

August / September 2020

# ECOTEXTILE

The environmental magazine for the global textile supply chain

NEWS

## Platform Power

The new textile industry police?



amazon

ASOS

zalando

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# Another sob story

Following on from news that Boohoo has been temporarily suspended from online sales platforms Zalando, ASOS and Next due to concerns about textile worker exploitation in Leicester, a group of 50 British lawmakers, retailers such as Marks & Spencer and New Look, investors and NGOs have called for urgent action to prevent the exploitation of garment factory workers in the United Kingdom.

A joint letter, coordinated by industry lobby group the British Retail Consortium (BRC) and addressed to Home Secretary Priti Patel, asked for the introduction of statutory licensing of garment factories to ensure they all meet their legal obligations to employees.

This is welcome news, but we've been here before – and very recently.

In February last year, the Environmental Audit Committee led by former MP Mary Creagh published a 'Fixing Fashion' report that called on the Government to end the era of throwaway fashion through wide-ranging recommendations covering both environmental and labour market practices.

All of its recommendations were rejected.

Among the EAC report findings, it called for a more proactive approach to enforcement of the UK National Minimum Wage with greater resourcing to increase inspection and detection work. It also said the government should publish a publicly accessible list of retailers required to release a modern slavery statement – supported by an appropriate penalty for those companies failing to report and comply with the Modern Slavery Act. Meanwhile, the BRC noted its members have long been 'calling for' greater enforcement by the authorities to support the actions retailers are taking to ensure fair treatment of workers and to encourage businesses to invest in UK fashion manufacturing.

Yet nothing has happened to incentivise any behavioural change.

That's until the aforementioned retail platforms took the bold step of removing Boohoo from their shop windows.

Even though Boohoo's sales through the all online platforms are said to be only around four per cent of its revenues, the news generated huge media interest that panicked large institutional investors resulting in the group's market value falling sharply (see page: 16).

It's a good example of how the market – rather than government – can effectively 'sanction' businesses that operate without sufficient due diligence. Yet it's clear that we can't rely on market self-regulation alone (page: 7).

More legislation is required, and a good start would be to blow the dust from the cover of last year's EAC report and take the findings seriously.

One idea is a 'fit to trade' licensing scheme that ensures all garment factories are meeting their legal obligations to their employees.

That would be a good start – and not just in the UK, but worldwide.

## Textile microfibre summit set for 2021

As the global apparel industry starts to get to grips with its contribution to pollution related to textile fibre fragmentation, the Microfibre Consortium will hold an online edition of its Fibre Fragmentation Summit from 23rd – 26th March 2021 – in partnership with Planet Textiles.

Since the inaugural Microfibre Leadership Summit in 2017 (co-hosted by Ocean Conservancy and the Bren School of Environmental Science & Management), new studies, innovations, methodologies and policy discussions have elevated global awareness of textile microfibre pollution.

However, there is still a huge knowledge gap about the exact scale, sources, fates and impacts of textile fibre fragmentation, with the best practices for mitigating shedding only just beginning to emerge.

Spread over four days next year, the new online summit aims to tackle these key issues and will convene global apparel and textiles brands, supply chain partners, legislators, NGOs, academics and other thought leaders for the next round of cross discipline presentations, discussions and action planning.

Save the date: 23rd – 26th March 2021 in your calendar and register your interest through the event email: [findoutmore@microfibreconsortium.com](mailto:findoutmore@microfibreconsortium.com).

### Fibre Fragmentation Summit



March 23-26, 2021



Issue 98

August / September 2020

Image: © Freepik.com

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Can fashion marketplaces such as Zalando, ASOS and Amazon police textile sustainability?

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ISSN: 1752-7422



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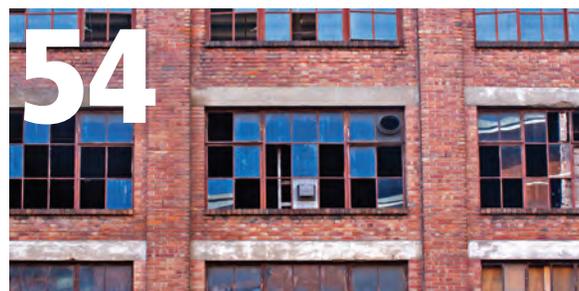
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## U.S. Cotton Trust Protocol launches

MEMPHIS – Fashion brands and retailers have been invited to join the US Cotton Trust Protocol, a new data-rich system that will verify company commitments and efforts in-line with the UN's sustainability goals.

The protocol has been the subject of pilot-phase work, assessing its efficacy in supplying data on US cotton's impact on water use, greenhouse gas (GHG) emissions, energy, soil carbon and land use.

Now launched, it's hoped the platform can fill a data gap to best enable brands and retailers to measure progress on the sustainability front.

"One of our goals in developing the Trust Protocol is to give brands and retailers greater confidence when including US cotton in their sourcing mix," said Ken Burton, executive director of the US Cotton Trust Protocol. "Participating brands and retailers will now be able to demonstrate measurable progress in reducing their environmental footprint and in achieving sustainability targets."

Liza Schillo, senior manager of Global Sustainability Integration at Levi Strauss, and Trust Protocol board member, commented: "We are in strong support of the introduction of standards – including the US Cotton Trust Protocol – that champion sustainably grown cotton and drive wider adoption over the long-term of sustainable cultivation practices."

Web: [bit.ly/3fCu3t5](http://bit.ly/3fCu3t5)

## Uniqlo bans alpaca wool from clothing

TOKYO – Following in the footsteps of Marks & Spencer, Japanese fashion titan Uniqlo has vowed to ban the use of alpaca wool from its collections after a PETA exposé highlighted instances of gross misconduct at the world's largest privately owned alpaca farm, situated in Peru.

Undercover work by the

animal rights group at the site of Mallkini showed how workers slammed alpacas onto tables and tied them to stretching devices as their legs were all but torn from their sockets.

PETA executive vice president Tracy Reiman says: "Uniqlo's decision will go a long way in helping to prevent

Uniqlo has vowed to ban the use of alpaca wool from its collections.



## Amazon and Aquafil join Ellen MacArthur Foundation

COWES – The Ellen MacArthur Foundation has announced that online retail giant Amazon and sustainable textile producer Aquafil have joined its circular economy network.

Swiss technology company ABB has also joined the network of companies which have committed to working towards circularity in their business practices.

"We are delighted to welcome ABB, Amazon, and Aquafil to our network," announced the Ellen MacArthur Foundation in an online statement.

"As new members of the

world's leading circular economy network, they will work with the foundation and other members to share ideas and drive the global transition to a circular economy." Amazon's services include Amazon Second Chance which helps customers trade-in, repair, and recycle devices, purchase refurbished products and recycle packaging. Aquafil has invested in sustainable production methods and developed the Econyl system to rescue nylon 6 waste and transform it into new raw material.

Web: [bit.ly/2ChtTJm](http://bit.ly/2ChtTJm)

vulnerable alpacas from being abused and shorn bloody for their wool."

Last month we saw M&S move to ban alpaca wool from its clothing collections after viewing PETA's graphic video of torture within alpaca farms, not least the largest and most established facility of its kind globally.

Footage shows these terrified animals crying and vomiting in anguish as they're man-handled, roughly shorn and crudely stitched back up having been subject to mistreatment.

"Kind consumers can do their part to reject this cruelty by opting for vegan clothing, which no animal had to suffer for," Reiman added.

PETA continues to work relentlessly within the fashion and textile industries, enforcing its will in a bid to banish animal-based product from apparel and accessories.

The organisation has minimal shares in leading brands including Ralph Lauren, Burberry, Urban Outfitters and Guess, and does so with the sole purpose of gaining a seat at annual meetings. Here, the campaign group can spotlight fashion's need to clamp down on animal mistreatment within their supply chains, as culpable sites only exist due to the continued backing and custom of brands.

Web: [bit.ly/30eDHMh](http://bit.ly/30eDHMh)

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# Platform power

The big clothing retail platforms such as the likes of Amazon, Zalando, ASOS, Next, Ebay and Revolve, amongst others, could be a huge force for positive change in our industry – at a time when self-assessed ‘improvements’ may not be enough.

By John Mowbray



Image: © Bloomcom | Shutterstock

**W**ould you fly with the world's 'most improved' airline?

Sounds an easy question to answer doesn't it? But before you agree straightaway, what would you say if you discovered this 'most improved' airline had a terrible safety record – and its newest aircraft was in fact a Douglas DC-53 from 1958?

Hmm. I thought you may demur.

It's a bit like this with environmental improvement awards dished out by some in the textile industry. These are mostly for PR purposes, they're easy to spot and are usually 'awarded' by those who want to keep hold of their 'winning' clients.

Meanwhile, most certification programmes are used to track exactly *what* raw materials are used in clothing. If a brand really wants to do it, it's fairly straightforward and it looks good and is a responsible way to find out more about their own supply networks. Amazon did this recently through its partnership with CanopyStyle.

Here, the online retail giant agreed to make sure that by

2022 none of the manmade cellulosic fibre (viscose, lyocell and modal) used in Amazon-owned private brand clothing is derived from ancient and endangered forests, or from endangered species' habitats and other controversial sources (see: [www.ecotextile.com](http://www.ecotextile.com)).

So, all good then.

But wouldn't it be even better if Amazon would also apply the same restrictions to all the third-party brands that it sells through its online platform – not just its own private label clothing? Surely that would have a much bigger, positive impact on the survival of ancient and endangered forests?

The initial financial implications of such a move are clear though for Amazon. Kicking off brands for non-compliance would lower both income and website traffic – even though it would greatly help to preserve the endangered ecosystem that it's actually named after!

The really difficult part of transparency though is not identifying *what* a garment is made from – the tough part is identifying exactly *how* a product is made. Our Boohoo story (p.16) is an unusual example of this.

Unlike others in the fashion sector doing exactly the same thing – either in the UK or overseas – Boohoo was unlucky enough to get caught using suppliers that exploited workers on very low wages in Leicester, UK.

I say 'unlucky enough', because the way some in the Leicester garment trade operate has been an open secret in the retail sector for many years. We understand that some UK clothing retailers even treat Leicester like a problematic overseas destination and approach it with the same caution.

But the interesting part of this unfortunate story is that it simply would not go away this time for Boohoo – thanks to continued media coverage and heightened consumer sensitivities around both COVID-19 (Leicester suffered a second lockdown) and the exploitation of ethnic minorities.

This additional unwanted attention ensured Boohoo was ultimately suspended from vital online sales platforms such as Zalando, ASOS and Next due to *how* these clothes were being made.

These platforms, and others such as those which

we draw attention to on the front cover of this magazine, earn substantial royalties from the **sale of third-party brands.**

It's a fantastic business model. Maximising revenues and profits for minimal effort – or risk – in terms of how a third-party product is made. So why would any platform want to fall in line with a money losing exercise by turning away a big 'anchor' brand, for example? After all, having a big brand on any platform will lavishly furnish the bottom line of both brand and the retail platform – delighting two sets of shareholders.

So for Zalando, ASOS and Next, Boohoo's current suspension essentially means lost income, which makes what they've done – in the middle of a pandemic-inspired retail sales crash – all the more impressive.

But their financial pain is only a fraction of what Boohoo is now going through as institutional shareholders pull out their investments. The platforms behaved much like the police, checking and handing out on-the-spot penalties through denial of service, that has ~ resulted in real-world financial consequences.

Finance aside, it does also show how the power of these platforms can be a massive force for positive change in our industry. Looking ahead, perhaps there's room for a 'platform coalition' or consortium? Not one that conflicts with others in our industry such as the SAC or the ZDHC, but one that uses these

It's a bit like how the big social media platforms such as Facebook and Google now account for over 80 per cent of online advertising revenues without providing any content of their own – we (me and you) do it for them.

## “ Institutional investors have left Boohoo to mop up its own tears

pragmatic standards to harmonise social and environmental performance across clothing sold on all retail portals?

But to do that, the above programmes would also need teeth. This means they'd have a pass or fail criteria so that transgressors can be thrown off the programme and/or their chosen sales platform if they did not comply.

So for example, in terms of chemical management, if a brand posted a low (fail) score in the ZDHC brand leader programme, this information could be made available to platforms. If nothing was done to rectify this situation the brand could be sanctioned by the platform. The same could apply to brands that perform poorly with the Higg Index brand module, for example. That would immediately raise the question of whether a brand would be able to sell through online platforms if it wasn't improving, or passing an agreed Higg and/or ZDHC score.

It sounds draconian, but it could be an answer. Like in the world of social media, power is now being concentrated in the hands of the few. But alas, the two aforementioned industry initiatives do not want to become 'standards' – instead they aim to provide guidance for improvement and advice on industry best practice.

It's the same problem with brand licensing. Another elephant that's squeezed into that overcrowded room-sized metaphor. For example, many successful clothing brands have special licensing agreements with

overseas retailers to sell their brands in that locality. They may know *what* they are made from – but not *how* they are made.

The licensed brands often have strict environmental policies on chemical management, with the correct certifications in place, but because their licensees often sell the same brand on a different continent, it will source apparel from local suppliers who may not implement the same chemical stewardship of a heavily certified parent brand located elsewhere. Inditex being a noticeable exception.

This lack of transparency is a well-known problem in the global textile industry – certainly more well-known than the problems of Boohoo in Leicester.

I'm all for self-improvement in our industry, but without standards, certification and metrics that have real sanctions for non-compliance – in partnership with retailers selling directly to the general public – instead of flying ahead on sustainability, our industry will be forever like the pilot of the Douglas DC-53 – frantically pressing buttons and turning levers in order to avoid a very bumpy, Boohoo style landing.

Like the potential passengers of the 50's aircraft, best practise, guidance and education are all fine in their own way, but 'new and improved' doesn't quite inspire 100 per cent confidence. The new breed of ESG (environmental, social, governance) investors who have left Boohoo to mop up its own tears no doubt agree. ■

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# COVID-19 and fashion supply chains: the latest chapter

By Chris Remington

**1st June:** In rebuttal to calls in India to impose a levy on garment imports, the Bangladesh Textile Mills Association wrote to the country's textiles, finance and commerce ministries, demanding that they work to impose anti-dumping duties on Indian yarn imports. The organisation insists India benefits much more than Bangladesh through open trade.

**2nd June:** As new research highlights that the apparel industry is amongst the hardest hit as a result of COVID-19, the European Union announces plans to support Bangladesh – the second largest exporting nation. The EU is providing US\$104m to help support the estimated one million Bangladeshi garment workers who have either been laid off or permanently lost their jobs.

**3rd June:** Reports in India suggest that a dwindling garment manufacturing workforce is becoming reliant on exporting PPE, which it was only given the

green light to produce in May, as demand for everyday apparel has dried up. "It is a matter of survival. We have no option," the head of human resources and compliance at one garment factory in the Peenya industrial area said.

**4th June:** The Garment Manufacturers Association in Cambodia pleads with the European Commission to delay partially suspending the country's apparel manufacturers from its 'Everything But Arms' (EBA) scheme, which will soon enforce tariffs on exported goods. "The EU must not ignore the gravity of the situation and the devastating impact of removing EBA benefits in August," says GMAC chairman, Van Sou Leng.

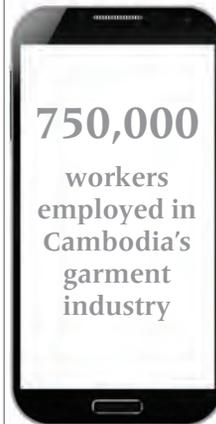
**5th June:** On the day that Rana Plaza factory owner, Abdul Khaleque, died of COVID-19, the BGMEA warned that the contagion could continue to cause major job losses in the country's RMG sector. Rubana Huq, president of the association, says the

industry is running at only 55 per cent capacity due to retracted orders from brands and retailers.

**8th June:** The International Labour Organisation's Better Factories Cambodia initiative launches a mobile phone hotline in the country to provide garment workers with information on how best to recognise and prevent the spread of coronavirus whilst working. Despite lingering health concerns, factories continue to reopen and must be equipped to adhere to social distancing as well as other safety measures.

**10th June:** Children's charity UNICEF develops guidelines for clothing and footwear companies to better address the rights of minors in global supply chains. "As the socio-economic consequences of the COVID-19 pandemic threaten the livelihoods of millions of workers in global supply chains, children's rights must be at the heart of business action," says deputy executive director, Charlotte Petri Gornitzka.

**11th June:** The Ethical Trading Initiative and FairWear jointly publish both a factory checklist and discussion sheet in an effort to ensure worker health and safety remains paramount whilst COVID-19 is a threat. "For brands there is a clear expectation to follow up closely with their suppliers, support them on health and safety and ensure sufficient measures are implemented to protect them," ETI says.



**12th June:** Fashion firms Inditex, Primark and Bestseller say they've launched investigations into allegations of mass sackings of trade union members and officials at their suppliers in Myanmar. Meanwhile in Cambodia, it's agreed that discussions over a new minimum wage will begin in July, though they're expected to be contentious.

