil, Pakistan and Turkey. Some

250 million people work in cotton processing, while 100 million are farmers who grow cotton.

The vast majority of these farmers grow their crop on fewer than two hectares of land and are located in developing countries, including in 30 ranked by the United Nations as low in its development index measuring healthy lives, education and standard of living.

The cotton sector is a huge user of water and pesticides, and its human rights record has >



Smallholders are disproportionately impacted by the fact that they have very little financial resilience, and very little climatic resilience

HANNAH CUNNEEN, Forum for the Future

come under increased scrutiny, especially since allegations of [forced labour of Uyghur people in China's Xinjiang province](#). (See [Brands scramble to address forced labour in cotton supply chains](#))

The sector's sustainability issues stand to be exacerbated by increased risk to extreme heat, drought, floods and wildfires already being caused by climate change, Forum for the Future warned in [a 2021 report](#). Besides cutting yields, it will also affect the wellbeing of those involved in the supply chain, it noted.

"Smallholders are disproportionately impacted by the fact that they have very little financial resilience and very little climatic resilience, and an even smaller voice within the industry and cotton's complex supply

chains, which means that their knowledge and role as critical changemakers are often overlooked," says Hannah Cunneen, Forum for the Future's global principal in food and fibre value chains.

In 2022, widespread flooding in Pakistan affected or destroyed [around 40%](#) of the country's cotton crop. In the U.S., drought led to the loss of around one million tonnes of cotton in West Texas, according to [the International Cotton Advisory Committee](#). Though the ICAC [reported](#) in December that production was still outstripping consumption by 1.2 million tonnes, the risks to the sector as climate change gathers pace were laid bare. Coping with climate change will require a response that goes "beyond incremental solutions to fundamental changes", Forum for the Future said.

There is growing awareness in the cotton industry of the need to improve smallholder livelihoods. Non-profit Better Cotton is launching its Sustainable Livelihoods Approach to support smallholder farmers in improving their wellbeing and earning a "living income", defined as that which would provide a decent standard of living. This year, it is gathering data to assess the gap between this goal and current incomes, and researching livelihood diversification and its contribution to household income. >

Shoppers search through piles of cotton shirts for sale in a store in Hong Kong.

Its recent conference featured discussions around how the cotton industry could learn from other sectors such as cocoa, where work on living incomes is more advanced.

But the sector has also focused specific programmes on climate resilience and livelihoods. Forum for the Future has just completed Cotton 2040, a three-year programme aiming to better understand the impact of climate on the sector, promote the uptake of sustainably sourced cotton and scale up more regenerative growing practices.

REGENERATIVE AGRICULTURE

It is now piloting an ecosystem service market in cotton-growing regions in Alabama, Arkansas, Texas and Tennessee, in which producers can get paid for quantified benefits provided to society, such as improving soil health by eliminating tillage or incorporating cover crops; a significant reduction in water use; or increasing populations of wildlife, such as pollinators. So far, it has learned that though such markets play an essential role in promoting regenerative agriculture, they are not yet designed in a way that tackles social inequity.



It's a challenge to make companies see beyond the farm, in restoration of the wider landscape, which isn't something that certification typically offers

HELEEN BULCKENS, IDH

For example, farmers from disadvantaged communities or ethnicities are less able to deal with the risk of reduced or failed crops from adopting regenerative agriculture practices.

Sustainable trade foundation IDH is trying to tackle the issue of making cotton smallholders and the land they grow on more resilient at a landscape level. Climate change is causing droughts and floods, but also increasing pest attacks on crops. This leads smallholders to increase use of pesticides, which is expensive for them and further degrades soil, explains Heleen Bulckens, senior programme manager of materials, textiles and manufacturing at IDH.



DOMINIQUE PATTON / REUTERS

The organisation's Climate-Smart Cotton Landscapes programme aims to improve farmer incomes while simultaneously regenerating their natural resource base by focusing not just on farm, but also across a whole landscape.

"We try to reimagine agricultural systems so that they're based on resilience, sustainability and inclusivity," Bulckens says. The programme aims to go beyond certification schemes to create systems change, which is possible when working across a geography, she says.

In the Indian state of Madhya Pradesh, IDH is working across nine cotton-growing districts covering 56,000 square kilometres. The programme is working with the state government, producers, private sector partners, such as India-based Fruitful, and local NGOs to provide more than 120,000 farmers with access to capacity-building, credit and inputs to support their adoption of regenerative practices so that sustainable land management practices are applied to more than 100,000 hectares of cropland by 2026.

The Laudes Foundation has provided catalytic funding, but IDH aims to make it sustainable in the long term by proving the business case for regenerative approaches so that the public sector, the market and other investors become involved in scaling the work, Bulckens explains.

However, persuading the private sector to invest in landscape-level projects is challenging, she >

Workers at a cotton processing plant in Xinjiang province, China. There have been allegations of forced labour of Uyghur people in Xinjiang.

says. "It's a challenge to make companies that are interested in sustainable agriculture see beyond certification. You could easily have certification and a landscape approach, but we also need businesses to invest beyond the farm, in restoration of the wider landscape, which isn't something that certification typically offers," she says.

In addition, the benefits of landscape-level projects are hard to communicate to consumers. Though IDH is working on a data dashboard, it cannot yet offer businesses a way to credibly claim a project's contribution to reducing emissions, due to complexities of issues such as double-counting the same emissions reductions from the landscape, she notes.



There's a lot of talk about supporting farmers to change agronomic practices, but nobody is helping them to de-risk

HANNAH CUNNEEN

Even if a business does invest in some landscape restoration work, it is reluctant to financially incentivise farmers to adopt regenerative practices, she says. "We're seeing a misalignment between sustainability commitments on climate change and biodiversity, and their actual procurement practices, which is largely due to them not wanting to share value and risks equally with farmers."