**15th June:** The European Union has pledged to support Cambodia by mobilising grants and loans to the sum of an estimated US\$483 million, but has failed to mention whether it will postpone the country's partial suspension from the Everything But Arms scheme. There's reason to be more optimistic in Myanmar, with the government saying foreign investor interest in the country's apparel industry remains high.

**16th June:** There's relief in Karnataka, after the government decides to U-turn on its controversial decision to increase garment worker hours, which could have otherwise reached close to 60 a week. In Indonesia, there's word that authorities plan to restrict garment imports as to protect custom for native suppliers post COVID-19.

**17th June:** There's calls from Bangladeshi business owner Mostafiz Uddin for the industry to work together to save factories throughout the coronavirus crisis. "Cash is the lifeblood of our

industry, and right now, many thousands if not tens of thousands of garment factories around the world are running out of it," he wrote in an op-ed in Dhaka's *Daily Star* newspaper.

**19th June:** The ILO introduces a series of guides to help garment factories in Asia navigate the COVID-19 pandemic and build business resilience. The six 'action-orientated' guides address: managing cashflow, reducing costs, finding alternative sources of income, establishing an online presence, organising factories for safer and more efficient operations, and communicating with workers.

**20th June:** Bangladesh is named as one of the worst countries in the world for workers' rights – with those in the garment industry among the worst affected, according to the 2020 ITUC Global Rights Index. "Workers in Bangladesh are exposed to mass dismissals, arrests, violence and state repression against peaceful protests. In the garment sector, strikes are often met with extreme brutality by police forces," the report says.

**24th June:** H&M is accused of being the reason one factory employing 1,200



▲ Labour contractors had abandoned the workers and had even switched off their mobile phones," the report read.



▲ Suspended from the EBA, Cambodia could lose out on trade benefits totalling US\$1bn.

▼ Collectively, these six garment factories employ around 5,000 people, whose incomes have been jeopardised.

people was forced to close in Karnataka. The Swedish fast fashion firm is said to have retracted an order for goods which subsequently sank the business that'd struggled amidst the pandemic. H&M says it will work with the supplier and local unions to reach a resolution.

**25th June:** A new report from the Society for Labour and Development (SLD) labour rights organisation paints a concerning picture of the plight of garment workers during the coronavirus lockdown in India. Of 100 garment workers from India's National Capital Region, only 19 had received any payment from factory bosses – and just one of the 44 sub-contracted workers in the survey had received any money.

**28th June:** A new report urges the Sri Lankan government to modernise the country's garment and textiles industry following the economic damage caused by the coronavirus pandemic. It also calls for the establishment of a comprehensive social security system.

**29th June:** Six garment manufacturing facilities in the Bangladeshi city of Chattogram say they're set to lose out on a combined US\$3.2 million in orders after being forced to suspend operations due to a location-based lockdown period. Uttor Kattoli, a neighbourhood in the city, was listed a 'red zone' earlier in the month due to a surge in COVID-19 cases. ①

**30th June:** Cambodia's Minister of Labour Ith Samheng urges his peers in authority to address the plight of workers and find resolutions amidst the coronavirus pandemic, after yet more protests over factory closures and uncertainty over pay. There's also action in Vietnam as stakeholders come together to agree a plan to help the country's apparel industry survive the coronavirus pandemic.

**1st July:** A survey of suspended factory workers in Cambodia, whose sites have closed either temporarily or permanently in light of the coronavirus pandemic, highlights the severity of their financial difficulties with respondents suggesting they're eating less and have been forced to sell land in some cases to repay debts.

**2nd July:** The ILO partners with both the BGMEA and the BKMEA (Bangladesh's knitwear association) to establish a virtual platform that can assist workers with guidance on handling COVID-19 as they return to work. This 'RMG Learning Hub' has a three-fold strategy to increase awareness, develop social dialogue between stakeholders in Bangladesh and ensure best safety practices are followed.

**3rd July:** The OHS (Occupational health and safety) Initiative, which has run for four years to date, intervenes amidst the

▼ Los Angeles' garment manufacturing industry employs upwards of 50,000 people, many of which have been called upon to produce PPE throughout the pandemic.



▼ In addition to medical kits, two information hotlines will become functional, led by qualified physicians.



pandemic to provide emergency support to struggling communities in Dhaka. Until November, a new project will provide COVID-19 safety guidance, access to medical support and counselling, and essential items such as food and medical kits to those in need.

**6th July:** The Ethical Trading Initiative and FairWear publish joint guidance for brands on how to conduct their supplier relationships during the pandemic. *The COVID-19: Loss of Jobs and Wages Series* is based on four webinars which lay out guidance to member brands on upholding their responsibilities to workers.

**7th July:** A collective of workers' rights organisations have submitted a complaint against fashion titan C&A to the Complaints and Disputes Committee of the Dutch Agreement on Sustainable Garments and Textiles, accusing the retailer of turning a blind eye to rights violations regarding wages at one of its supplier factories in Myanmar.

**8th July:** In the third issue of its 'Emperor Has No Clothes' report, the Asia Floor Wage Alliance calls for further action from brands and governments to protect garment factories and their workers from the impact of the coronavirus pandemic. The report highlighted that the majority of suppliers in Cambodia, Indonesia, India

and Sri Lanka are not in a financial position to remain operational and pay wages.

**9th July:** The GMAC seeks the ILO's support in calls to postpone the country's partial suspension from the Everything But Arms agreement. Unless postponed, Cambodia will lose out on trade benefits to the sum of around US\$1 billion. Meanwhile, Bangladeshi factories are accused of targeting pregnant women when downsizing their workforces.

**13th July:** One factory in Los Angeles is found to be a hotbed for the coronavirus, as it registers more than 300 cases, leading to the deaths of four. The city's Department of Public Health is locked in a war of words with the site's boss, saying inadequate safety measures caused the spike. Factory manager Dov Charney says there's been no clear instruction on how best to protect workers.

**16th July:** Workers' rights groups speak out after incidents in both Bangladesh and India highlight how unscrupulous bosses are targeting factories with established unions and closing them under the pretence that it's due to the impacts of COVID-19. Scott Nova, of the Workers' Rights Consortium, reaffirms: "It is illegal to dismiss workers because of their union affiliation or to close a factory because it is unionised." ■



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# How COVID-19 could save fashion



**Much has been written about how the fashion industry might emerge from the pandemic. Simon Glover reports on analysis from the RSA (Royal Society for the encouragement of Arts, Manufactures and Commerce) on how the crisis could lead to positive change.**

**H**alf of all UK consumers think the fashion industry should do whatever it takes to become more environmentally sustainable after COVID-19 and just 19 per cent want it to go back to normal, according to a recent survey carried out for the RSA.

The poll of 2,125 members of the public, conducted by market research company Populus, also found that more than a third of women planned to buy fewer clothes after lockdown, and that nearly half of those surveyed wanted to see more ethical fashion supply chains.

Josie Warden, associate director of the RSA's Design and Innovation Team who is leading the organisation's work on the move towards a more circular economy, said the results indicated the pandemic had raised

awareness about sustainability and social issues in fashion.

She suggested this desire for change needed to be supported by the fashion industry, as well as the government, and suggested four key ways that the industry might use this opportunity to embrace the circular economy.

The first relates to consumer behaviour. With half of us buying less clothes during lockdown and planning to make long-term changes to our fashion habits, Warden thinks we'll be buying fewer but better quality clothes and taking more care of those we do buy, as well as buying second-hand.

"Resale platforms like Depop have seen a surge in sales in the last few weeks, and we can expect to see more brands and retailers exploring adding

Which, if any, of the following statements are reasons why you usually buy clothing?

- To replace worn out clothing 81%
- To reward myself 37%
- To feel more confident 30%
- To help make me more comfortable during an activity e.g. sport 29%
- To distract or entertain myself 12%
- To show my identity to others 12%
- To fit in with friends or peers 5%
- Other 5%
- None of these 3%

secondhand, repair or rental services to their offers in the coming year," she said.

Warden also expects to see customers putting pressure on brands over their treatment of the people who make their clothes, with 69 per cent of people wanting the fashion industry to create better pay, conditions and job security for garment workers.

"There was very strong concern in the survey about the conditions of workers across the supply chain. I think it's a really good signal they are kind of joining the dots around supply chain concerns and the way they are buying fashion," Warden said.

"I think the virus has done a lot, in a disturbing way, to show the connections between supply chains and the global economy that many people won't have seen before. The interesting thing is that they are starting to think about what it means for a whole industry to change quite radically and what that means for workers across the supply chain."

Thirdly, Warden said the fashion industry needed to take real notice of consumers' demands for it

to do “whatever it takes to become environmentally sustainable”, such as making clothing last for longer and be repairable.

“To achieve these demands, the industry needs to rethink its business models. Small tweaks, such as having a ‘sustainable’ line or using materials such as organic cotton or recycled polyester won’t cut it,” she said.

“The challenge at the moment is that we can see isolated pockets of activity and the kind of circular conversation where consumers say industry has to change, and industry says consumers need to change before they’ll act,” she said.

“There is a sense now that all of us are saying that we all know this needs to change and there needs to be a much more public conversation which will enable things to change.

“Consumers and citizens have to recognise what constraints a business is under and encourage them to be more transparent to have that open conversation. I think that’s how we work together constructively to push this forward.”

The last of Warden’s four key areas for positive change is the growing influence of younger consumers, the so-called ‘Gen Z’, who she says are increasingly lining up behind more ethical brands.

“They may have the least purchasing power but I see a really interesting shift with this group in their values and their desire to be involved in conversations that are actually trying to address quite deep issues in society,” she said.

“Some of those issues are

really hard for businesses and even governments; they kind of steer away from those conversations about what is growth for, what are we trying to achieve, what is a good society, and how are people included in that.

“I think that Generation X are doing a huge amount to bring that forward and I think if we can have some of those deeper conversations and really challenge the structures that we have built business and industry around, that could influence a huge amount of change.”

Explaining the rationale behind the survey, Warden explained: “We thought it was an interesting time to see how lockdown was affecting people’s behaviour. We wanted to understand a bit around whether people were buying more or less, and why they thought that was.

“People were bringing up things they intended to do in the future, such as buying second-hand more, trying to buy better quality and maybe fewer items. They were saying they intend to repair and reuse things more.

“It will be interesting to see what actually does happen but people were not just saying they’re going back to what they were doing



▲ Josie Warden, associate director of the RSA’s Design and Innovation Team.

An EAC inquiry into fashion led to the 2019 report, *Fixing Fashion: Clothing Consumption and Sustainability*, which made a number of radical proposals all of which were rejected by the government.

“**The crisis provides an opportunity to build a bridge to a better future for the fashion industry**”

▼ Sustainable fashion protest



before, they’re thinking that in the longer term they want their behaviour to be a bit different.

“In the UK, I think the government could do a lot more. The fact that they didn’t take on board any of the recommendations from the **Environmental Audit Committee** last year is a signal that they aren’t as serious about this as they should be.

“This is also a moment for citizens to think: ‘Why am I doing this? Can I reduce the amount I’m buying?’. There are opportunities for citizens to say to businesses: ‘Actually we really want you to go down this direction, please help us to do that and we’ll help you as well.’”

Warden admits that the fashion industry itself has a mountain to climb, but she sees hope in developments such as the recent announcement by Gucci that it will no longer be taking part in fashion weeks.

“There is a long way to go for an industry that has been called the favourite child of capitalism to reinvent itself for a sustainable future. But reinvention is in its DNA,” she said.

“At the RSA we think our relationship with fashion epitomises many of the social and environmental consequences of today’s economic structures.

“Rather than the current ‘take, make, waste’ view of consumption we want to see a more ‘regenerative’ approach based on renewal and reuse. The current crisis provides an opportunity to start building a bridge to a better future for the fashion industry.” ■



# Boohoo under fire again

**Lockdown had been good for Boohoo – until conditions in its supplier factories in Leicester were linked with a coronavirus spike which saw the city forced back into lockdown. Simon Glover reports on the troubles now facing the British ultra-fast fashion brand.**

**C** OVID-19 was the proverbial ill wind for Boohoo, thanks to the surge in online shopping. While most brands took a tumble, its shares shot up by 22 per cent and it had the confidence to splash out £5.25 million on buying Warehouse and Oasis.

But all of that changed with the publication of a report, by the Labour

“**Boohoo calls the shots in the local supply chain**

*Dominique Muller,  
Labour Behind the Label*

Behind the Label non-profit, linking conditions in Boohoo's supplier factories in Leicester with a spike in COVID-19 cases which saw the city forced to re-enter lockdown.

Labour Behind the Label suggested that garment factories in Leicester, which have long been renowned for illegally low pay and Dickensian conditions, had worked as normal through the pandemic, without bothering with social distancing or PPE.

“As the biggest brand sourcing from Leicester, Boohoo calls the shots in the local supply chain,” said Dominique Muller, policy director for Labour Behind the Label.

“Government authorities must recognise that the lack of proper legislation and monitoring is endangering workers lives – it is time to ensure that workers in Leicester are protected and better practice in the garment industry respected.”

Days later, the *Sunday Times* newspaper published an undercover investigation which said workers in a factory in Leicester that

supplied Boohoo were being paid as little as £3.50 an hour – less than half of the minimum wage.

Boohoo quickly tried to distance itself from the allegations but the mud was sticking. Retail giants, including Next, Asos and Zalando, announced that they would no longer be stocking Boohoo clothing until they were convinced its supply chains were risk free.

This was more of a PR blow than a financial one. Sales through third-party platforms accounted for less than four per cent of Boohoo's revenues in the last financial year. However, £1.5 billion was also wiped off the company's stock market value following the controversy.

And the brand's reputation took a battering on social media which is vital to Boohoo's business model and key to understanding why it buys so much product in the UK compared to rival brands who prefer to source from cheaper countries such as Bangladesh, Cambodia and Vietnam.

Boohoo likes to source locally because it's fast. The company became one of fashion's quickest growing companies on the back of reacting instantly to what celebrities and influencers are wearing on platforms such as Instagram and producing inexpensive copies within days.

But to sell these fast turnaround products to its young consumers, it also needs to be cheap. Labour Behind the Label alleges that, to sell dresses for less

than £10 and £5 bikinis, too many corners have been cut.

Boohoo has a lot to lose. Worth more than Marks & Spencer and Asos combined, its brands include Nasty Gal, PrettyLittleThing, MissPap and BoohooMAN, as well as more recent acquisitions Warehouse, Oasis, Coast and Karen Millen.

The company said it was “shocked and appalled” by the allegations and appointed a leading expert in business crime, Alison Levitt QC, to head an independent investigation into pay and conditions at its supply factories in Leicester.

Boohoo is now investing £10 million (US\$12.5m) on trying to eradicate supply chain malpractice. As well as Levitt’s probe, the money will be used to accelerate a separate supply chain review being carried out by ethical auditors Verisio and compliance specialists Bureau Veritas.

John Lyttle, Boohoo Group CEO, commented: “As a board we are deeply shocked by the recent allegations about the Leicester garment industry. We wish to reiterate how seriously we are taking these matters and we will not hesitate to terminate any



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We are  
deeply  
shocked  
by the  
allegations

*John Lyttle,  
Boohoo Group CEO*



relationships where non-compliance with our Code of Conduct is found.

“Our commitment to an incremental £10 million of investment demonstrates our resolve to enforce the highest standards of ethics, compliance and transparency for the benefit of all garment workers.”

However, Muller was less than impressed by Boohoo’s response, countering: “The appointment of a criminal liability QC and the focus on identifying the actions of a ‘few’ bad apples once again shows how Boohoo has not understood the seriousness of the issue nor is willing to take responsibility for its supply chain and business practices.

“We are calling for the urgent development of new regulations that will firmly link the business models of fast fashion companies and the need for proper enforcement of labour laws and brand responsibility for all workers in their supply chain.

“We want to see a vibrant and healthy garment industry in Leicester – one in which workers are protected and paid what they are due. Closures of sub-contractors and raids here and there will do nothing to curb the systematic issues in the industry. We will be closely following this up with the local and central authorities and with Boohoo itself to ensure justice for the workers and a better future.”

Boohoo says that it has unearthed some inaccuracies in the claims made against it, including that some of the garments

featured in media reports had actually been made in Morocco and shipped back to the UK to be repackaged.

It said that one of the companies named, Jaswal Fashions Limited, was not a supplier to the group, and the goods concerned had been ordered by its Nasty Gal brand from Revolution Clothing Co Ltd which had sub-contracted Morefray Ltd to manufacture them in Morocco.

“Our investigation to date has not found evidence of suppliers paying workers £3.50 per hour,” continued the statement. “However we have found other evidence of non-compliance with our code of conduct and the group has taken the decision to immediately terminate its relationship with both suppliers.”

Retail analysts will be looking keenly at Boohoo over the coming months to see whether the company can weather the storm and hold on to its place at the heart of the ultra fast fashion industry.

Financial advisers, such as the Motley Fool website, have advised investors to steer clear of Boohoo stock but, tellingly, the brand’s largest independent shareholder, Jupiter Asset Management, actually increased its holding at the height of the controversy, even as Boohoo’s share price went into freefall.

Jupiter would appear to believe that the market for a £5 bikini is unlikely to be affected by concerns over the pay and conditions of garment workers in Leicester. Only time will tell whether or not it is correct. ■



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# Fast Retailing among Make Fashion Circular inductees

NEW YORK – The Ellen MacArthur Foundation's Make Fashion Circular initiative has welcomed six new recruits: Fast Retailing, Guess, Lee, Nordstrom, Wrangler and Vestiaire Collective.

The initiative was launched back in 2017 and has set out to influence fashion industry stakeholders in best addressing sustainability within their supply chains. Just one venture launched by the initiative's organisers is the Jeans Redesign project which, based on the principles of the circular economy, aims

to ensure jeans are made in a way that is better for the environment and the health of garment workers.

Make Fashion Circular has aligned industry leaders including Burberry, Gap Inc., H&M Group, HSBC, Inditex, PVH and Stella McCartney as core partners. This roster of brands and retailers has now been strengthened greatly, having garnered new support from the Uniqlo brand's parent company, Fast Retailing, as well as household high street names in Guess, Lee, Wrangler, Nordstrom and resale platform Vestiaire.

With support from the Laudes Foundation, Mava Foundation and People's Postcode Lottery, Make Fashion Circular is vying to accelerate sweeping changes on the sustainability front by aligning stakeholders in a mission to promote circularity.

This has been epitomised by its Jeans Redesign project – backed by Tommy Hilfiger, H&M and Gap – which establishes guidelines on durability, material health, recyclability and traceability that partnering companies should strive to meet.

**Web:** [bit.ly/3fsGAzf](http://bit.ly/3fsGAzf)

## UK retailers plot course for net-zero

LONDON - Next, Amazon UK, IKEA and Marks & Spencer are among 20 major UK retailers that have pledged to jointly develop a net-zero roadmap for the retail sector, setting a more ambitious target than the national 2050 requirement. The coalition has said it will publish the roadmap in the run-up to COP26 in Glasgow, which has been postponed to November 2021 because of the COVID-19 pandemic, in a declaration coordinated by the British Retail Consortium (BRC). The group will work with each other, BRC environmental experts and third parties to define the roadmap's time-bound measures towards complete net decarbonisation ahead of the 2050 deadline. Three key areas, regarded as the UK retail sector's largest sources of emissions, will be analysed. These are comprised of upstream supply chains, customers and direct operations including shops, distribution centres, warehouses, transport and logistics.

The BRC claims that there is currently no other net-zero roadmap for the UK's retail sector that encompasses all of these emissions sources. Also signing the declaration are Aldi, the Booksellers Association, Boots, Co-op, Costa Coffee, Dixons Carphone, Greggs, Kingfisher, Lidl, Missguided, Musgrave, Ocado, TJX, WH Smith and Morrison's. Several of these have already unveiled net-zero targets deadlines at 2050 or sooner.

**Web:** [bit.ly/2ZpgcAK](http://bit.ly/2ZpgcAK)

## Podcast: Ecotextile Talks – Behind the News

WAKEFIELD – Have you ever wondered what goes on behind the scenes in our editorial newsroom? If so, why not have a listen to the first two episodes of our new series of *Ecotextile Talks* podcasts available on Apple, Google, Spotify and Deezer. Like good journalists we've always kept these confidential discussions well under wraps. That was until our working circumstances during the COVID-19 lockdown gave us an idea to launch our remote editorial chats as a series of easy listening 'on the couch' style podcasts about the latest social and environmental issues impacting our industry. The new *Ecotextile Talks*:



You can listen to *Ecotextile Talks* podcasts on Spotify, Apple, Google and Deezer.

*Behind the News* podcast series was born at the end of June and the first few episodes have already been quietly released on all major platforms. In our pilot episode we talk about the challenges of sourcing original news during lockdown and picked out a few key stories that managed to turn our heads over the last month. These include the dynamic and troublesome situation around worker safety in Bangladesh and

the issue of 'chemical leasing' – or chemical circularity – which is being promoted as a new way to drive the fashion sector towards new, more sustainable business models. Episode 1 meanwhile, gives listeners an insight into what our team thinks will happen to textile trade shows and other events post-pandemic. Will they all survive? How will those that survive evolve?

**Web:** [bit.ly/2CRaTRR](http://bit.ly/2CRaTRR)

# Online orders

**Kate Heiny, director of sustainability, at Zalando SE reveals how the fashion ecommerce giant wants its partners to align with its own environmental and social objectives – especially after COVID-19.**

**Your recent initiatives on carbon emissions and the Higg Index suggest you've managed to convince top-level management to run with environmental initiatives post-COVID? How did you manage that?**

No convincing necessary. Our management board is fully convinced that sustainability is highly relevant to our society. We notice the importance of sustainability to our customers. We can see from our data that customers want to make more sustainable shopping decisions, and they expect us to enable them to do so. As a highly customer-centric company, we take that need very seriously.

However, becoming more sustainable as a company is not just about gaining a competitive advantage.

We can influence our industry to do more and be better, because globally, society is facing sustainability issues that cannot be ignored. We know that Zalando can play an important role in tackling these fundamental sustainability challenges. As the leading online platform for fashion in Europe, our scale and technology will help us to take the lead in building the connections needed to transform the industry.

**What advice do you have for sustainability teams at other brands who get frustrated when their advice is ignored – and whose budgets are often the first to be cut in times of trouble?**

Zalando was founded in 2008 right at the beginning of a financial crisis. Our company culture was defined in a challenging environment where frugality and focus were essential. We

learned early that by steering decisively in challenging situations, we can not only prevail but can thrive as a team. This helped us through the financial crisis and will also steer us through this one.

Nevertheless, the coronavirus confronts us all with unprecedented challenges, but it also presents us opportunities. The global coronavirus situation has shown us how flexible and fast the economy can be when change is needed, and this should be used as a blueprint when it comes to sustainability.



Companies reevaluate and adjust business models and the way they operate to get through this. We believe there is a clear link between sustainability and continued commercial success in selling fashion online. Hence, this is a good time for companies to include a strategy for a more sustainable business. Solutions such as recycled materials or pre-owned fashion models have the potential for businesses to stay ahead of customer demand after this crisis.

**Two major sustainability announcements within a week at Zalando – and in the middle of a global health crisis. Might a cynic wonder if that, as an online retailer less affected by store closures, you saw an opportunity to steal a 'sustainability' lead on your rivals?**

We announced our do.MORE strategy in October 2019 and we have a plan on how to reach our goals in the coming years. We have not adjusted this plan because of the coronavirus. We just reached two important milestones on the way: First of all, we announced our science-based targets (SBTs). Thus, becoming the first platform worldwide to set SBTs to reduce carbon emissions in line with the 1.5 degrees Celsius Paris Agreement figure. The other one was the launch of our cooperation with the Sustainable Apparel Coalition (SAC) and Higg Co. The Higg Brand & Retail Module (Higg BRM) will help us to measure environmental and social sustainability impact across the fashion industry making sustainability assessment mandatory

for our private labels and partner brands. Our goal is to become a sustainable fashion platform with a net-positive impact for people and the planet. This is a long-term vision. Therefore, you will see many more exciting initiatives in the future.

**At the start of the pandemic, Zalando initiated the 'Connected Retail' programme that charged zero commission on brand and physical retailer sales to ease cash-flow for bricks and mortar brands. Were the sustainability credentials of these companies checked out first? And if not, will they be subject to environmental criteria if they stay with your platform?**

As a baseline for our human rights oversight, all of the partners we work with at Zalando agree to our Code of Conduct – and this includes our



**Kate Heiny, director, sustainability, at Zalando SE :**

**“If we do not see engagement or improvement, we’re ready to make some tough commercial decisions”**

partners in the Connected Retail program. With the launch of our do.MORE strategy, we have made assessments around ethical and sustainable parameters for all our brand partners mandatory. The brands we work with through Connected Retail can be established brands or

even small local stores run by a single person. So, our bigger Connected Retail partners will be expected to share sustainability information with us through their completion of the Higg BRM. We are rolling out a brand assessment step by step to all brand partners – how specifically we will

assess our business partners through Connected Retail will be defined in the coming months.

**As part of efforts to reduce carbon emissions, Zalando says its private label products will be made from more recycled materials. Is this** 

**realistic given the imminent falls in natural and synthetic fibre prices post-Covid? Oil price falls make virgin synthetics much less expensive by comparison.**

The work on our sustainability strategy has not changed as a result of the coronavirus crisis. Sourcing more recycled content is one element of our strategy, but we aim to take a holistic approach to reducing our carbon footprint across all materials, as well as reducing the impact of shipping and packaging. In terms of recycled materials in our products, we will increase the minimum content from 20 to 30 per cent in early 2021 and have already had success with testing recycled materials in new product areas such as sunglasses. In terms of other materials, last year over 40 per cent of our cotton was sourced more sustainably (Better Cotton Initiative, organic or recycled) and we are in the process of converting as many of our core fabrics to organic cotton as possible. We also source a significant amount of leather for our footwear and accessories business, and are focusing on reducing the impacts of the leather tanning process through our membership of the Leather Working Group as well as increasing traceability in our leather supply chain, as this can have varying carbon impacts.

**Your platform model and scale mean there's a lot of ground to cover to ensure all of your partner brands and all of their suppliers meet your demands on GHG emissions. How will this be measured?**

By 2025, we will reduce our own emissions by 80 per cent and from our own Zalando products relatively by 40 per cent. We acknowledge our impact far beyond our own operations; thus, we will engage 90 per cent of our key partners to set SBTs themselves. We will continue to measure and report our scope 1 and scope 2 footprint annually, as we currently do for our own operations. Our partners, who we are now requiring to set SBTs, will also have to measure and report annually, like us. We expect the measurement of their footprint to be aligned with the global standard, the GHG Protocol. We will report our full inventory (scope 1, 2 and 3) on an annual basis going forward.

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**In March 2020, when most countries were significantly affected by the coronavirus, almost 30 per cent of customers bought more sustainable fashion at Zalando**

**You say that your partnership with the Sustainable Apparel Coalition and Higg Co will make sustainability assessment mandatory for brands. How rigidly will this be enforced? Will it be immediate expulsion or something different, 'three strikes and out' maybe, for those that fail to comply?**

Brand assessment is a critical element of our strategy in order to provide our customers with more information not only on product sustainability parameters, but also with a more comprehensive understanding of what brands are doing on a corporate level and in their supply chains.

This first year of our brand assessment launch, 2020, is about data gathering and identifying areas of improvement and partnership opportunities. In 2021, we plan to scale the program and launch it to more brands. We also plan to start working toward data verification which we will do in alignment with the SAC. We will set specific requirements toward improvement, work with partners to address these issues, just as we do in our factories through the audit program. Ultimately, however, if we do not see engagement or improvement, we're ready to make some tough commercial decisions.

**You mentioned that Zalando adapted its steering during the Coronavirus crisis. How does this impact your sustainability initiatives? Can we expect to see Zalando sustainability projects being postponed or cancelled?**

As mentioned before, we see a clear link between sustainability and continued commercial success. That's why sustainability and our do.MORE strategy are central to our group strategy and our overarching company vision to become the starting point for fashion. We have not adjusted this plan because of the coronavirus.

Our sustainability ambitions will help us stay ahead of customer demand – and this demand doesn't change due to the pandemic. Both our current and future customer bases are calling for more sustainable choices in fashion. In March 2020, when most countries were significantly affected by the coronavirus, almost 30 per cent of customers bought more sustainable fashion at Zalando. More sustainable fashion makes up around 10 per cent of Zalando's GMV today. We are on a good track to grow this share to 20 per cent by 2023 in line with our strategy.

**What sort of feedback are you seeing from consumers regarding the sustainability filter on your platform? Are people really shopping by sustainability? If so, can you reveal any demographic and/or regional consumer trends on this?**

We know that customers are looking for more sustainable choices. Overall, in 2019 online searches on sustainability related terms increased by 60 per cent. Nine out of ten Generation Z consumers believe companies have a responsibility to address environmental and social issues. Therefore, we have introduced our sustainability flag to make it easy for customers to spot and shop more sustainable articles in our shop. Products are highlighted with the sustainability flag when they meet one of our sustainability criteria. With an offering of more than 35,000 items from more than 750 brands our sustainable fashion assortment today is one of the largest in Europe. We enlarge this every year, so we can enable customers to shop the way they want to – sustainably. ■

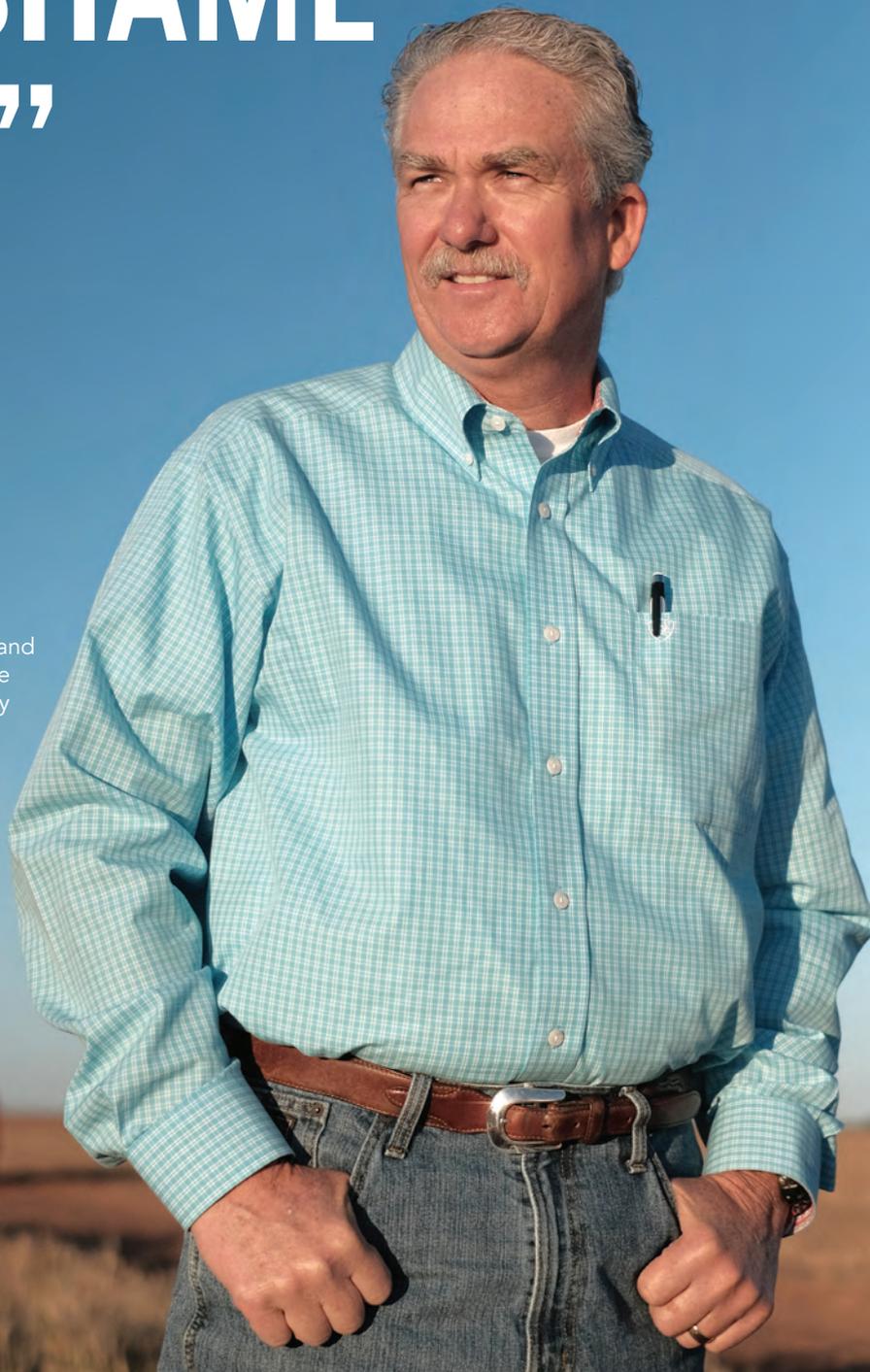
# “ IF WE’RE NOT TAKING CARE OF THE EARTH, THEN SHAME ON US.”