Cunneen of Forum for the Future believes that transparency over market information would help smallholders negotiate better prices. "They should be able to negotiate and make decisions based on what they experience to be true, whereas the way the cotton model and market works at the moment dictates how the cotton is to be grown, and how much they will be paid."

The lack of financial support from the private sector is a barrier to farmers changing practices to become more resilient and regenerative, she says. "There's a lot of talk about supporting farmers to change agronomic practices, but nobody is helping them to de-risk. There can be significant fiscal and yield implications, particularly for smallholder farmers, when altering their approaches to production.

"Farmers aren't going to be able to change, because they can't take on the risk of growing regenerative cotton alone. For example, if you >

A farmer inspects his damaged cotton field following flooding in Pakistan.



AKHTAR SOOMRO/REUTERS



Cotton is harvested in a field outside Montgomery, Alabama. Inset: A sign encouraging farmers to plant cotton at Wakita, Oklahoma, U.S.

CARLO ALLEGRI/REUTERS

experience a failed crop – or something more substantial, such as fire or flooding, due to changing climatic conditions, you’re not going to get paid,” she says.

The growing demand for cotton worldwide can also indirectly put further pressure on producers, and reduce opportunities to invest time and resources in adapting, she adds.

Cunneen believes the future for the cotton sector is bleak if it fails to support the whole supply chain, in recognition that the whole industry is premised on the ongoing ability for a producer to keep producing. “A significant amount of change is required, not just climate adaptation, but economic adaptation and mindset shifts. We’re currently operating beyond our planetary boundaries, and yet consumers and businesses think they can get more for less, so something’s got to go,” she says.

She adds: “Climate adaptation is happening, but it needs to happen at scale, it needs to be inclusive in order to be fully achieved because there’s cotton growing all over the world, so to focus on bits and pieces and only within your own pillar, or your own organisation, is not going to be enough.”

For Bulckens, the sector has “almost no choice” but to start collaborating not just with farmers, but across whole landscapes. “I would like to see the world at large view farmers as more than just producers of crops, but also as very valuable land stewards, who can help prevent drought and floods.

“If you organise all these land stewards properly, you can get a lot of ecosystem services from the area, it just requires a bit of zooming out of your own interests,” she says. ●



NICK OXFORD/REUTERS



Catherine Early is a freelance journalist specialising in the environment and sustainability. She writes for Business Green, China Dialogue and the ENDS Report among others. She was a finalist in the Guardian’s International Development Journalism competition.

Brands scramble to address forced labour in cotton supply chains

In the face of revelations about China's Xinjiang region and Turkmenistan the fashion industry is being pushed to take liability for human rights abuses. **Catherine Early** reports



CHINA DAILY/REUTERS

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ew consumers would find their new T-shirt quite as desirable if they knew its production could be hiding dark secrets. Forced labour, child labour, poor working conditions, and threats to collective bargaining, the ability to join a trade union and freedom of expression are common in the cotton industry in many parts of the world.

Revelations about the state-imposed forced labour in the Xinjiang province of China, where Uyghur Muslims are subject to forced labour, kept in prison-like conditions where they are tortured, separated from their families and forced to renounce their faith; conditions described as “crimes against humanity” by a U.N. report last year, have focused >

A labourer stacks cotton in China's Xinjiang Uyghur Autonomous Region.



LUCAS JACKSON/REUTERS

lawmakers’ minds on the issue. Meanwhile, in [Turkmenistan](#), awareness has been growing of the government’s forcing of public sector workers to fulfil cotton-picking quotas, with private businesses required to contribute to the efforts financially or with labour. The International Labour Organization (ILO) is examining Turkmenistan’s compliance with its obligation to end forced labour.

The fashion industry’s record in tracking such abuses in its supply chains has not been good. Some \$468 billion of garment imports in the G20 are at risk of modern slavery, equivalent to a third of goods imports in these countries, according to the [2023 Fashion Transparency Index](#) by activist movement Fashion Revolution. Its analysis found that just 23% of brands disclose the prevalence of modern slavery-related violations and risk factors in their supply chains.

However, governments are now forcing change through new legal clampdowns. In the United States, the Uyghur Forced Labor Prevention Act (UFLPA) came into force in June 2022. The legislation bans all goods from the Xinjiang Uyghur Autonomous Region (XUAR), which is responsible for 20% of the world’s cotton production.

Under the legislation, brands must provide evidence that their goods do not contain any element that may have been made with forced labour. There is a presumption of guilty until proven innocent instead of vice versa, which meant that previously, brands could escape enforcement by claiming ignorance, explains Shameek Ghosh,

T-shirts in a Walmart store. The U.S. has banned goods from the Xinjiang Uyghur Autonomous Region.

founder and chief executive of traceability platform provider TrusTrace.

The European Union is following suit with a proposed Ban on Forced Labour regulation, and the planned EU Corporate Sustainability Due Diligence Directive. Individual countries are also taking action, with new laws including in 2021, the German Supply Chain Due Diligence Act and the Norway Transparency Act, and the 2017 French Corporate Duty of Vigilance Law. Sustainability reporting laws will also force more due diligence in supply chains, backed up by clampdowns on marketing and labelling to curb brands making claims to consumers that cannot be proven.

“The fashion industry has been operating for the last 30-35 years by turning a complete blind eye to supply chain issues, and taking no liability,” says Ghosh.

Previous laws and policies to clean up supply chains have allowed brands to place all responsibility for supply chains on their tier 1 suppliers, but now governments are forcing direct liability, he explains.

But this historic lack of responsibility for supply chains, the complexity of fashion supply chains, and the high volumes produced by many brands, have combined to mean that many brands lack data on suppliers beyond the first level, and now do not have much time to prepare for new laws and regulations, he says.