– Dahlen Hancock  
Texas

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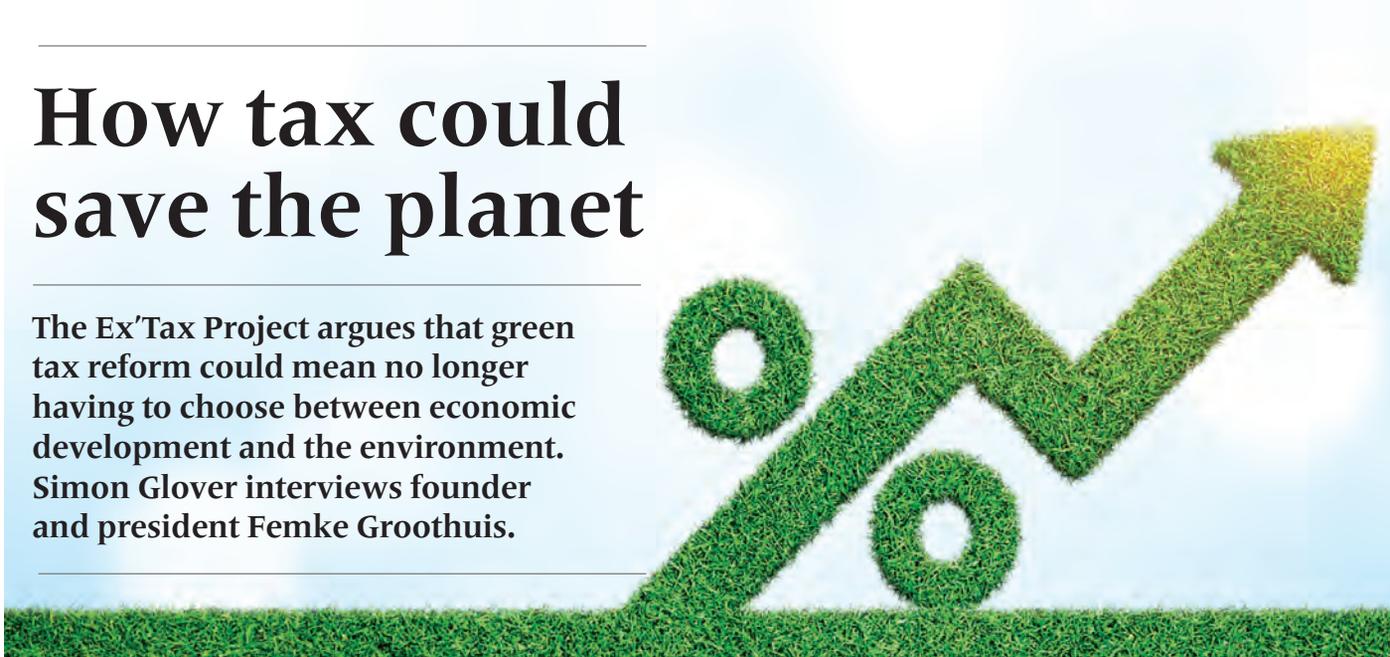


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# How tax could save the planet

The Ex'Tax Project argues that green tax reform could mean no longer having to choose between economic development and the environment. Simon Glover interviews founder and president Femke Groothuis.



The money required to achieve the UN's Sustainable Development Goals (SDGs) to avoid catastrophic tipping points on climate change is truly mind-boggling. Femke Groothuis believes her Ex'Tax Project might just have the answer. "Currently, tax systems put a high and increasing tax burden on labour, while leaving natural resource use and pollution – the use of water, metals, and carbon emissions – relatively untaxed or even subsidised," she argues.

"This means tax systems are aligned with the linear 'take-make-waste' economic model, which is focused on maximising resource extraction and consumption and minimising the input of human capital."

Groothuis describes the Global Goals agreed by 193 countries of the United Nations as a "clear 'to do' list for humanity".

"The most daunting tasks are to adapt the metabolism of our economies to match

the carrying capacity of the Earth and stay below 2°C global warming," she says.

"Since taxes have a fundamental impact on investment, employment and consumption decisions, they will need to evolve. They should now be aligned with the goals of the inclusive circular economy; a regenerative, carbon neutral economy that supports the Global Goals."

Groothuis points out that labour taxes, including income tax, payroll taxes and social contributions, currently account for 52 per cent of total public revenue raised in OECD countries, while green taxes raise only five per cent.

"Our proposal is to gradually shift the tax burden from labour towards green taxes to shift financial incentives. This involves reducing the tax burden both for employees and employers," she explains.

"We can't afford to expect economic development first and then start thinking about the environment. In



▲ Femke Groothuis  
The Ex'tax Project

reality, environmental degradation is a huge threat to the economy. Numerous studies have demonstrated that inaction is more expensive than action."

Interestingly, Groothuis says the apparel industry could be the perfect sector to take the lead in advocating tax reform for environmental good.

"I believe the industry can be a force for good," she says. "It takes a huge transformation but it's possible. Applying the Ex'Tax model means that sustainable and social solutions become more profitable and scalable. It's a way to ensure that doing good and doing well go hand in hand."

With this in mind, and the support of the C&A Foundation, her organisation recently carried out a study examining how it might work in Bangladesh, the world's second largest garment manufacturer.

"Bangladesh was chosen as a case study as the country has one of the largest gaps between tax

“Our proposal is to gradually shift the tax burden from labour towards green taxes

revenue and GDP, which means that there is a need to mobilise domestic resources," she explains.

"Pollution levels are high, and the country is very vulnerable to climate disruption, which could displace more than 30 million people by 2050. It has a large, growing and resilient population of 165 million, with two million youths entering the job market every year, representing a vast human potential.

"Also, the country has a proven track record of effectively addressing poverty and other challenges. We wondered if taxing pollution rather than people, as advocated by UN Secretary-General António Guterres, could be a way of 'leapfrogging' tax systems to the SDG era."

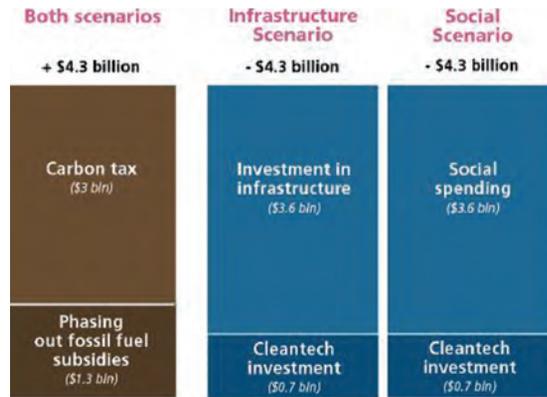
The report, entitled *Tax as a Force for Good*, concludes that tax reforms could lead to higher GDP and employment levels, while lowering carbon emissions and reducing energy imports.

It estimates the potential **green tax revenues** by 2025 of a carbon tax of US\$30 per tonne of CO<sub>2</sub>, while phasing out oil and gas subsidies.

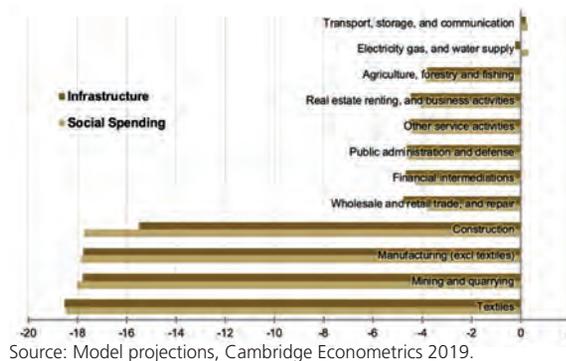
Business consultants Cambridge Econometrics modelled two slightly different tax reform scenarios – one focused on infrastructure in which revenues are invested in clean technology; the other combining spending on clean technology with social programmes targeted towards low income groups.

In both scenarios, the clean-tech investments were targeted towards the textiles sector, because of its

**THE INFRASTRUCTURE SCENARIO AND THE SOCIAL SCENARIO (IN 2025, BANGLADESH)**



**CO<sub>2</sub> EMISSIONS PER SECTOR (2025, % DIFFERENCE FROM BASELINE, BANGLADESH)**



Phasing out fossil fuel subsidies could potentially save US\$4.7 billion, while a carbon tax could raise another US\$10.6 billion.

From 2020-2025, GDP would rise by US\$6.9-7.8 billion, carbon emissions would fall by 18.5-19.9 megatonnes, while an extra 540,000-670,000 jobs would be created.

**We can't afford to expect economic development first and then start thinking about the environment**

importance to Bangladesh's exports, and in each case, the figures showed a **higher GDP, lower emissions and an increase in employment.**

Groothuis continued: "The social scenario in the study demonstrates that when the revenues are mainly used to alleviate poverty, higher benefits for lower income groups are possible. This means that climate policy can be social policy; the outcomes depend on the design."

Of course, she does foresee major challenges if her ideas are to be taken on board, not least in terms of persuading the owners of Bangladesh's garment factories - which are responsible for 80 per cent of the country's exports - they would have to pay new pollution taxes.

"Nobody likes to pay for

something that was previously for free," she admits. "The main problem is that we've created the illusion of cheap fashion by externalising its true costs.

"As one of the most polluting industries, the global textiles industry is at a crossroads; continuing the linear model – while imposing external costs to society and future generations, or shifting to circular models.

"Our study shows a slight negative result in terms of gross output (0.24 per cent and 0.15 per cent respectively) by 2025 for the textiles sector, but overall, the Bangladesh economy would be stronger and more competitive in terms of carbon intensity and energy import dependency.

"Also, it's important to note that the competitiveness impacts of the cleantech investments in the sector – totalling more than US\$2.5 billion – are not yet captured in the model.

"Of course, there are numerous challenges to implementation, but if the textiles and fashion industry is serious about the SDGs and circularity, the sector will need to clean up its act and start supporting positive solutions.

"Ultimately, it's politicians who pull the strings with regard to tax. But business leaders and businesses exert influence over political decision-making processes. If they're serious about the circular economy and the SDGs, they need to explain to politicians how the tax system is a barrier to scaling up future-proof business solutions." ■

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**Tim Wilson**  
3P Strategy (threep.uk)

# Transparency: “You’ll know it when you see it...”

Despite the emergence of league tables on transparency, has the textile industry really made any progress? Tim Wilson says we should ditch the current delusion that we’ve made wholesale progress.

I hate transparency. There – I said it. I hate it because as a concept it matters to me – it’s only possible if you care. To be clear, it’s not the idea of transparency that I hate, but the use of the word in the current discourse. My idea of transparency may not be the same as yours and yet we use the same word to describe both. This is true for many ideas and the words we use to communicate them. Anyone who has ever moved furniture with another human will know that simple concepts – like right and left – can cause pain due to a difference in perspective. Right and wrong is on another level altogether.

I’ve spent more than 20 years of my life trying to deliver ‘better’ transparency in global supply chains. In this context, the word

‘better’ often means ‘some’ – and there is evidence of change. Transparency is a new topic, new information is coming through, league tables are being built. But have we really made progress, or are we creating mirages in the desert? We thought we had something but when we focus and look more deeply, it disappears.

Last year the Sustainable Apparel Coalition published the findings of their consumer research into transparency. They provide a good list of guiding principles, focused on communication to consumers, but little detail. Is there a standard way of measuring modern slavery? Are the units ‘hours per thousand garments’? Would that be just in the garment factory or all the way back to raw materials? How should effluent discharge from



contract dye-houses be apportioned to a specific brand or product? If carbon footprint is reported, is that measured, or estimated through an LCA model? Given that the guidance suggests a ‘red, orange, green’ rating for embedded CO<sub>2</sub>, not an absolute number, what are the thresholds for each band?

The Transparency Index from Fashion Revolution is now in its fifth year of benchmarking brands across a range of topics – from policies to traceability. The benchmarked cohort has grown each year and the criteria have remained stable enough to allow progress reporting. This initiative provides a useful KPI – showing how capable of disclosure a brand is, and how that has developed over time. H&M is ranked #1, and what it’s doing is impressive. For many H&M products I can now look on the ‘product background’ tab when browsing the online

“  
**Is there a standard way of measuring modern slavery? Hours per thousand garments?**

shop and discover the factories that manufactured it and the materials it is made from. Progress indeed – but is this transparency? It feels more like a presentation or a ‘show reel’ – managed and manicured.

If I were really looking through the glass I ought to be able to shift my position to see different things, including the imperfections.

We’ve all been honing our online meeting skills recently. Don’t you find that the Zoom calls where your interlocutor has used the ‘green screen’ feature to present the idealised bookcase background just distracting? It’s the wonky picture, the washing-up sitting on the side and the child peeking around the corner that makes it real. Makes it human. It lets you focus on the person and what they need, rather than trying to work out what else isn’t real.

Clothes are still – for now at least – a human endeavour. From cotton fields to garment factories, they are made by people. And yet they are almost entirely missing in this narrative. When they do appear, it is either with stories of heart-warming salvation or gut-wrenching tragedy.

### Human well-being

Maybe human wellbeing is the most important issue in the global textiles industry. When you spend time with the experts you learn just how complex, nuanced and embedded the processes of exploitation are – and how important the industry might be in reducing poverty. We could zoom in – pun intended, if indeed it is a pun.

But then there are the issues of deforestation and land degradation, the chemical use and biodiversity loss, and waste ... and more waste.

We can’t have transparency of everything all of the time. It would be impractical as well as commercially and emotionally exhausting. Transparency is massively inefficient compared to trust, but late-stage, globalised capitalism seems antithetical to trust. There is a movement to change that – by replacing shareholder primacy with something else and seeking global agreements for ‘common goods’ – such as a planet to live on, but they’re going to take a long time and require new, higher quality information to flow anyway.

Meanwhile, circular business models are in the ascendancy, and they are going to need transparency of a completely different calibre. Knowing the factory where the finished goods were made isn’t going to cut it – and let’s be clear, there are brands and retailers today who don’t even have this information. Nor is working at the style level, or the colourway, or the size – it’s about the individual piece. Not any old £10 note but the one numbered AH16 799662 (I have it at the moment – and given that the last time I used cash for anything was probably around March 23rd I may have it for a while).

So, we are stuck in the middle. We’ve evolved a system that continually erodes trust through ‘winner takes all’ mechanisms, the tyranny of choice, globalised

If our goal is greater transparency, then we ought to be able to define how much we currently have and determine if our interventions are moving us towards our goal.

“  
We’ve  
chucked the  
whole lot in  
a bag and  
written  
transparency  
on the  
outside

instant communications and nation states. We can’t go on as we are, and we can’t put the genie back in the bottle. Every single intervention in the current system – seeking improved outcomes for people and planet – requires better quality information from more distant stakeholders. We’ve chucked the whole lot in a bag and written transparency on the outside.

**Metrology is the science of measurement** – and it lies at the heart of the problem. So, what are the units of transparency? It seems clear to me that there are none, nor can there be.

BlackLivesMatter is instructive here. Don’t point me to your employment policy, show me the racial composition of your board. The advantage in this case is that – generally – the ‘system’ already requires companies to report the identity of its ultimate decision-makers to the relevant authorities. Reporting must be accurate, in a timely fashion and there are penalties for getting it wrong. We’ve built a process to deliver high quality information that is directly usable in a specific area of poor system performance.

We may be stuck in the middle of the systems evolution process – but we’re not stuck with the bag. We should upend it and sift through, choosing to ditch this increasingly useless fallacy and replace it with more defined, meaningful and accurate descriptions of the information we want. While we’re at it, let’s do the same with sustainability.

Don’t. Even. Get. Me. Started... ■



# Reading the terrain

Breakthrough for Bangladesh as transparency platform gains momentum.

By Chris Remington

**B**angladesh is a key cog in mobilising the fashion and textile manufacturing industries and has been for decades, this we know. What perhaps isn't as clear is the intricate make-up of this Southeast Asian nation's ready-made garment (RMG) sector, and the workforce that's at the heart of its operations.

Basic data recognising even just the number of factories has been contentious. Figures from market research authority Statista suggests around 4,500 sites were operational in 2018 – the highest in the country's recent history after years of successive growth. Meanwhile, in the same year, the NYU Stern School of Business tallied the number closer to 8,000, with data published in its

report *Five Years After Rana Plaza: The Way Forward*.

With these evaluations at such odds, a new project kick-started by Dhaka's BRAC University is to be warmly welcome.

"In Bangladesh, if you look at any list you'd get extremely confused," project lead Hasib Hussain tells *Ecotextile News*. "Nobody knows whether a factory is listed but non-operational, listed and operational, listed but temporarily closed, and there's also a large portion of factories which are there but not listed anyway.

"So that's been the problem, what we call these sub-contracting factories. They were totally outside of the radius, so we're the first and only project in Bangladesh that's identified non-member factories. Our engagement is physical, we walk through each and

Led by the Centre for Entrepreneurship Development at BRAC, the project has been backed by Laudes Foundation and the Netherlands through the Dutch Embassy in Dhaka.

**“**  
**In Bangladesh, if you look at any list you'd get extremely confused**

every street to find factories, and a factory's definition can be as small as employing 20 people or as big as having 10,000 people," he explains.

Though conceived post Rana Plaza – at a time when many in the industry were aligned in their efforts to reinforce worker safety and transparency within the Bangladeshi RMG sector – the team at BRAC has only made real headway over recent years, leading up the launch of its beta map – **Mapped in Bangladesh.**

The on-boarding process has been a concerted effort by a team of more than 40 from BRAC, spanning Dhaka's dense central population and those of the surrounding areas, including Gazipur and Narayanganj. Data collection within Chittagong remains a work-in-progress.

"That was our scenario

before this pandemic struck,” Hussain notes. “This has been stopped because our physical movement was restricted.”

As such, the university team presently counts more than 2,500 factories on its platform, which can be filtered through in different ways. A user is able to whittle through this stream of data by sub-categorising the type of product the factory produces, the processes they use – whether it be weaving, knitting, dyeing or printing – the certifications they’ve attained, the countries they export to, the brands or retailers they serve, or via their membership – which might be with the Bangladesh Garment Manufacturers and Exporters Association (BGMEA) or the Bangladesh Knitwear Manufacturers and Exporters Association (BKMEA).

According to the team at BRAC, stakeholders across the country’s industry are optimistic of the potential this platform holds, including the Bangladeshi government.

The BGMEA’s president, Rubana Huq, told us: “Our interactions are mostly within the area of how well the map is capturing the data and plugging them in to the map within the perimeter of the industry, and the sustenance of the map after the project is over in June 2021.

“It could be a great reference tool for global brands to check basic information on a factory and to find a match for them. Moreover, we [the BGMEA] feel that a digital map could be a big step towards transparency since we will be able to track which factories

are working for which brands,” she continued.

Though promising in this sense, building the platform to be representative of the country’s RMG sector has proven difficult for the research team, as factory owners themselves have – perhaps unsurprisingly – been reluctant to publicise the details of their operations so openly.

“In the end we convinced leadership that this is beneficial to the factory,” Hussain tells us. “This is where it’s going, buyers and consumers in the 21st century want to know where their products are coming from and there’s absolutely no other option than to be transparent. The new leadership [the RMG Sustainability Council] has also reacted favourably to this and we’ve collaborated with them for this latest COVID-19 crisis research on different locations.”

### Life on lockdown

For now, progress has quickly been ground to a halt due to limited travel and understandable health concerns, as has been the case for businesses globally. What’s more, with the Bangladeshi RMG sector painting a muddy picture with the resurgence of some sites and the shutdown of others, it’s difficult for a team vying to gain a representative perspective of the industry’s ‘norm’ to make progress when the circumstances are so alien.

“It’s madness to keep factories open at this time, but we cannot do anything about it because our government feels that

## “ A big step towards transparency

### How Bangladesh has reacted:

- Both the BGMEA and BKMEA announced that factories would reopen from April 26
- Hygiene and safety guidelines for factories were published by the Ministry of Health and Family Welfare on April 29
- The government of Bangladesh stimulus package provides aid to export-oriented RMG industry

## “ We’re terrified that the increasing number of deaths will force us to have a repeat shutdown

people should go to work, earn and feed themselves,” Hussain says. “The dangerous thing is, the performance of Bangladesh in terms of **controlling the COVID-19 pandemic** has been relatively bad so there’s a chance within a month that we’ll be in a terrible situation whereas other countries will have control over the situation that we compete with.

“Sadly, we’re terrified that the increasing number of deaths will force us to have a repeat shutdown.”

Distressed, a resolute team at BRAC hasn’t rested on its laurels amidst this period of lockdown and economic disarray, instead opting to conduct “rapid surveys” of its impressive database of factories to assess the impact of COVID-19 on their operations – a unique insight at a time when we’re hearing from afar of the hardships exerted on workers.

The first survey has subsequently centred on the resumption of operations for factories and their prospects, as some customer brands and retailers have controversially chosen not to pay for goods in-production that hadn’t yet been exported.

Findings, from the 1,686 factories that responded, show that 64 per cent of sites are open once more, whilst 36 per cent remain closed. Of those in operation, 86 per cent are working on salvaged orders and those which had been put on pause due to lockdown.

The remaining 14 per cent has turned its attention to producing personal protective equipment (PPE), which is expected to ❶

represent a growing export market for the country as items like face masks quickly become commonplace in global societies. Remarkably though, more than half of those producing PPE at present are doing so on a not-for-profit basis.

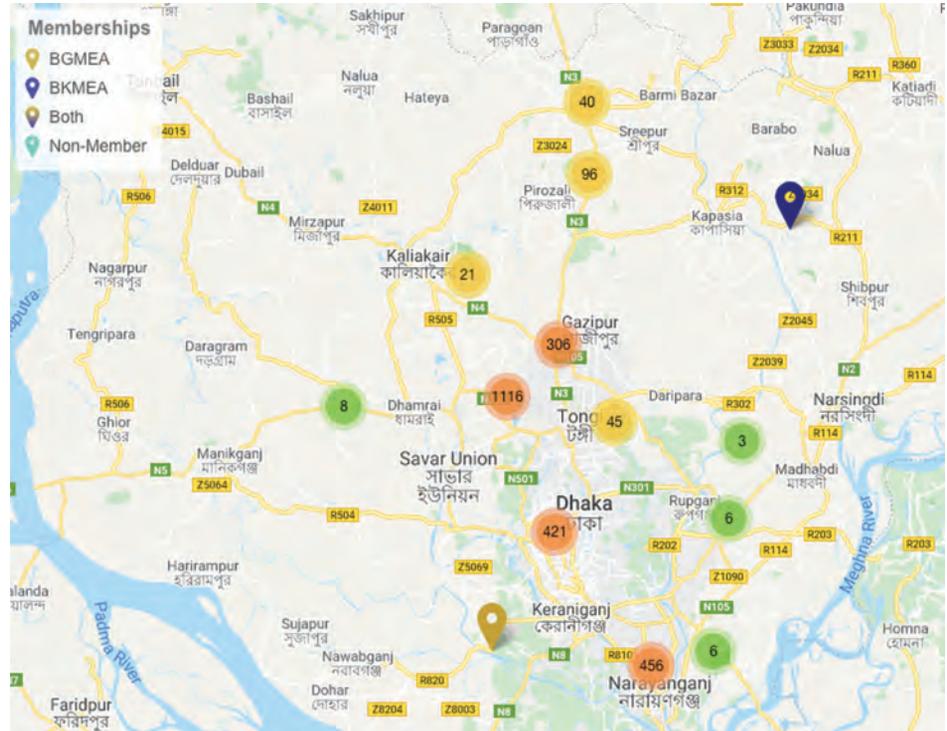
Having proven the efficacy of engaging with these sites on a survey-style basis, the team at BRAC is to assess the robustness of measures imposed in factories with regards to worker safety. Going forward, it could be leveraged to gather data in a number of ways.

**Ground work**

“Our view is, with this infrastructure in place, people can come and use this data to do something,” Hussain tells us. “We’re doing the ground work, and we’re looking for collaboration so that people can use this data. We feel energised that our dataset can be used by lots of different partners.”

Scaled and in practice, the map could prove instrumental in the resurgence of Bangladesh post-coronavirus. It’s easy-access, simplistic interface could streamline supply chain relations, and enable businesses to tailor their requirements, whether this be based on a particular certification or just product type.

“Given the size and complexity of the Bangladesh apparel industry, the map can provide a lay of the land for the sector,” says Mostafiz Uddin, owner of Denim Expert Ltd, a factory site in



Chittagong which will soon be added to the map.

“It is not just about attracting more business for Bangladeshi suppliers, the Mapped in Bangladesh platform was intended to mark a major milestone in Bangladesh’s transparency journey, making it one of the only apparel producing countries in the world to have such a map,” he continued.

Beyond purely business implications, the digital map has also been tipped for broader, even government-level, work.

“If we were focusing on the environment for example, and in Bangladesh we wanted to look at the quality of water, nobody has been able to coordinate the impact of water quality to an industry, but with the dataset we have now, supposing if we collect the water around Dhaka city and spawn research on the

▲ The map hosts details on factories across Dhaka, Gazipur, Narayanganj and, soon, Chittagong

correlation between the location of factories and water quality, we can directly say that these are the factories responsible and therefore they need some measures to stop this kind of pollution,” Hussain summarises.

The dataset has the potential then to be central to Bangladesh’s future, and may even set a standard that other key exporting nations might strive to emulate. What’s more, as it continues to branch out from Dhaka, the map will not only become more accurate – providing a truly representative scope of the country’s RMG industry with every business it on-boards – but it will serve to spotlight factories of all sizes in equal measure.

“There’s the opportunity for this to expand to all kinds of data points so that different people can engage and find value,” Hussain concludes. ■

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# Going the distance

After months of disruption and an unparalleled disconnect between certain brands and manufacturers, how will the post-pandemic fashion supply chain look?

David Styles reports



COVID-19 will leave an indelible mark on the fashion industry. Just as the Rana Plaza collapse is still discussed as a cornerstone moment for the sector, pre- and post-coronavirus will almost certainly become commonly used terms in the coming years.

Many businesses have reached a fork in the road: stick with a global supply chain in pursuit of the cheapest production costs or switch to a more localised model that can offer greater resilience but requires a higher outlay.

The lack of resilience exhibited by fashion supply chains was diagnosed as a key problem during the pandemic by a recent white paper from the World Economic Forum. The current globalised norm meant “disruption is amplified, and recovery is more prolonged”, according to the white paper, which also asserts that the impacts of COVID-19 cannot be compared to previous crises because in this instance all major global economies have been hit when supply chains are more interdependent than ever before.

Understandably all links

in the supply chain are feeling edgy, wondering how their counterparts will react to the unilateral uncertainty. This is plainly evident in a statement released by the STAR (Sustainable Textile of Asian Region) Network, insisting that “responsible business has become more important than ever for the whole world to survive and recover from the crisis”.

Decisions made by brands and retailers will have “enormous impacts on the fundamental rights of millions of workers and the livelihood of their families in the supplier end” of the industry, the statement continues. “It is time for global businesses to uphold and honour their commitment to labour rights, social responsibility and sustainable supply chains.”

With the Bangladesh Garment Manufacturers and Exporters Association (BGMEA) estimating unpaid orders to be worth around US\$3 billion in its country alone, the scale of the current supply chain rupture can’t be understated. Serious fears are now being raised regarding how this will affect factory workers.

“When a crisis hits, the most vulnerable – such as

workers in supplier factories – are affected first. Women workers are likely to be affected most of all,” claims Christine Svarer, director of HERproject, an initiative focused on empowering female garment workers.

“To counter this, it is critical for all parties, including brands, to carefully consider possible future scenarios and how these scenarios might affect business operations. Doing so helps brands and suppliers to be more prepared and to weather crises.”

The COVID-19 crisis has put “every aspect of global supply chains under pressure and has highlighted the fragility of ultra-connected, fast-paced value chains”, she states. To mitigate the damage, HERproject advocates the creation of “long-term relationships between brands and suppliers, which would provide suppliers with more security and decrease their vulnerability to shifting demand patterns”.

Another potential threat looms for employment levels on the factory floor. With social distancing having become a pressing issue – in responsibly run facilities at least –



“  
A move  
toward  
‘local’ will  
definitely  
accelerate

Pete Santora,  
advisor to Software  
Automation

conversations have been reignited surrounding large-scale automation.

### Automatic stop

“Can you go back and start working in a mill? Yes. Can you return to the same volumes during a pandemic? No,” states Pete Santora, adviser to **Softwear Automation**. “That’s why a move toward ‘local’ will definitely accelerate.”

He believes after initial reluctance due to a lack of mutual incentives for brands, retailers and manufacturers, the pandemic has changed a lot of people’s thinking on automation. Intensified collaboration from service providers alongside proposals for government grants to support localised production hubs are also referenced as big steps forward.

Risk remains at the fulcrum of such decisions, Santora says. “In the past, if you thought China was risky then you would choose Vietnam, Bangladesh or India. Now you’re looking at global risk.”

He points to the frantic international trade of PPE as evidence of the dangers posed by the globalised system; with countries entering bidding wars to secure volumes that, at present, could never be produced on their own shores.

“Previously, brands weren’t certain that quicker lead times were a price worth paying for losing that low-cost labour. Now, the cost of no supply versus local has suddenly become a very different proposition. Automation has undoubtedly become a less risky alternative.”



Softwear Automation’s ‘Sewbots’ improve production efficiency with a patented computer vision system. The machines use a combination of cameras and needles to track the placement of a fabric before sewing the apparel at a reported higher level of accuracy than the human eye.



### Our world has changed

Sara Diez, Zalando’s vice president of womenswear

Automation is by no means exclusively wed to on-demand, low volume production either. “The challenge is how you create something local and balance that with inventory levels. When you consider the current situation, maybe that’s actually higher inventory levels than before. People are trying to figure out the right mix.”

Increased emphasis on this is supported by a recent McKinsey & Co survey of fashion sourcing executives. The study found improved inventory management was one of four topics identified by 116 respondents as key to current decision making.

If businesses adding more technology driven solutions into their business model follow the lead of Hugo Boss, “adding technology throughout its production systems but simultaneously investing more in people and training programmes” there is no reason for despair in any quarters, Santora adds.

### Ravaged retail

From a struggling retailer perspective, the pandemic paradigm is utterly joyless. Taking the honourable approach and paying for orders may well leave you facing job cuts or even insolvency, whereas the alternative is a PR disaster and may well consign workers further down the supply chain to destitution. Some companies have, however, plotted a route through the turmoil and emerged relatively unscathed.

Zalando is one such firm, and is also part of the new generation of high-volume online retailers trying to

disrupt the well-established ‘race to the bottom’ cartel.

“The crisis has not only affected us and our brand partners but also our supply chain partners for our private labels,” Sara Diez, the firm’s vice president of womenswear, tells *Ecotextile News*. “To help our suppliers, we are offering improved payment terms for factories in need. We are working with production lead time buffers and extended deliveries and will continue to be very mindful of any delay that might be caused by the coronavirus outbreak.”

Asserting that there will be no return to high street dominance, she adds:

“Many brands, retailers and stores lack the necessary skills or direct access to customers online. Zalando offers immediate solutions to increase liquidity, clear overstock, and launch or expand direct-to-consumer business”

“Our world has changed. With that we see how flexible and fast the economy can be when change is needed, and this should be used as a blueprint when it comes to sustainability. The outbreak of the coronavirus has not paused our sustainability efforts at Zalando but rather reinforced our mission to make a net-positive impact on people and the planet.”

It is this kind of agility that will be a necessity for firms to recover, regardless of their position in the supply chain. While calls for change have long fallen on deaf ears, COVID-19 has guaranteed one thing: for better or worse, business as usual will no longer do. ■



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**Molshree Vaid**  
Correspondent,  
Fashion & retail



# Cleaning up its act

**'Sustainable' laundering solutions to assist circular economy.**

**W**ith hygiene a top concern for customer uptake, an eco-cleaning and repair infrastructure is badly needed to loop garments into a circular economy.

Traditional dry cleaning won't cut it because clothing reuse business models ought to positively impact the environment and keep clothes in circulation for longer. Also, the marketing message for circular fashion is sustainability gains.

But as more brands and retailers investigate business models like renting, reselling and even repairs, they encounter a gap in the market. At least, these are the thoughts of Roosmarie Ruigrok, founder of the Clean & Unique supply chain consultancy service.

"The big fashion brands are struggling to find eco-cleaning solution companies with proven credentials and a wider geographical spread," she says. Yet Ruigrok doesn't think brands will internalise cleaning operations like US-based Rent The Runway (RTR), which has gone on to build the world's largest dry cleaning facility to support its operation.

## A departure

Instead, there will be apparel cleaning partners, akin to authorised service providers in the electronics industry for example, focused on eco-responsibility.

Dry cleaners for 35 years, Reuben Rosenblatt and Tim Kyser are aiming to transition into this very role with their new venture, eClean.

The US-based duo believes that dry-cleaning facilities run by the likes of RTR and Nuuly, the **rental subscription service offered by Urban Outfitters**, are traditional models even if their cleaning process is perchloroethylene (PERC)-free.

**PERC** is the most infamous of all dry-cleaning solvents, and was banned by France at the start of the year, and has been the subject of phasing out efforts within California since 2007.

"From hydrocarbons to liquid silicone, solvents of any kind are bad from an environmental and human standpoint and leave a toxic residue on the garment," Rosenblatt says. He adds that the heat applied to extract the chemical from the garment is a double whammy, an energy intensive process that also



Through Nuuly, shoppers can rent six items for US\$88 a month.

In 2008, the Environmental Protection Agency (EPA) suggested that PERC be classified as a "likely human carcinogen", with evidence that it can cause various types of cancer dependent on exposure levels. Non-cancer effects include nerve and brain damage.

reduces the life of the fabric. "They (RTR and Nuuly) did not think through the environmental impacts of different processes while setting up their large-scale facilities."