“If brands already had this data, the new laws would not be such a big problem for them,” he says. >

Competency is also a problem for many firms, he adds. “Most companies have been structured more as marketing units than good procurement units. The skill level is only how to cut costs, they only understand the top and the bottom line. Now they have to improve the social line and the green line, so how do you balance that out?”

TrusTrace is launching a new digital supply chain mapping tool later this year to support brands to comply with the U.S. UFLPA. Each piece of clothing could have up to 100 different certificates and evidence documents from suppliers, which is very cumbersome to check manually, Ghosh explains.



We’re going to start seeing more lawsuits, and then we’ll see more work being done to implement due diligence through the whole value chain

PATRICIA JUREWICZ, Responsible Sourcing Network

TrusTrace’s platform will automate the process using artificial intelligence (AI) to read all documents, and cross-check them with central databases of certification and audit bodies all over the world, he says. Though it currently only covers some 2% of the world’s cotton – most of which is already under the “conscious cotton” sector, such as organic – the platform could be scaled up rapidly to meet demand, he adds. The firm is planning further launches to aid compliance with laws developing elsewhere.

Progress has been made in other parts of the world. In Uzbekistan, a global boycott of cotton and high-profile campaign by the Cotton Campaign coalition of NGOs, trade unions, brand associations, responsible investors and academics has succeeded in motivating the government to end the state-imposed forced and child labour of its cotton industry, which was [confirmed by an independent inspection by the ILO](#) in 2021. The boycott has since been dropped.

Though the campaign was successful, there are still issues with workers belonging to unions, and collective bargaining rights, while the Uzbek government does not register NGOs, according to Patricia Jurewicz founder and chief executive of the Responsible Sourcing Network, part of the Cotton Coalition.

It was relatively easy for brands to commit to



REUTERS

A high-profile campaign and boycott led to the Uzbek government ending state-imposed child labour in the cotton industry.

not sourcing from Uzbekistan, due to the smaller size of the market, she believes. The successful campaign could be replicated to tackle the issues in Turkmenistan, where the government is reliant on revenue from the cotton sector. However, it would be much harder to implement a boycott of cotton from Xinjiang, which was responsible for 20% of global cotton, she says.

“To pivot and then have alternatives for that is difficult. And we have seen that if brands are sticking up too much against the situation, they can be cut off from the Chinese market,” she says.

However, Jurewicz remains positive that new laws can make a difference in cotton supply chains around the world, along with technologies such as DNA identification of the origins of cotton yarn, and better due diligence. “We’re going to start seeing more lawsuits, and then we will see more work being done to implement due diligence through the whole value chain, all the way to the raw material,” she says. ●

Can Shein change its spots?

The fast fashion poster child is seeking to dispel criticism that it is contributing to unsustainable levels of textile waste, reports [Catherine Early](#)

Sales of \$10 tops and \$15 dresses have sent the value of Shein, the Chinese-owned brand selling ultra-fast fashion to the West, soaring since it launched in 2017 in the U.S.

Churning out thousands of new designs a day, Shein has a direct selling model that targets its millions of social media followers.

The privately owned company, which is in talks with investment banks about a potential U.S. initial public offering, [according to Reuters](#), is valued at more than \$60 billion.

In February, the Financial Times reported that Shein, now headquartered in Singapore, made \$22.7 billion in revenues last year, on a par with H&M, though below industry leader Inditex, which owns Zara. And Shein has no intention of slowing down, targeting revenues to more than double to \$58.5 billion in 2025.



Shein made a reported \$22.7 billion in revenues last year, on a par with H&M, and is targeting revenues to more than double by 2025

Although another Chinese company with a similar model, Temu, is now snapping at Shein's heels, Shein is squarely in the sites of environmental campaigners, who see it as a prime contributor to the mountains of discarded waste textiles exported to countries in the Global South.

According to U.S./Ghanian not-for-profit Or Foundation, one destination for waste textiles is >



SHEIN



FRANCIS KOKOROKO/REUTERS

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Kantamanto second-hand market in Accra, Ghana, received 15 million new garments a week, with 40% of it ending up as waste, often within one or two weeks

OR FOUNDATION

Kantamanto second-hand market in Accra, which receives 15 million new garments a week. It says 40% end up as waste, often within one or two weeks, burnt in piles around the city, dumped in informal settlements or washed out to sea, where they contribute to microplastic pollution.

In an interview, Peter Pernot-Day, global head of strategic communications at Shein, defended the company’s record, and said it was working hard to reduce waste. The company already claims to have reduced waste from unsold clothes to “very low single digits”, and in some cases, below 1% , which

Pernot-Day said was “unheard of” in the fashion industry, where such excess inventory is typically around 25%, but can reach as high as 40%.

It has achieved this through its “direct to consumer” business model, meaning that it produces items in small batches of 100-200 pieces, then uses digital technologies to analyse each item’s popularity with consumers, before ramping up production of top sellers to meet demand.

The lack of waste stock is the main reason Shein is able to offer goods in such a cost-competitive way, Pernot-Day says.

Last year, Shein committed to a fully circular supply chain by 2050. It unveiled a key element of its strategy in May this year, saying it will partner with U.S.-based technology company Queen of Raw to rescue excess fabrics from brands and retailers to use in its own supply chain. The fashion industry produces vast quantities of excess fabrics and unsold products, the value of which grew to around \$288 billion in 2022.

Pernot-Day explains that it will be able to match up so-called “deadstock” fabric with its production processes using its software, which enables it to function in a similar way to a vertically integrated company. “We will be able to admit entry to these next-generation fabrics at the mill level, and drive >



JOHANNA GERON/REUTERS

adoption across our contract manufacturing base," he says.