Rosenblatt and Kyser pooled their life-savings to develop a proprietary liquid carbon dioxide (LCO<sub>2</sub>) cleaning technology that eliminates toxic solvents, water and textile damaging heat from the process.

The industry concurs that LCO<sub>2</sub> is the best alternative fabric-friendly cleaning tech available at the moment. However, the bulky equipment, requiring a high-pressure operating environment, comes at a prohibitive cost.

Ludovic Blanc, founder and CEO of Blanc, a London-based eco-apparel care company explains: "You have to be seriously focused on sustainability to use this tech as the LCO<sub>2</sub> machines cost more than ten times that of wet-cleaning equipment." Wet cleaning replaces solvents with water and biodegradable detergents and involves pre-rinse stain removal. However, as Blanc scales his consumer-facing business to work with brands and rental businesses, he will deploy a mix of both technologies – using LCO<sub>2</sub> for delicate garments and wet processing for in-depth cleaning.

Meanwhile, ozone-based sanitation has made news due to COVID-19. But this solution has long been in use for smoke and odour removal and for sanitising garments after a cleaning process. As per an industry official, requesting anonymity, some rental

companies are sanitising garments in ozone chambers between rental requests to save costs. She regards it as an unhealthy practice, one that will be unacceptable to most customers if they were to find out.

This cleaning strategy correlates with the nature of the business model. For instance, the two high-traffic resale platforms, Thredup and The RealReal rely on the honour system, through which they don't clean the item and instead place the responsibility on the seller. However, that dynamic changes in the case of branded recommerce. The Renewal Workshop, a circular solution provider for brands like The North Face and COS, has invested in LCO<sub>2</sub> hardware from Tersus Solutions and Electrolux, the company's co-founder Jeff Denby, tells us. "It is incredibly expensive but an important part of our system to add value back into a used product. The customer should feel that the garment has undergone a really significant cleaning process."

### Retrofitting the legacy business

Rosenblatt and Kyser have moved out of their neighbourhood to a 13,000 square foot, centralised facility to offer sophisticated tech and third-party logistics at a competitive price to B2C and B2B customers, including a turnkey rental solution.

But what is the scope for their former peers, the local dry cleaners? Can those cornerstones of the community contribute as circular fashion enablers while staying profitable?

Of course, the first step is to transition to green. As per a 2017 industry study, 70 per cent of dry cleaners in the US still use PERC. According to Kyser: "They are locked into existing machinery, however, states like California offer grants to switch to wet cleaning technology. Switching to renewable energy is also an important step."

Blanc says more countries should follow in the footsteps of the US, France and Denmark that are offering subsidies to support the transformation of an industry that still follows archaic practices. Having worked for eight years in finance, Blanc followed his passion and launched his fresh-faced apparel cleaning shop in 2011. "Running an eco-cleaning company is like organic farming. Things need to be re-learned. It takes more time and effort but the output, i.e. cleaned garments, is better and business is profitable as customers are increasingly seeking sustainable cleaning options."

Expectedly, rental is the most lucrative model for small to mid-sized dry cleaners to plug into as it will entail more garment washes than second-hand and subscription. Such businesses in New York have been served that option by peer-to-peer fashion rental marketplace, Wardrobe. The one-year old start-up has brought together over 40 dry cleaners (with the majority following eco-practices) which act as cleaning and inventory hubs for the platform. Adarsh Alphons, founder of Wardrobe, says: "Our cleaning partners don't



“You have to be seriously focused on sustainability to use this tech

*Ludovic Blanc*



“The price of clean water will rise in the future and circular businesses must begin to factor in the true costs of cleaning as more customers go from buying to renting

*Roosmarie Ruigrok, circular fashion expert*

have to do anything differently. The model offers them incremental income and free clothes for cleaning at no marketing expense." While COVID-19 has currently slowed things down, Alphons intends to expand the cleaning hub network within the US and also to bring it to new markets like London.

The fragmented, often family-run apparel laundry business is not glamorous enough to attract smart talent. Although, when done well, it holds huge potential. Therefore, the prevalence of start-ups and investments in this space is focused on customer convenience and scaling the laundry service through smart tech. Examples include Rinse and Cleanly in the US, Laundrapp and Oxwash in the UK and Lavoir Moderne in Paris.

Such businesses bring value through efficiency but what's missing is innovation and investment in eco-responsible textile cleaning and maintenance tech. Ruigrok adds: "We need cheaper innovations for water-saving technology. The price of clean water will rise in the future and circular businesses must begin to factor in the true costs of cleaning as more customers go from buying to renting."

The emphasis on apparel cleaning in new models can also drive brands to simplify and standardise garment care guidance. At the moment, most items with complex designs or materials are lumped into the 'dryclean only' category. In reality, there is ample scope for that restriction to be a relic of the past. ■

# Why fashion needs to learn from nature

The fashion industry need to act more like a natural ecosystem if it is to become truly sustainable, according to the Biomimicry Institute.

Simon Glover reports

It's safe to say that no one ever looked at a barrel of oil and thought: "That would make a nice-looking dress," reads an eye-grabbing line from the Biomimicry Institute's latest report, *The Nature of Fashion*.

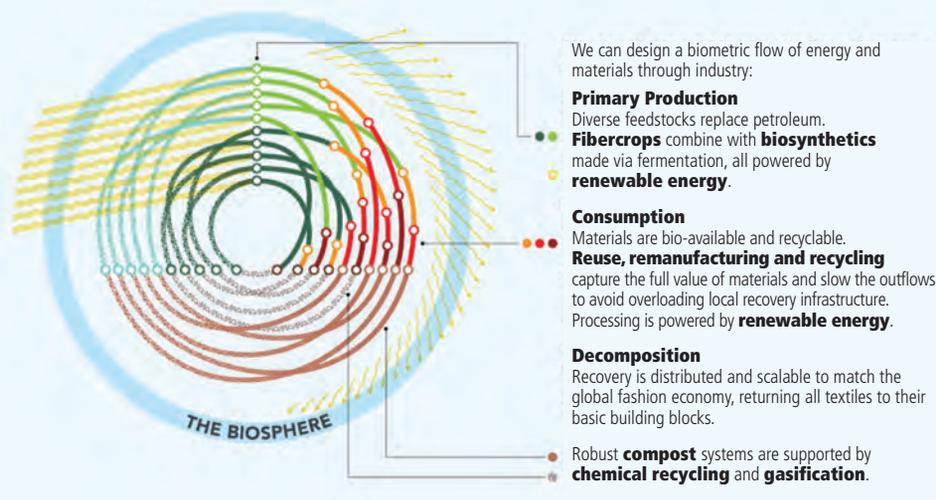
"And yet, for nearly 80 years, we have collectively looked past the ill-effects of petroleum and focused solely on the versatile, low price-point clothing that polyester makes possible," it continues.

The Biomimicry Institute report argues that an industry able to learn lessons from nature could boost biodiversity, build soil, support communities and clean up existing pollution.

"The circular economy seeks to replicate nature's cycling, and one of its premises is that infinitely

## BIOMETRIC FASHION ECONOMY

In the future, all fashion industry loops (technical and biological) could cross and mingle. Such a system, requires the existing recycling and circular economic infrastructure to enable consumption to be highly efficient, extracting all available usefulness from materials before they are ultimately safely decomposed.



reusing our industrial materials can make commerce compatible with nature," the report says.

"But everything we do, all of our industry and economic activity, still exists within the natural system. The same laws of physics that drive natural material cycles make it impossible to isolate the technical ones. Our man-made material loops always, inevitably, leak."

The non-profit recommends "the difficult recognition" that plastics do not belong in the biosphere and looks at how they might be replaced with fibres that support a natural equilibrium.

It also calls for new business models and ways to change "price point tolerance for customers", as well as research into how quickly and with what level of investment synthetics could be replaced with cellulosic waste, and what percentage of farmland could be quickly converted to regenerative agriculture.

"As we spoke with industry experts and reviewed the mass of recent research and conclusions articulating how to make

fashion responsible, sustainable, regenerative, and circular, we realised that many of the suggested circular economy solutions do not align, and cannot align, with biological principles and the laws of physics," it says.

"With that understanding, we hope to continue this research in the future and expand on how biomimicry at the systems level can further inform the evolution of a circular fashion economy."

The institute aims to support existing sustainability efforts in fashion, as well as the brands to have already committed to being petroleum-free within the next decade.

Lastly, the report identifies three levers for change: investing in local production cycles, building restorative and regenerative agriculture systems, and incentivising the creation of new biomaterials.

"By realigning ourselves with what occurs in nature, we can design a next-generation textile production model that recognises its connections to the biosphere," it argues. ■

▼ Biomimicry Institute's latest report, *The Nature of Fashion*.



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**Phil Patterson**  
Correspondent,  
Chemistry & retail



# Natural selection

The old 'natural' versus 'synthetic' textile dye conundrum has once again reared its head. But **Phil Patterson** argues that this binary thinking will slow progress and only result in the status quo.

produced dyes of equal performance may well have been manufactured anyway – simply to reduce costs.

The reason is that the amounts of natural dyes found in plants, animals and insects are very small, meaning that lots of land or animals are required to make usable quantities of dye. In a widely quoted paper written by former chemical giant ICI, it was reported that 12,000 molluscs are needed to extract just 1.2 g of tyrian purple dye, so loved by Roman emperors. Roughly 150,000 insects need to be killed to produce 1 kg of red cochineal dye.

Plant-based dyes fare no better really, with Indian government figures reporting that 77 hectares are required to produce a tonne of natural indigo dye. When a potato farmer can expect to get 40 to 70 tonnes per single hectare you have to question if dye production is the best use of land, especially when you consider that the last time natural dyes were a major feature of the textile industry was probably around 1900 when the world population was under two billion, compared to around eight billion people today.

Natural dyes can produce decent colour fastness if they're treated with mordants that fix the pigment to the textile, but historically these have been based on heavy metals which are widely restricted due to their toxicity.

Generally, the main 'positive' promotional point about natural dyes is the word 'natural' itself and it's often accompanied by largely unsubstantiated claims about 'toxic' or 'carcinogenic' synthetic dyes.

During a recent hot spell of weather my wife was gardening, wearing a combination of natural and synthetic fibre clothing all dyed with synthetic dyes. After an hour of working in the heat she had to stop and take a shower because of a severe allergic reaction... to lovely natural, carcinogenic bracken plants.

So, natural isn't always good. And synthetic isn't always bad – but it can be.

### Toxicity

Some synthetic dyes are highly toxic, some synthetic dyes cause skin sensitisation and some synthetic

dyes are carcinogenic – but these are generally known, profiled, restricted and out of use.

Early synthetic dyes were technically better than natural dyes but not necessarily safer – most of these have now been withdrawn but do still occasionally pop up in routine testing of clothing because, unacceptably, some are still manufactured and used by small, back-street type operations. This means, the phrase 'toxic synthetic dyes' sometimes gets wrongly applied to all synthetic dyes and all mainstream textiles.

Of course, there is no place for complacency and if safer, better alternatives become available we should embrace them, and if credible evidence arises to demonstrate that synthetic dyes that were previously thought to be safe are problematic then they should be restricted.

However, the amount of research into new synthetic textile dyestuffs is at historic low levels and if the industry unnecessarily loses dyes from the inventory, it may never find replacements.

### Next generation dyes

Natural dyes may not satisfy the exacting demands of the modern fashion brand or consumer, but nature, with a helping hand from science, could have a role to play in making a new generation of colours.

Puma has recently launched a collection called 'Design to Fade' in collaboration with Dutch company Living Colour, which uses bacteria to create colourants for dyeing textile fibres.

The name doesn't inspire confidence. It implies the fastness and/or durability of colour could be poor and also assumes there could be deliberate release of dyes. This isn't wise, as it may invite specific registration obligations under Reach legislation if volumes are increased.

However, there is something very interesting in the approach to bacteria producing pigments, something that is already being scaled up by UK-based Colorifix.

Living Colour has used a range of different bacteria grown on semi-solid gels such as agar to produce a range of shades, whereas Colorifix 

**T**he most common question in my inbox from students, small business owners, journalists and, occasionally members of the public is: "How can I use natural dyes to dye my product?"

The response is generally that natural dyes "are poor compared to synthetic dyes", and I recommend that people should think very carefully before they promote, endorse or use them.

By 'poor', I mean there's a very limited colour range, the colours are generally pale and the fastness of the dyes is usually inferior to synthetic textile dyes, which were invented precisely because natural dyes didn't perform well enough. If natural dyes had a high level of performance, we possibly wouldn't have synthetic textile dyes at all.

I say 'possibly' because natural dyes are so expensive per unit of colour delivered that it's reasonable to assume that synthetically

has used fermentation vessels to create live broths from which fabrics can be dyed.

It's very early stages from a technical perspective, but the advantages over traditional natural dyes are clear.

There's basically no land required, no animals should be harmed and, given the right food and conditions, bacteria multiply exponentially meaning that you can potentially grow large colonies of dye-producing bacteria in a very short period of time.

What isn't so clear at this stage is what the technical performance is compared to synthetic dyes or what it could be in the future?

The genetic modification of bacteria could potentially deliver different colours, different colour intensities and, possibly, different chemical groups that make the dyes more suitable for different fibre types.

Many readers will be pre-disposed to reel backwards at the mere mention of GM. But the modification of bugs in a sealed laboratory happens on a daily basis in the pharmaceutical sector – and is a different scenario to introducing GM organisms into natural eco-systems.

Spending many years in the textile dyeing sector, I honestly don't see textile dyeing from live broths (where you immerse your substrate in a vat of live dye-producing bacteria) as something that can become mainstream. It could find small-scale use with large scale publicity, but it's difficult to see hundreds of thousands of metres of fabric being dyed to a specific beige, grey or khaki colour within the desired colour difference tolerances demanded by major apparel brands.

Also, as the inventor of such a system, I'd be concerned about having my idea – and my livelihood stolen. Being a live system that's capable of rapid reproduction, it only takes someone to get hold of a test-tube full of broth to set up their own dye production unit.

So, from an intellectual property and product consistency perspective, the best approach would be to use fermentation for the production of dyes which could then be applied

using relatively standard dyeing methods – something acknowledged by Living Colours.

Yet if I'm honest, I don't expect dyes produced by fermentation to match the technical performance of synthetic dyes, but we also shouldn't look at this issue in a binary 'natural vs synthetic' situation. If large quantities of natural chromophores (the coloured bits of dyes) can be made and then chemically tweaked to have superb technical performance wouldn't that be a great result?

If colours produced by bacteria are inert, insoluble and unsuitable as dyes then why not use them as pigments and apply them with a chemical binder? Getting science and nature to work together for large cumulative benefits has to be much better than fully natural, niche demonstration projects.

### Dye extraction

It should also be noted that, unless the dyes (or any natural product) are extracted with water or steam only, they still have to be registered and go through the same safety and toxicological assessments as synthetic dyes. There seems to be a somewhat blasé approach to safety of natural products at the development stage, with assumptions that natural = safe and, if these approaches are scaled up, those assumptions count for nothing as suppliers will still be forced to jump through the various regulatory hoops.

The other thing that would need to be rigorously assessed is the biological safety of any live dye broth – these are bacteria after all – as companies wouldn't want workers falling ill with infections or these bugs getting into open wounds.

Let's not forget that water-borne bacteria causes millions of deaths per year around the world and we do not want to be adding to that. It's unlikely that will happen, but a rounded assessment of chemical and biological 'pros and cons' is required if these approaches become mainstream. And what happens if the dye-forming bacteria get into water courses in large numbers? Are we going to see red, yellow and blue rivers depending on what colours are being dyed upstream?

Thanks to the Detox Campaign and the intervention of the ZDHC, the textile industry is finally addressing sludge – waste comprised of live and dead bacteria that are deliberately used to digest chemicals in effluent treatment plants. But this also means that waste from biological processes is very much on the agenda – and the downsides of 'good' biological processes are now in sharp focus.

Dye-producing bacteria should be fine from a chemical contamination perspective but what isn't really known is how much dye is produced relative to the amount of sludge that's formed in large scale, mature processes. Can a single bacterium produce 100 times its own weight in dye over its lifetime? Or can it produce just a tiny fraction?

For this approach to scale up multiple types of bacteria will be required and it's likely that the productivity will vary from species to species – if there's a good conversion rate from 'food' (typically simple sugars) to usable dyestuff then this could be viable. But if conversion rates are low then the cost of the dyes may be prohibitively expensive and the volumes of sludge quite high.

Biotechnology is very versatile and there is no reason why bacteria can't eventually multi-task to improve productivity and cost-effectiveness. Could dye producing bacteria also produce useful enzymes that can be used in textiles? Could the dye producing bacteria be used in effluent treatment plants and digest the effluent as food? Although I'm not overly convinced by the live broth dyeing for mainstream textiles it would be interesting to use an effluent treatment plant as a dye production factory.