Meanwhile, the software used by Queen of Raw, Materia MX, will enable Shein to track and report the impact of its use of deadstock in terms of the amount of carbon, chemicals and water saved.

Shein and Queen of Raw have piloted the idea in the United States, selling products made from deadstock alongside other stock and without any specific labelling, according to Stephanie Benedetto, co-founder of Queen of Raw.

"They just lived on Shein.com, the way other products live. We wanted to test it and learn from it. One product sold out, and we've had five-star customer reviews about the fabric without us even telling them about its history," she says. The impact of the pilot will be published soon, once the results have been audited, Benedetto adds.

In addition, Shein wants to produce more products from recycled fabrics, Pernot-Day says. Its evoluSHEIN by design standard requires garments to consist of at least 30% preferred materials such as recycled polyester, and be produced by suppliers with high compliance with social standards, verified through third-party audits. Shein is aiming to roll the standard out to 50% of its products by 2030, he says.

DEVELOPING CIRCULARITY

Longer term, Pernot-Day says he would like to see the EvoluSHEIN standard be further developed while accelerating recycling to promote full material circularity.

He pointed out that recycling of materials used

A woman leaves a Shein pop-up store in Paris, France.

in clothing is still in its infancy. (see [Can the fashion industry move from recycled bottles to reused threads?](#)) Though Shein was "actively looking for partners in this space", he adds that: "There is still quite a bit of work to do in taking synthetic fibres and being able to recycle them multiple times."

On the issue of reducing post-consumer waste, Pernot-Day said: "To be totally candid with you, we haven't completely solved that problem, but we've taken a number of very important steps towards our ultimate goal of full circularity."

One of these is enabling customers to sell unwanted Shein clothes to each other via its website, he says. The peer-to-peer exchange has been trialled in the U.S., where one million users have

signed up, and Shein plans to roll it out to other countries this year.

In response to criticism about fashion waste ending up in Global South landfills, [SHEIN last year set up an Extended Producer Responsibility \(EPR\) Fund](#), to which the company will dedicate \$50 million over the next five years.



We haven't completely solved the problem (of post-consumer waste) but we've taken a number of important steps towards our ultimate goal of full circularity

PETER PERNOT-DAY, Shein

Liz Ricketts, co-founder and executive director of the Or Foundation, called Shein's action "truly revolutionary" and an acknowledgement that its clothing may be partly to blame for Kantamanto's problem. "We have been calling on brands to pay the bill that is due to the communities who have been managing their waste, and this is a significant step toward accountability!"

Others, however, have pointed out that the fund did nothing from preventing the problem in the first place.

Liv Simpliciano, policy and research manager at Fashion Revolution, which scored Shein a 7 out of 100 on its annual [2023 Fashion Transparency Index](#), said that though direct-to-consumer >

models do reduce waste, “if you have an on-demand model done at scale, producing small amounts of thousands of styles, that is over-production by a different name.”

She added that the model could also lead to unpredictable order volumes, putting excess pressure through the supply chain, whose workers are already under immense pressure, to meet production quotas.

In the U.S., there has been congressional scrutiny of the direct-to-consumer model employed by the likes of Shein and Temu, alleging that it allows them to circumvent the Uyghur Forced Labor Prevention Act, which bans imports from China’s Xinjiang region, where materials such as cotton are often the product of forced labour by the Uyghurs, a mainly Muslim ethnic minority. (see [Brands scramble to address forced labour in supply chains](#))

The same provision, known as de minimis, allow Shein and Temu to avoid import tariffs as long as the retail value of individual shipments does not exceed \$800.



Using deadstock and more sustainable materials is great, but if you continue to mass-produce new items made from virgin materials that just signals as good marketing rather than a serious interest in slowing down fashion

LIV SIMPLICIANO, Fashion Revolution

A coalition called Shut Down Shein has called on the Securities and Exchange Commission to deny IPO registration to Shein unless it shows it complies with the act.

In a statement, the company said: “As a global company with customers and operations around the world, Shein takes visibility across our supply chain seriously. Since entering the U.S. market in 2012, Shein has been compliant with U.S. tax and customs laws.”

Meanwhile, the impact of Shein’s programmes on its environmental record is yet to be seen. The company’s [2022 sustainability report](#) contains little in the way of concrete targets and data.

Pernot-Day says that its ESG team has now developed a framework for reporting so that it can produce consistent data. “Hopefully with the



CARTIER

Stephanie Benedetto, co-founder of Queen of Raw, which has partnered with Shein to help reduce its excess fabrics.



CHEN LIN/REUTERS

evoluSHEIN framework we will be able to report over time on these programmes and their success,” he says.

The company also wants to be “as transparent as we can” about its business, its challenges and its opportunities and successes.

Though Simpliciano backed the use of deadstock fabrics by fashion brands to reduce production-related waste, she pointed out that such strategies should be accompanied by plans to reduce the amount of clothing made from virgin materials.

“Using deadstock and more sustainable materials is great, but you cannot have these things and continue to mass-produce new items made from virgin materials,” she says. “That just signals as good marketing rather than a serious vested interest in slowing down fashion.” ●

Shein, which is headquartered in Singapore, made \$22.7 billion in revenues last year.

How Houdini has woven nature into its sportswear business model

Sarah LaBrecque talks to the CEO of the pioneering Swedish company about its mission to operate within planetary boundaries



HOUDINI SPORTSWEAR

In 2014, The Guardian published [an article](#) about a problem that was on few people’s radar: the leaching of microfibres from synthetic clothing into marine ecosystems. It became one of the most popular sustainable business articles that year.

The insidious, tiny fibres that shed from clothing when washed or tumble-dried are [responsible for 4%](#) of the total mass of microplastic leakage into

the oceans, along with personal care products. That’s between [200,000-500,000 tonnes](#) of fibres entering the oceans every year.

There were few fashion companies back then that were aware of the issue, let alone working on it. But Sweden-based Houdini was one of the pioneers. Chief executive, Eva Karlsson, who has been at the helm of the sportswear company for 22 years, says [▶](#)

INTERVIEW

they began working on microfibres in 2013, just **one of the many** sustainability- and circular economy-related imperatives the small firm is advancing on.

As well as being a member of the **Exponential Roadmap Initiative**, a cross-sector collaboration that aims to halve global emissions before 2030, Houdini built its 2018 **corporate sustainability report** around the Planetary Boundaries framework, the first company to do so. The boundaries, developed by Johan Rockström and his team, helped the company to link the fashion industry to all nine planetary boundaries.

We sat down with Karlsson to talk microfibres, circularity and why we don't need any more innovation.

Q: When did Houdini start weaving circularity into its business model?

EK: I came on board in 2001, and that was when we defined our long-term strategy in terms of how to move towards regenerative business. Our products are designed for a long life, but they were still moving in a linear, albeit a slow linear, pattern. We needed to bend that curve, so to speak.

That means not only using recycled material and recycling at the end of life, but designing for circularity, so that instead of an end-of-life solution, there's a next-life solution.

We then looked at natural resource flows and flows of products towards circular business models. Very early on we were exploring rental, subscription, take-back schemes and having vintage as a part of our offering. And repairs, of course.

Then the third part of circularity is the flow and distribution of knowledge. So open-source has been a principle of ours, sharing knowledge with peers in the industry, and also with our users and customers in order to shift mindsets. We've come a long way because we've been really stubborn; 85% or so of our products are designed for circularity.

Q: What is your strategy around microfibres and microplastics more generally?

EK: We have very clearly defined goals for 2030 and that includes microplastics. In 2013 we started talking to all our suppliers and innovation partners to figure out ways to solve it. We acknowledged that we are part of the problem and decided to act on it. I would say this recognition is still something that is lacking in many cases across the industry.

We've phased out quite a lot of staple fibre fabrics, meaning fabrics that are constructed with shorter fibres. Nowadays we only use filament fibres, which are extremely long fibres made in a very complex construction that don't shed. We also



HOUDINI SPORTSWEAR

We've come a long way because we've been really stubborn; 85% or so of our products are designed for circularity

EVA KARLSSON,
Houdini CEO

work with appliance company Electrolux, which has a simple filter solution that can be added to existing appliances to catch microfibres.

Additionally, we're working a lot on how to improve washing, but also garment care in the larger sense. Products are worn out by washing too much. We can shift the culture around care and support with new, better detergents. There are a lot of things companies can do.

Q: Is switching to longer filament fibres the main solution to reduce microfibre shedding?

EK: I think we need to take a holistic, systems >

INTERVIEW



ELECTROLUX

approach – there is not one silver bullet that will solve all the problems. We need to work on several angles and go in many different directions. Our industry is pretty good at adding conceptually interesting, new and novel solutions, but only as a “spice on top”, or an additional separate line, and then continuing with business as usual.

There are many, complex issues we need to sort out, not least microfibres. For example, academic research has found that organic fabrics, when interacting with the natural environment, are behaving like synthetics. This is because they are treated with so many chemicals during dyeing and production. When Houdini uses natural materials, it's important for us to make sure that the dyes and all the chemicals that are involved are either eliminated or substitutes are used. Some of the treatments that are done are not even necessary, and there are natural alternatives that are available.

Q: Houdini's products fit into a more premium bracket. Is it possible to produce a sustainable fast fashion garment?

EK: If you look at the filament fibre, the long one that I talked about that is continuous, you can have it stretch through the entire fabric – that doesn't have to make it more expensive. I think it's much more about knowledge and willpower in that sense. But if we look at the larger scope of things, not



Our industry is pretty good at adding conceptually interesting, new and novel solutions, but only as a ‘spice on top’, then continuing with business as usual

Houdini works with Electrolux, which has a filter solution that can be added to washing machines to catch microfibres.

only microfibre shedding but product longevity, it's difficult to do it at a low price. And if you add to that social and ethical aspects, it's not possible.

Q: Where does that leave us then?

EK: Honestly, I think that we have for the last few decades been trained to not value natural resources, because everything is available so cheaply. That has also resulted in an explosion in consumption. There are 100 billion garments produced every year, and 60% of that is discarded within the first year. That's not value creation for anybody, not even the customer.

I think if we start valuing natural resources and valuing products, we will be more accepting of higher price points. But that's very easy to say >

INTERVIEW



HOUDINI SPORTSWEAR

being a brand from Sweden catering to the top 7% of the global population.

We asked ourselves quite some years ago: would it be possible for us to add an entry-level price point or mid-price point in order to be more inclusive? And we realised that the only way to do that without compromising our philosophy on supporting ecosystems, society and individuals, is to continue doing super high-quality products that last for a long time, but offer them in circular business models. So, selling used products and offering a rental service, which we can do at a much lower price.

We did a survey around our Power Hoodie, (which retails for 220 euros) and found that it's worn on average 1,287 times. The average in the western world is 10. And the global average is 160. Wearing something so many times means the cost-per-use goes down radically.

Q: What role can consumers play in reducing microfibre shedding?

EK: You can use a wash bag, and choose the right products. There's a lot of talk at every conference

Houdini offers its products in circular business models such as selling used items and offering a rental service.

about educating the customer. But it's going to take time and it's a complex issue – not only microplastics but everything about sustainability. Maybe the best solution is simply for brands to take responsibility by only offering sustainable alternatives. There's no reason to continue with microfibre-shedding fabrics. We can continue to innovate – and I love innovation – but we don't need to wait for it. We only need to decide whether we would like to have more fish or more microplastics in the ocean by 2050.