Conceivably, this could mean a red ETP and blue ETP and a yellow ETP to create a palette of colours!

Biotechnology already helps with the dyeing and finishing industry and the potential is enormous, but we must caution against letting perfection be the enemy of the good. The marriage of nature and science can possibly do great things but if we have a binary natural vs synthetic dyeing argument there's only one winner – the status quo. ■





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# Fitting the bill

## California waits on worker protection legislation.

By Chris Remington

Los Angeles' garment manufacturing industry, once hailed for its ethical approach to social sustainability, has become dogged by workers' rights controversies and systemic claims of wage theft.

With a 50,000-strong workforce made up largely of migrant women, it's now deemed no better than areas of Bangladesh, Cambodia and Myanmar – which continue to be marred by such allegations.

Wage theft is now commonplace across LA, with unscrupulous factory bosses using underhand tactics to deprive workers already on the poverty line of a US\$15 minimum wage by adopting the 'piece-pay rate'.

"Under piece-pay rate, makers are paid US\$0.30 for each piece assembled," Ayesha Barenblat, founder of workers' rights organisation Remake tells us. "In

addition, makers are often paid in cash, with rates set and changed by their employers each week. Today it is a common industry practice for employers to reduce already promised piece rates with garment makers having no clarity on what their take home pay will be week by week."

It's been the rise of what Barenblat describes as the "ultra-fast fashion brands" that's laid wake to such problems. She uses the US brand Fashion Nova as just one example. In April, questions were asked when the **Fashion Nova Cares campaign** was launched, promising to give away US\$1,000 every hour of the day for over a month to lucky shoppers in a goodwill gesture amidst the pandemic.

Remake was quick to question the approach taken by Fashion Nova. A statement at that time read: "Fashion Nova's garment makers, who literally stitch together designs, have worked for years to the betterment of this enormously profitable brand – and now, Fashion Nova is proclaiming a generosity of its wealth to those in need during the coronavirus – but aren't the brand's makers the ones in need?"

This overlooked minority, like many workers in cheap apparel manufacturing hubs, have had no respite



Popstar Cardi B fronted Fashion Nova's campaign, which gave away US\$1 million to its customers in total, whilst paying workers as little as three cents per product made.

“Our collective unity is where the power lies to create real and long lasting change”

Ayesha Barenblat, Remake's founder

amidst the events of the past few months, "with many workers losing their jobs overnight and being unable to access any relief given their migration status," Barenblat says. "For the makers who have headed to factories to make masks and PPE, they've become sick. COVID-19 has brought the situation to a head."

## Power in unity

The situation in LA, though drab, could be on the up. Draft legislation, called the Garment Worker Protection Act or SB 1399, has already received the backing of Los Angeles County supervisors, and is now to be decided upon by California's Senate.

If passed, such legislation would ensure garment workers in the city and across the state are afforded the minimum wage, tripling their usual takings, and laying accountability for failures to this end firmly at the feet of bosses and contracting brands. The project is the pay-off of relentless campaigning from the workers themselves, who were encouraged to craft the bill by the Garment Workers Center, to Remake's community of 150,000 activists.

"Our collective unity is where the power lies to create real and long lasting change," Barenblat says. "Unfortunately, this situation is not unique to LA and my hope is for this bill to be a catalyst for other states, particularly New York to follow suit. This would be a major win for garment workers and a game changer for the fashion industry overall." ■



# The bigger picture

## Could Google technology transform supply chain data?

By Chris Remington

In what's being described a "defining decade" for climate change, progress on the sustainability front has never been as crucial as it is right now. In 2015, 197 countries famously threw down the gauntlet by signing the **Paris Climate Accord**. Since then, efforts across industries and geographies have centred on limiting greenhouse gas emissions within business operations to ensure global warming doesn't exceed that of a further 2°C. In this endeavour, it's required businesses from the top down to self assess and adapt where possible. Access to accurate data is, and will continue to be, imperative to progress, and so it bodes well that tech conglomerate Google is onside and doubling down on its efforts to transform supply chain data accessibility.

It was only last year, at the Copenhagen Fashion Summit in the Danish

“Data which would have previously taken 15 years to process can now take just a day

The accord outlined how "ambitious goals, appropriate financial flows, a new technology framework and an enhanced capacity building framework" would be put in place to anchor the actions of committed nations, as well as support mechanisms for more vulnerable nations

capital, that the Silicon Valley firm first outlined an ambitious new pilot project with Stella McCartney, through which it stated how the latest advances in artificial intelligence (AI) and data analytics would be used to provide a bird's eye view of the brand's operations and the subsequent environmental impacts.

"Data which would have previously taken 15 years to process can now take just a day. It gives organisations the opportunity to make changes right at the beginning of the supply chain," explained Ian Pattison, head of customer engineering at Google, at the event.

It's with this cutting-edge technology that the McCartney brand has been given magnified insight into the effects of its raw material sourcing practices, highlighting the impacts on air pollution, land use, and water and energy consumption in an eye-opening exercise. What's telling is that this step change in data availability, whilst huge for Stella McCartney, merely serves as an introduction to the industry for Google which has much more ambitious plans ahead.

## Expansion

Google recently announced that it has partnered with the World Wide Fund for Nature (WWF), to broaden the remit of its database.

"The partnership with WWF has fundamentally changed what we are able to achieve, making the platform more powerful than we initially envisioned," Maria McClay, Google's senior industry head of luxury tells us.

"To give just one example, our ambition was to analyse two materials first (cotton and viscose) – this partnership will allow us the potential to ultimately look at over 20 variations, incorporating wool, polyester, nylon, hemp and more. The outcome will mean greater visibility of supply chain impacts and risks, filling fundamental data gaps."

WWF's workings in the industry to date have more often than not been grounded in empowering environmental change. To give just a couple of examples, the organisation has teamed up with the likes of the Vietnam Textile and Apparel Association (VITAS) and specialty chemicals company Archroma, amongst others, to launch projects promoting improved water quality and conservation.

Further, in a joint project with Swedish homeware giant IKEA, WWF was instrumental in the development of an online tool capable of monitoring the risk and impact of various textiles on the environment.

"WWF's partnership work

with companies has always been motivated by the need to drive real transformation at the largest possible scale,” notes Håkan Wirtén, CEO of WWF Sweden. “This project is an excellent example of how we can take valuable work with a long-term partner like IKEA, and collaborate with another strong partner like Google to make that work even more powerful. Hopefully it can help with the transformation of a whole industry.”

### Part of the solution

Though not specific to fashion and textiles, Google has experimented with the potential of its **Earth platform and data analytics capabilities** with various environmental projects. In 2016, for example, an initiative was launched at the US Secretary of State Jon Kerry’s Our Ocean conference, setting out to promote sustainability in our oceans by tracking and sharing data about global fishing activities across 60,000 of the world’s largest industrial fishing vessels. With this, anyone with an internet connection can track fishing activity in near real time from 2012 up to within a few days of now.

Still, McClay admits the technology wasn’t what it is today, which perhaps hampered the opportunity to execute such projects at a globally representative scale, but that’s all about to change.

“This project is important to us because our technology can help be part of the solution,” she says. “We have been working with a large number of brands and retailers, big and small,

## “The fashion industry is answering the call

across fashion, luxury, denim and athletic wear, as well as manufacturers and other industry organisations to ensure the resulting platform is fit for the whole market.

“The data backbone of the platform is not dependent on data coming from brands but rather will be based on third party datasets along with proprietary Google Earth and WWF data,” McClay continues. “Brands will be able to contribute their data to see the impacts of their decisions, and understand what improvements they can make to enable more sustainable sourcing. So, for example, what is the environmental outcome for each fibre and location type on different impact areas in terms of air pollution, waste, GHG emissions? What actions can brands take?”

It’s a platform that comes at a good time for the industry, which will be looking to bounce back in style as lockdowns are eased.

What will be important to remember as business resumes though is just how startling the environmental benefits were in the height

of the contagion: when flights were cancelled, cars were abandoned, and factories shuttered.

Who could forget the NASA satellite imagery from the start of the year which clearly depicted how nitrogen dioxide levels over Wuhan had plummeted compared to 2019 due to restricted travel and business operations.

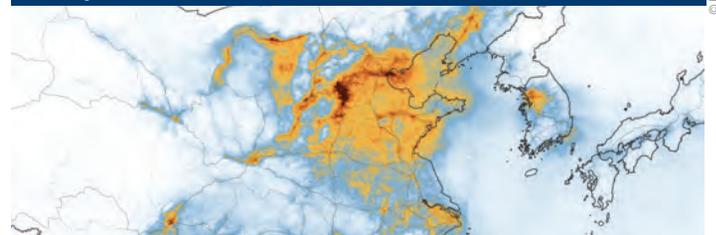
While this dramatic improvement might not last, particularly with economic survival and recovery paramount, this type of data will resonate with many across industry and inspire those wondering what a “greener future” might actually look like. It’s these people and businesses that will be buoyed by Google’s undertakings.

“We are still working out the best way that the partners can use the platform and we’re still having conversations to bring more industry partners and brands on board,” McClay tells us. “Now more than ever, the fashion industry is answering the call to sustainability.” ■

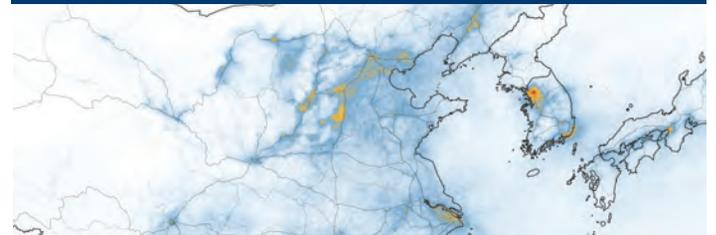
Datasets, such as the Google Earth Engine, can provide planetary scale analysis of environmental information such as concentrations of ozone, methane and sulphur dioxide amongst other things. It can also provide data on land cover, elevation, topography and, over time, is able to simulate time lapses showing forestry changes, crop yields, species habitat modelling, even disease risk mapping.

► Satellite imagery from NASA highlighted just how much carbon dioxide levels over Wuhan dipped between January and February due to lockdown.

January 1-20, 2020



February 10-25, 2020



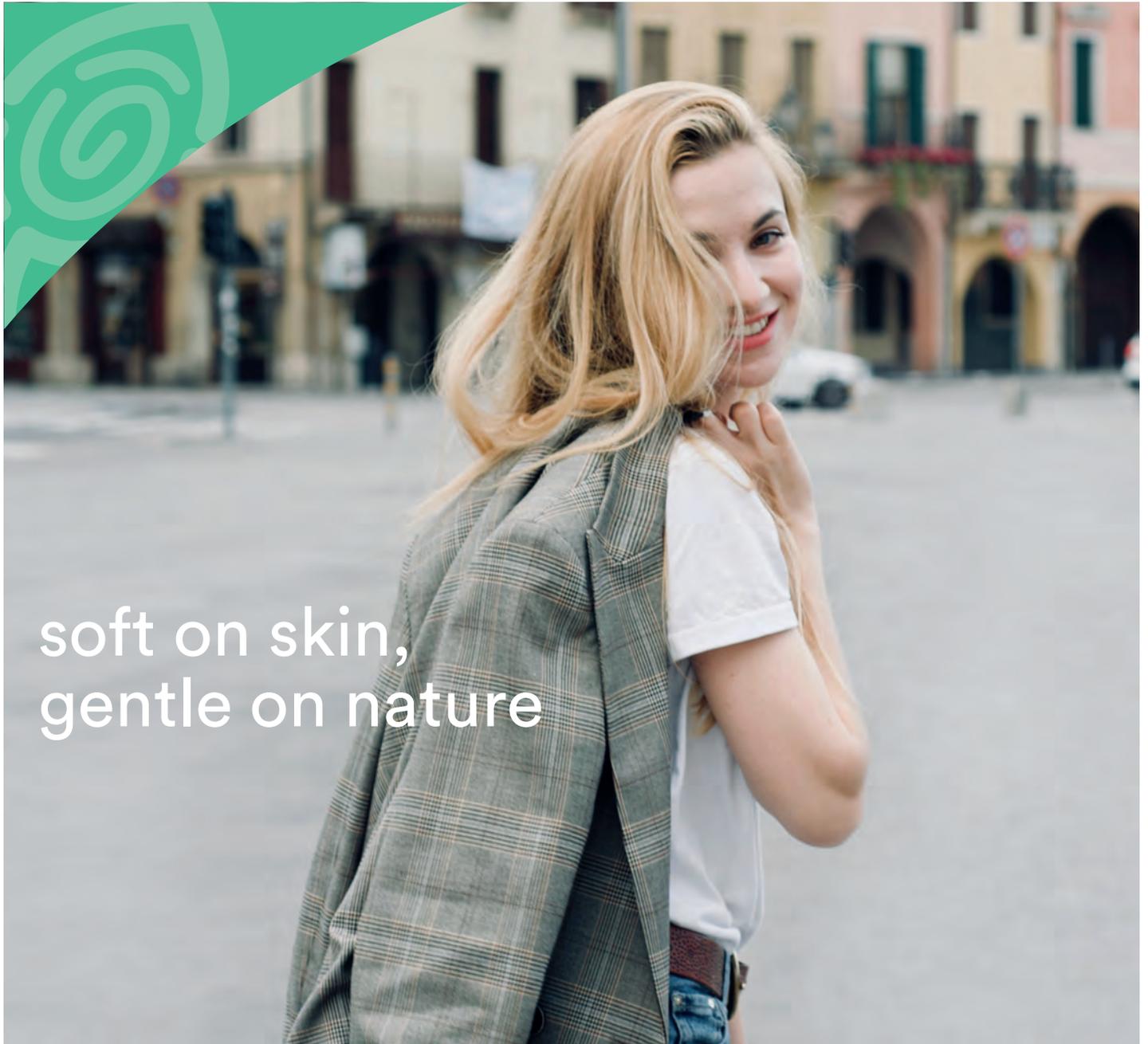
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## Microscopic menace

**A new study has thrown yet another curveball into the debate around whether synthetic fibres really do make up the majority of fibrous materials polluting our seas.**

By John Mowbray

**P**olyester, nylon and polypropylene are the most abundant forms of textile microfibre pollution in marine environments. Right?

Well, not according to researchers at the University of Cape Town which recently found that cotton, wool, silk, hemp and linen were by far the most abundant textile microfibres in more than 2,000 different seawater samples. Rather than being abundant, synthetic textile fibres made up just 12 per cent of the fibrous materials they found.

The new study contradicts some previous research projects that have blamed polyester and other synthetics for the vast majority of textile microfibre pollution in ocean ecosystems. But what the study also does, is echo growing evidence that it's the full spectrum of textile fibres that are being washed down the drain or emitted to the atmosphere before making their way into the

sea – and then staying there for a long time.

Similar findings in October last year came from the Ocean Wise Plastics Lab in Vancouver which identified a surprisingly wide range of textile fibre types shed in a single home wash. Polyester fleece and knitted polyester jerseys were found to be the worst offenders when it came to shedding fibres, compared to other synthetics such as woven nylon fabrics. But interestingly, Ocean Wise also found that cotton and wool textiles shed large amounts of microfibres too.

In the past, some ocean surveys counted all microfibres as 'plastic', based on the assumption that natural fibres like cotton and wool would biodegrade too quickly to persist in marine environments. That's not a surprising assumption given that over two-thirds of textiles manufactured today are synthetic. So perhaps the new work led by Peter Ryan at the University of Cape

“**Most fibres floating in the world's oceans are not plastic but dyed cellulose**

**How do fibres enter aquatic organisms?**

- Ingest accidentally, when eating its natural food source.
- Mistake it for a natural item.
- Food chain transfer. If very small plankton ingest these fibres, then the fish are eating these organisms will also eat them.



Town could indicate that natural and man-made cellulosic fibres do not degrade in seawater as rapidly as was previously thought?

“Most of the cotton and wool fibres currently floating in oceans are pollution from previous decades when they were the most common textiles used in clothing,” suggested Ryan.

“The widespread occurrence of natural fibres throughout marine environments emphasises the necessity of chemically identifying microfibres before classifying them as microplastics ... most fibres floating in the world's oceans are not plastic but dyed cellulose.”

Even so, irrespective of quantities, there's also a huge amount of qualitative research underway to find out exactly what impact these fibres have on ecosystems. Early studies show synthetics **could be bad news for some organisms.**

We've previously reported online that chronic exposure to synthetic microfibres has been linked to serious respiratory and reproductive changes in fish. Ryan's team used infrared spectroscopy to analyse microfibres, which were one millimetre long on average, in 916 seawater samples collected from the Atlantic, Indian and Southern Oceans and the Mediterranean Sea.