There's exponential change going on in terms of mindset shifts, as well. We don't even know what to expect in a few years, in terms of customer demand. So I think we all had better act, including fast fashion – now. Otherwise there will be stranded assets. I truly believe that. ●



Sarah LaBrecque is a freelance writer who splits her time between Ottawa, Canada and Hertfordshire. She writes about sustainable business and ethical living for publications such as the Guardian, Positive News, and for a range of B2B clients.



SUZANNE PLUNKETT/REUTERS

M&S is a partner in the ACT UK project, which aims to automate textile waste sorting systems.

How the UK is paving the way for a more circular fashion industry

Adam Mansell of the UK Fashion & Textile Association looks at how a government-funded collaboration is aiming to dramatically increase textile recycling

In Western countries we're buying more clothes than ever and keeping them for less time. It has become a major problem and the numbers are scary. In the UK alone, we generate enough waste textiles every year to fill Wembley Stadium 17 times over. The waste can't be reused – it's either worn out, damaged or of poor quality. An estimated 200,000 tonnes go to landfill or incineration. Even worse, less than 1% of that is turned from old textiles into new products.

In my view, the idea of relying on consumers to reduce massively their consumption of fashion is unrealistic. It's part of the puzzle, but everyone needs clothes, and most of the population need clothes at an affordable price.

Instead, what we need to do is find ways to transform this waste into a new textile feedstock which can be used here in the UK, solving the waste issue and presenting a significant opportunity for the future of domestic manufacturing.

The technology already exists to turn waste back >

COMMENT



PHIL NOBLE/REUTERS

into fibre. What is needed is the right collection and sorting infrastructure to allow this waste to be captured and processed.

UKFT has been working closely with the British Fashion Council and other stakeholders to attract wide-ranging government support for a new 10-year [Fashion Industry Sustainable Change Programme](#), focused on creating a world-leading circular fashion and textiles ecosystem in the UK.

As the first step, the government recently announced a 5 million pound Circular Fashion Programme, and – for the first time ever – this fund was created by a number of government agencies coming together to collaboratively support our sector: Innovate UK, the Arts and Humanities Research Council and the Natural Environment Research Council.

The first to receive support is a 6 million pound project to develop and pilot a pioneering fully integrated, automated sorting and pre-processing plant for waste textiles, known as an ATSP.

The Autosort for Circular Textiles Demonstrator (ACT UK) is a two-year project that will support the transition from uneconomic manual sorting of clothes and textiles that are not suitable for resale to highly automated sorting and pre-processing, which can then be used as feedstock for existing and emerging recycling processes.

Bags of clothing are manually sorted through at a recycling facility in Stourbridge, Britain.

UKFT is proud to be leading the ACT UK project. We are one of a consortium of over 20 companies from recycling technology partners, textile collectors and sorters, academia, data specialists, manufacturers, industry associations and brands/retailers.

The current list of project partners includes Circle-8 Textile Ecosystems, IBM, Marks & Spencer, Tesco, Pangaia, Reskinned, Salvation Army, Oxfam, Textile Recycling International, Shred Station, Worn Again Technologies, English Fine Cottons, Alex Begg, Camira, the Manufacturing Technology Centre, the University of Leeds, the University of Huddersfield, the Textile Recycling Association and WRAP. Since announcing the news, we have been inundated with requests to join the project.

The idea of that many partners working together sounds unlikely, but in truth, putting together the consortium was one of the simplest things I've ever done. On the face of it, many of the partners are competitors, but the size of the task in hand and the potential benefits are far greater than any one organisation can tackle alone. The industry is increasingly aware of the value of collaboration in a pre-competitive environment.

Manual sorting of used textiles has a number of limitations. It's not possible to sort garments by fibre composition "by eye", and the pre-processing >

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(that’s the removal of buttons, zips and trims) and sizing steps required by textile recyclers haven’t been optimised and customised to meet individual specifications. No scaled process currently exists which brings all of this into one industrial process or facility.

ACT UK will build on sorting approaches that are currently coming to market in countries such as the Netherlands, Spain and Sweden. The UK’s approach will innovate, combine and advance existing and new supporting technologies to overcome current barriers to materials circularity.

The project will bring together and advance key technology components including state-of-the-art optical scanning, robotics, AI, pre-processing and size-reduction equipment – all under one roof. It will create a world-class blueprint that integrates the latest technologies and can be deployed across the UK and globally.



By developing the ATSP we estimate that the value of one tonne of non-recyclable textiles will move from a cost of 100 pounds to a value of up to 1,000 pounds

We believe that by creating an ATSP, we will develop a solution that is efficient, cost-effective and paves the way for the UK to become an attractive home for other mechanical, chemical and biological recycling processes. If we provide a standardised feedstock that recycling companies can rely on, this will stimulate significant investment and growth.

The ATSP will provide feedstock into chemical, mechanical and biological recycling in a way that makes the economics of recycling work. To give you an idea of the economics of recycling currently: it costs textile sorters about 100 pounds a tonne to deal with non-recyclable textiles. By developing the ATSP, we estimate that the value of one tonne of NRTs will move from a cost of 100 pounds to a value of up to 1,000 pounds.

This project will be a demonstrator plant, but our ambition is to scale it rapidly to a point where it can process 50,000 tonnes of pre-sorted pre-processed textile waste a year. There are several consortia looking at building scaled recycling plants across the UK.



SHRED STATION

We estimate that in the UK alone there is already enough potential feedstock for seven ATSPs and a minimum of seven recycling plants.

Simply put, the ambition of the consortium is to change the concept of waste and specifically to turn non-recyclable textiles into a valuable resource.

Using the knowledge and innovation within our consortium, we’ll drive the transition from a linear textile sector to one that is fully circular. Creating the ATSP will cement the UK’s position as a global leader in innovation and textiles circularity, creating new markets, new businesses, new jobs and new IP.

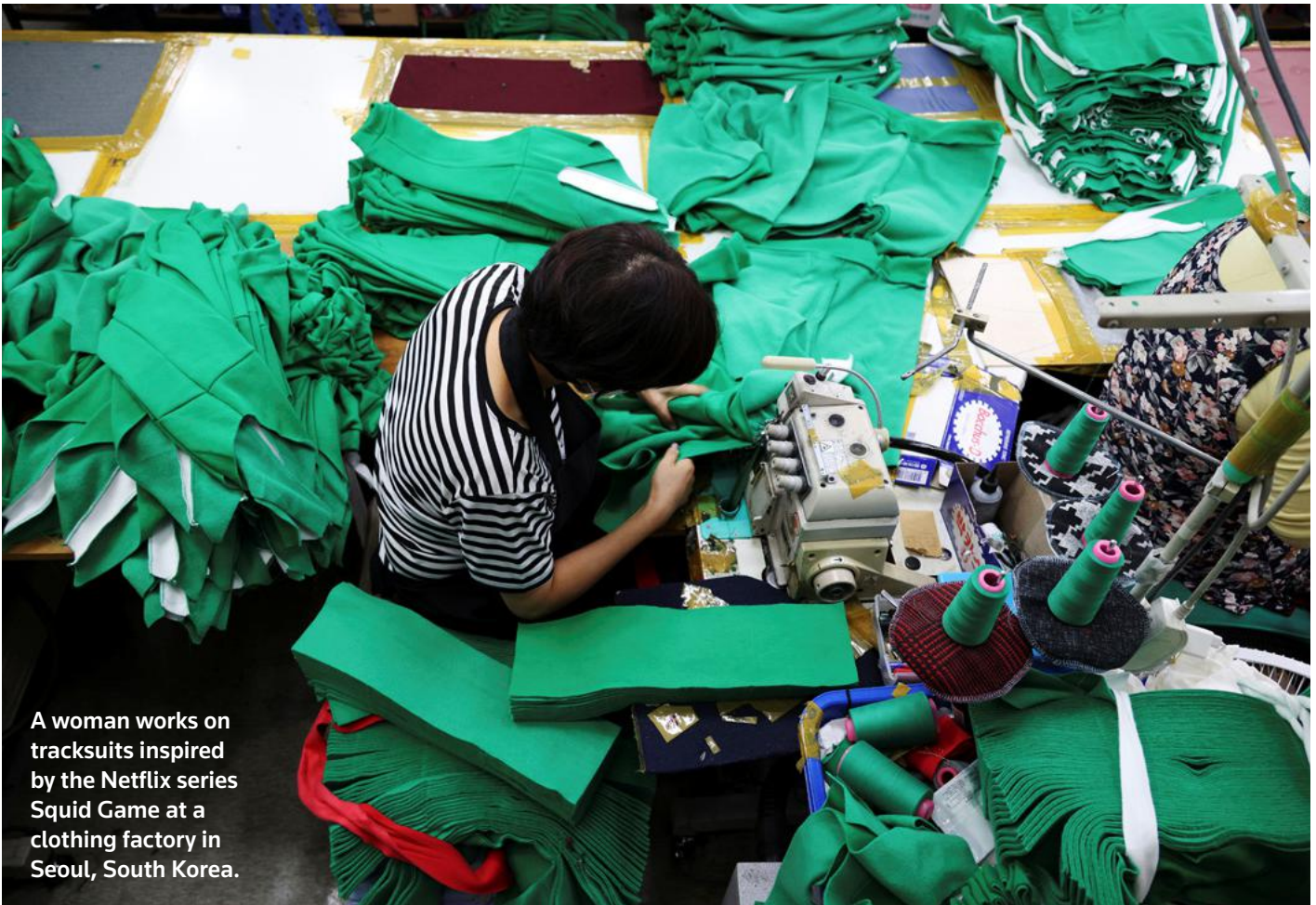
Not bad for a pile of old clothes, hey? ●

Shredded textiles at Shred Station, one of the ACT UK project partners.



Adam Mansell is CEO of the UK Fashion & Textiles Association, which represents UK businesses from spinning, weaving and knitting right through to the catwalk. Adam has links to every part of the industry and chairs a number of UK and international organisations, heading up a variety of large-scale innovation projects.

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KIM HONG-JI/REUTERS

A woman works on tracksuits inspired by the Netflix series Squid Game at a clothing factory in Seoul, South Korea.

‘In trying to slow down fast fashion, regulators should focus on overproduction’

Lewis Akenji of Hot or Cool Institute says efforts to make the industry more sustainable must not shift the burden to lower-income countries and consumers

When other fashion businesses complain about Shein, it is usually about how its ultra-fast fashion model is saturating the clothing market, and because it draws attention to practices that are otherwise hidden to those outside the industry.

That’s because Shein is just the most obvious manifestation of a prevailing ethos that cares little about sustainability, labour conditions for workers, or quality, and is focused on optimising profits, as we at the Hot or Cool Institute found in the report [“Unfit, Unfair, Unfashionable: Resizing Fashion for a Fair Consumption Space.”](#)

Even conservative estimates place fashion among the top global polluters, with a share of global climate-warming gases varying from the Global Fashion Agenda’s 4.8% up to an estimated 10% by the United Nations Environment Programme. Changing how garments are produced and >

COMMENT



LEONHARD FOEGER/REUTERS



Far from taking a pause to course-correct, the fashion industry remains on a trajectory to double its emissions within 10 years

consumed is essential to achieving international climate goals. Our analysis shows that emissions from fashion would need to fall by 50-60% within the next seven years to stay below 1.5-degree increased warming.

Far from taking a pause to course-correct, the fashion industry remains on a trajectory to double its emissions within 10 years, to around 2.7 billion tonnes of CO₂-equivalent in 2030. Trends show escalated production volumes and increased fashion cycles per year, more complex and difficult-to-recycle artificial fabrics, more discounted sales, shorter use-time per clothing item, and a trend to destroy unsold items or ship off second-hand

clothes to landfills in the Global South.

Policymakers, including in the European Union and the United States, have taken note, and are preparing legislation to extend the responsibility of fashion brands to cover impacts across the life cycles and supply chains of their products. It's an approach known as extended producer responsibility, or EPR.

But lessons from the application of EPR in other sectors, such as electronic waste management and packaging, show that poorly defined policies can merely shift the burden from rich nations to low-income countries. Brand owners have also found ways to transfer the onus onto consumers, greenwashing while increasing profits for shareholders.

Designed the right way, EPR could achieve four critical objectives that would bring fashion within ecological limits and address attendant social tensions. First, improve clothing recycling and waste management. Second, ensure fashion brands pay for the costs of environmental damage and waste management resulting from operations across their supply chains. And third, change the design of clothing and business strategy to ensure that operations and products are less harmful and can >

Changing how garments are produced and consumed is key to achieving global climate goals.

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be easily assimilated by nature or recycled after use.

The fourth is no less important: ensure fair and just practices across the industry, especially to partners in low-income countries, where citizens endure the double whammy of poor manufacturing conditions and the negative impacts of environmental pollution.

The fashion industry tends to focus mainly on the first objective of waste management and has practically reduced it to recycling. The appeal of this is that instead of changing core strategy, business-as-usual can continue with only marginal tweaks, bringing in technology to manage post-consumer waste and unsold clothes.

An effective EPR policy would be designed to ensure the other three objectives are also met.

In the G20 countries, 84% of greenhouse gas emissions embodied in fashion consumption occur in upstream production, from fibre cultivation to garment tailoring and finishing. Although textile waste represents one of the largest components of municipal waste, industry leaders have baulked at suggestions to reduce clothing overproduction or make process changes that affect item design.

In its [June 2023 resolution](#) on an EU Strategy for Sustainable and Circular Textiles, the European

Parliament was emphatic in its language, calling for "a paradigm shift in the fashion industry to end overproduction and unsustainable consumption, driving fast fashion to go out of fashion".

But to achieve this the EU would need to set clear targets to cut down overproduction and emissions, restrict the use of artificial fibres, ban practices such as destroying unsold items, and phase out the production of items with high per capita footprints.

In terms of social justice and inequality, the unfair working conditions in manufacturing countries have seen some public attention, with the European Parliament acknowledging that "power asymmetries between suppliers and global buyers, as well as harmful purchasing practices, exacerbate the risk of labour rights abuses".

What has hardly been discussed, however, is the sheer inequality of fashion consumption across income groups. Our report shows that on average, fashion consumption by the richest 20% in any given population causes 20 times higher emissions than by the poorest 20%. This ratio varies with income inequality.

An equity-based approach to meet the 1.5-degree limit of the Paris Agreement implies that the richest 20% need to reduce their footprint from fashion >

A dumpsite where used clothes are discarded in Accra, Ghana.



REUTERS/FRANCIS KOKOROKO

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consumption by, for example, 83% in the UK, 75% in Italy and Germany, and 50% in France. Measures would be needed to regulate advertising and perceived or planned obsolescence that drives overconsumption, industry antics such as proliferating fashion release cycles, and marketing that incentivises impulsive purchases and next-day returns.

One aspect of consumer scapegoating has been the promotion of second-hand donations instead of extending use times of garments. While this might be morally uplifting to donors, its overall impact is harmful. On average, about 10% of emissions occurring in the disposal phase of garments are linked to second-hand donations and exports. Around 30% of used clothes exported are directly incinerated or landfilled at the destination, with little accountability.



NYANCHO NWANRI/REUTERS



Major brands should be made to reinvest part of their profits in manufacturing countries, increasing wages and improving working conditions

Part of the challenge of applying EPR in donation-receiving is that it is not always easy to determine brand owners or, if identified, to hold them accountable if they are foreign companies. The large informal economies in these countries also make monitoring of used clothing quality a major challenge. So, not only are receiving countries such as Ghana and Peru serving as dumping grounds for unwanted clothing to create room for new purchases by the rich, second-hand donations at a wide scale are also decimating local fashion industries in receiving countries while creating dependences on shipments from richer countries.

To address this, EPR legislation should ensure greater transparency in supply chains, and that brands maintain similar environmental, manufacturing and waste management standards in high-income and low-income countries.

Legislation should also severely restrict second-

hand clothing donation and exports, and protect local markets and artisans. Major brands should be made to reinvest designated percentages of their profits in manufacturing countries: towards, for example, increasing wages, improving working conditions, more environmentally sustainable products, and skills training, particularly for women.

Rather than single out Shein, industry leaders need to take responsibility and recognise the urgency and the outsized contribution of fashion to environmental damage and social issues. If it had responded appropriately to mounting evidence, there would have been no room for a Shein model and little of the attention now coming from regulators.

Were the fashion industry to devote its creative energies to resizing to live within ecological limits, rather than blowing through them, it could yet emerge as a sector that champions a just and sustainable future. ●

Clothes sellers in Lagos, Nigeria. Flooding countries with used Western clothing negatively affects the local fashion industry.



Lewis Akenji is a political economist and managing director of Hot or Cool Institute, a think tank that brings science-based perspectives to issues at the intersection of environment and society. He is a member of the Club of Rome, and Transformational Economics Commissioner with the Earth4All project.