“Our results highlight a considerable mismatch between the global production of synthetic fibres and the current composition of marine fibres, a finding that clearly deserves further attention,” he concluded. ■

# Lost Stock - and two smoking barrels

Lost Stock became a viral sensation by selling more than 100,000 boxes of clothes from orders cancelled by brands in Bangladesh. But not everyone is fully behind this initiative to support garment workers.

*Simon Glover reports.*

On the face of it, Lost Stock would seem beyond criticism. It puts food on the table for Bangladeshi garment workers laid off because of the coronavirus pandemic while raising money to partly compensate factories for orders cancelled by brands.

It has so far sold more than 100,000 boxes of clothing worth at least £70 (US\$88) – originally intended for stores such as Topshop – for £39

(US\$49) to shoppers based on their age, gender, size and colour preferences.

Some 37 per cent of the money supports garment workers' families in Bangladesh through the not-for-profit SAJIDA Foundation while another 30 per cent goes to the factories. Lost Stock says the initiative also prevents unused stock going to landfill.

So Remake, the organisers of the #PayUp campaign set up to pressure brands which



“Consumers aren't purchasing 'lost' stock — they're purchasing goods made from stolen labour

*Ayesha Barenblat, Remake*

have cancelled orders during the pandemic, raised eyebrows recently by questioning the initiative which was set up by Cally Russell, founder of fashion shopping app Mallzee.

Remake argues that Lost Stock poses an ethical quandary because it reduces pressure on brands to meet their obligations.

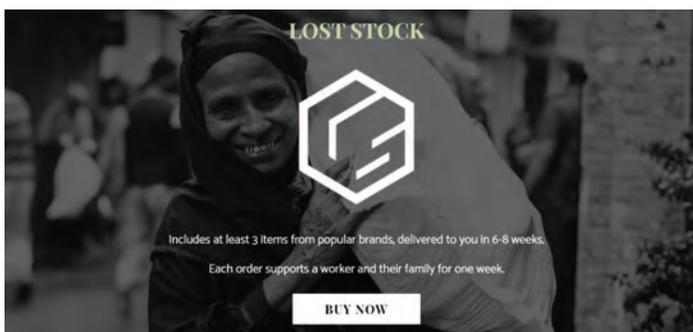
“Lost Stock is making headlines for offering a unique solution that seems to be advantageous to both the consumer and the factory suppliers — however, this innovative solution to waste may not be all that it's cracked up to be,” said Remake founder Ayesha Barenblat.

“If the items in Lost Stock boxes include clothing made for brands that have yet to #PayUp, then consumers aren't purchasing 'lost' stock — they're purchasing goods made from stolen labour.

“It's simply a bandage that's allowing factories to catch a few drops of the bloodletting caused by brands refusing to #PayUp. Lost Stock's mystery boxes won't and can't pay workers what is owed to them — only brands can do that.”

Barenblat and Russell subsequently held talks to discuss their differences which led Remake to tone down its attitude to Lost Stock – but it is sticking by its guns on its position relating to the brands which have cancelled orders in Bangladesh.

“It's not really about us criticising Lost Stock, who are playing an important but different role in dealing with the waste and human rights implications of brand



behaviour of cutting and running during COVID-19,” explained Barenblat.

“We don’t need the charity of food vouchers, what we need is for brands to pay up. In addition, suppliers are in an untenable position of taking anything Lost Stock offers them in order to not go bankrupt because of the brands.

“In short, our criticism is targeted at the brands and retailers and their behaviour. Our community is here to hold brands accountable to the right thing, which is good business practice not charity.

Barenblat added that Remake was standing by its central argument that “Lost Stock is not lost but made from stolen labour” despite Cally’s opposition.

“It is again not a criticism of them but the situation at hand where workers put in the work to make products and were not paid,” she said.

“The fact that they are compensated by food vouchers in this time of crisis by Lost Stock is commendable but we want to be very clear that the brands who placed the orders in the first place and then cancelled without payment are not off the hook. They are the ones who stole these wages.”

Nazma Akter, founder and executive director of the Awaj Foundation labour rights NGO, agreed: “We believe Lost Stock is not a solution for the challenges that workers are facing. By jumping in and buying the goods emerging from holding and cancellations, Lost Stock acts as a middleman without any



direct business responsibilities towards workers.

“Suppliers agree to sell products to them because they have no choice and it is an incredibly difficult time for them, but they will make a loss on the sales. Lost Stock didn’t buy the raw materials or pay worker wages. Workers, who are our ultimate concern, will not get the wages they are due for producing those products.

“Lost Stock is providing a good service for the consumer, who may find it appealing and get significant discounts for products, but it’s barely helpful for suppliers and it doesn’t help to improve our society. The charity hand-outs workers receive are no replacement for the wages they are due.”

Russell, as founder/CEO of Lost Stock, defended his initiative’s success in providing support to impoverished garment workers, as well as factories which would otherwise have been stuck with the unused stock.

“In just eight weeks consumers have been able to provide 100,000 weeks’ worth of support to families in need and saved nearly 500,000 pieces of clothing from potentially ending up in landfill through buying a Lost Stock box, that’s something that I think, as a society, we should all be proud of,” he said.

“Whilst we massively

respect the Remake campaign, and all that they have achieved in this crisis so far, Lost Stock was set up to provide urgent direct support to workers in need and tap into consumer groups that might not sign a petition or change their shopping approach.

“The process we have created sees SAJIDA provide garment workers with vouchers that can then be spent in local stores, both on food and medicine. Factories that we’re working with have been providing SAJIDA with the details of their workers who may need support.

“By law, we can’t specify the names of the brands that will be included in a Lost Stock box and have to remove the labels from each product. Alongside this, many factories insisted we didn’t focus on this to protect their future relationships with brands.

“We don’t believe we’re a solution to all of the industries’ problems in this crisis and have never suggested we will be. We strongly believe that the solution to this crisis comes from many sources and people taking action in multiple ways.

“As we move forward, we aim to create a sustainable and worker positive fashion offering that reimagines how companies should operate.

“We will be announcing more of this in the coming weeks – alongside a range of charitable partners to donate unwanted clothes to, a series of upcycling activities and also access to a range of swap platforms to help Lost Stock products do even more good in the world.” ■

“  
**Lost Stock was set up to provide urgent direct support to workers in need**

*Lost Stock founder  
Cally Russell,  
Lost Stock*



# Dark side factories threaten post-pandemic reshoring

**'Dark side' British factories which pay workers less than half of the minimum wage could jeopardise attempts by brands to reshore more of their supply chain after the coronavirus pandemic, according to one expert.**

*Simon Glover reports.*

**T**he cramped conditions in Leicester's garment industry have been singled out as a possible cause of the COVID-19 spike which saw the city forced back into lockdown, just as the rest of England began to reopen for business.

Many of the city's factories reportedly continued to operate at full capacity throughout the lockdown, with workers pressured to work with little to no PPE or social distancing.



Leicester's apparel industry, which also recently made international headlines over the illegally low pay and Dickensian conditions of the workers who produce garments for fashion brands such as BooHoo, was already notorious in the industry.

One academic expert, Dr Amy Benstead of the University of Manchester, is far from surprised at the reports which she says exemplify why she believes a post-pandemic move towards reshoring could prove troublesome in Britain.

"I believe the factories in the UK have just been carrying on as normal, that's what I've heard," she said. "I think there are some really good factories but some have probably just carried on... I think they are so under the radar, they probably can."

As a former buyer with global sourcing company

Li and Fung, Benstead has plenty of hands-on industry experience to go with her academic credentials to support her in her role as a lecturer and researcher specialising in the fashion industry.

Her seven years in industry culminated in her role as senior merchandise manager based in Istanbul where her responsibilities included sourcing and managing production for major UK fashion retailers.

After returning from Turkey to carry out doctoral research, she opted to remain in academia where her research interests include socially sustainable supply chain management and global sourcing within the textiles and fashion industry, with a focus on modern slavery and reshoring.

This gives her some real insight into current suggestions – from the likes

**“It is criminal activity isn't it... I feel like it's a vicious circle**

of market analytics authority GlobalData – that more and more brands and retailers will look to reshoring once the pandemic is over.

The argument runs that buyers will look to be less dependent on the supply chain countries, which were so badly impacted by the pandemic, and look closer to home for their production needs.

However, Benstead warns that rogue elements within the UK industry, which she dubs 'dark side factories', may jeopardise such a move. These factories, many of which are concentrated in Leicester, pay workers as little as £3.50 (US\$4.34) per hour.

These wages are clearly illegal. But unscrupulous factory owners get around this by claiming to employ their workers for half as many hours as they actually work. Their employees, often from the poorest sections of society, are happy to settle for whatever work they can get.

Many of these factories are small scale operations, often crowded together in decaying buildings with poor health and safety conditions yet they supply some of Britain's biggest names.

"The issue is that companies now are quite nervous because the UK is classed as a high risk sourcing location and then there's also the concern that there will be a reputational risk if they do source," she said.

Benstead said the amount of unauthorised sub-contracting in the industry meant that buyers could never be sure who,

exactly, was making their clothes so they had little real insight about their pay and conditions.

"They want cheap, but they also want fast, so they want it from the UK but then something's got to give. If they are ordering quite a lot from the UK, the factories are going to have to cut corners," she said.

"There are some really good factories in the UK. It's hard for them though because it's very easy for them to get pulled into the dark side, if that makes sense, just to compete. They know that if they say no to an order then someone next door will say yes."

However, Benstead sees some grounds for optimism, in the factories that are trying to do business more ethically, and in the brands and retailers who are trying to support them.

"I've been working with one company that's an ETI (Ethical Trading Initiative) member which sources in the UK and they're really trying to improve their practices," she said.

"I think there's definitely potential for sourcing closer to home – then you don't need to order that far in advance and you don't have the issues of having all the stock that is going to end up being reduced or kept in storage for a year.

"But then I think the retailers are nervous because they do think, it's an open thing that there are issues in the UK. It really needs more retailers to source in the UK. That would create a step change, it needs that kind of leverage to create that level playing field."

Benstead's current research work is examining exactly that – the potential for brands to shift more of their production back home to the UK. The work is still at an early stage but she says it is already producing some interesting results.

"I'm trying to really see it from both the buyer's and the supplier's perspective," she said. "What are the challenges and what can be done? What strategies need to be put in place to improve the situation? A lot of it is having more buyers sourcing in the UK.

"You need more buyers to re-enter the market because a lot of the suppliers just want consistent orders. Then they can plan their production a lot better and their costs will decrease if there's more people buying and it's more consistent."

However, she admitted that there was a long way to go before buyers could source from UK manufacturers and be confident the people making their clothes were paid a legal wage and working in healthy and safe conditions.

"There are multi-stakeholder initiatives and collaboration happening but it probably needs government enforcement bodies involved as well. It's too big an issue for the retailers to deal with alone.

"It is criminal activity isn't it? There's lots of tax evasion going on, there's benefit fraud, underpayment of wages, health and safety issues. So, it needs many different parties coming together to solve the issue. I feel like it's a vicious circle." ■

“It's very easy for the good factories to get pulled into the dark side”

▼ Dr Amy Benstead  
of the University  
of Manchester.



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# Chemically recycled denim

**Researchers say they've developed a new multi-stage chemical-based technique to remove dyes and separate cotton and polyester from denim.**

By John Mowbray

**F**inding new ways to make the production of denim kinder on the environment continues to accelerate.

One of the most interesting recent developments comes from Lithuania where scientists used activated carbon to regenerate the spent leaching solutions from dissolved denim fabrics where polyester was extracted from solution by CO<sub>2</sub> saturation of water, and cotton was then liberated using a switchable hydrophilic solvent.

The scientists at Kaunas University of Technology, claim this new process lowers the carbon footprint of traditional methods of recycling denim waste, while at the same time they forecast 'significant economic returns' once at a commercial scale.

Of course, that remains to be seen, but it's yet another example of a technology designed to address the problematic amounts of textile waste.

In this Elsevier Science

**paper**, the researchers identify denim as one of the main sources of this waste noting that previous studies have pinned the amount of waste jeans generated annually at 2.16 million tons – with 35–50 per cent of this being collected in Western Europe.

This useful source of raw materials also ties in with a recent white paper released earlier this month by Brussels-based Chemical Recycling Europe, which calls for a faster recognition and legislation review to unlock the potential of chemical recycling as part of the EU's new Circular Economy Action Plan – part of the EU Green Deal.

## The process

The way the multi-stage process works is by removing dyes from the blended textile (denim) waste using nitric acid followed by the regeneration of the spent acid by activated carbon. The next step dissolves polyester from the solution using an 'ultrasound-assisted dissolution treatment' to separate it from cotton using a 'switchable' hydrophilic

solvent after which polyester is extracted by adding CO<sub>2</sub> to the solution. Here, the solvent is also regenerated.

Solidified polyester was collected by filtration, and the solvent was 'switched back' to being hydrophobic through heating and CO<sub>2</sub> removal. The morphology and composition of the liberated fibres and extracted polyester were confirmed with microscopy and spectroscopy.

"By comparing the obtained data with a reference FTIR spectra of high purity cotton, it can be seen that the functional groups of the recovered samples were very similar to the functional groups in the pure sample, indicating that the recovered fibre was high purity cotton and all the (indigo and sulphur) dyes were removed," said the researchers.

However, our denim correspondent Miguel Sanchez of Barcelona-based consultancy Gavilan noted: "It appears that cotton was not dissolved in the nitric acid and stayed as pure cotton? If so, how is it possible to keep cotton 'very pure' – even if it's only partially-solubilised?"

The denim fabrics were 80 per cent cotton and 20 per cent polyester. "It is clear that the technology provides a high recycling rate reaching high – over 99 per cent," they said.

A cost analysis was performed for one ton of textile waste (100 \$/ton); "The results showed possibility of reaching economic returns up to US\$1,629 \$/ton of waste and reduction of carbon footprint by 1,440 kg of CO<sub>2</sub>-eq/t of waste." ■

Journal of Cleaner Production, May 2020.



**Simon Ferrigno**  
Correspondent,  
Cotton & agriculture



Image: © Previne | Shutterstock

# Cotton Horizons

## Sustainability at crossroads in Africa

**Textile Exchange (TE) recently published a report from its PAN Africa Sourcing Working Group called *Cotton in Africa: sustainability at a crossroads*, which says that an increase in the number of countries growing GM cotton is a potential threat to sustainable cotton.**

After we asked for clarification, TE managing director La Rhea Pepper said: “The intent and purpose of this report is to raise the visibility of these challenges and opportunities so they can be tackled. It’s key for governments, farmers and other stakeholders to recognise the importance of protecting the right of farmers to grow non-GM crops.” She called organic agriculture a “proven system for sequestering carbon, building soil health and diversity and increasing food security”, saying: “Introducing GM agriculture requires the implementation of stringent biosafety regulations as well as investment in non-GM seed and training to ensure co-existence with organic agriculture.”

Pressed for more information on investment and development in African textiles, TE explained: “There are numerous initiatives already underway to develop manufacturing capacity in both East and West Africa, supported by governments and international organisations.”

Encouraging news, but there is still only one programme that’s actually looking at large-scale investment, with potential noted over seven years of still only US\$20 billion in garment sourcing for the region, albeit with the

potential creation of a million jobs, according to research from Msingi, an organisation that supports economic development in East Africa.

Pepper agrees that although organic cotton production is increasing in Africa, it still requires investment in capacity building at the farm level. “The challenge now is to unlock and secure sufficient resources to scale and spread them. New programmes are starting to do just that across the continent,” she said.

But genetically modified (GM) cotton by itself will not prevent organic cotton being grown, especially if countries put in place the biosafety protocols required by international conventions. The Cartagena Protocol on Biosafety (part of the Convention on Biological Diversity) for example requires countries to put in place systems to manage genetically modified organisms (GMOs).

Organic cotton has been around longer than GM cotton, but it has failed to achieve growth as promoters and users of organic cotton have focused on regions which can both grow and process cotton in local textiles industries at scale. The barriers to more sustainable and organic cotton have

not changed: infrastructure, energy, logistics and processing, in no particular order. Organic cotton projects have had to manage as best they can in most cases. As such, the successes in Africa are to be found in regions such as Benin (production) and Tanzania (production and processing) as well as the recent launch of a dedicated organic gin in Burkina Faso. But is it too little, too late?

There are few signs of strategic, high-level coordination of policy and finance or the kind of investment in production facilities that would bring large-scale fabric processing to African countries.

An interesting note about the TE report is that the Better Cotton Initiative (BCI) has not been considered for discussion among sustainability options for Africa because it does not ban GM - even though TE considers BCI as a 'preferred cotton' (see later on). The BCI told us: "If we were to exclude GM from our standard system, we would be excluding millions of farmers and communities across the world from receiving training and support on more sustainable agricultural practices." It added: "The Cotton made in Africa (CmiA) has been successfully benchmarked against the Better Cotton Standard System and as such is considered an equivalent standard. For the latest season (2018 - 19), there were approximately 822,000 CmiA and BCI farmers across 10 African countries all of whom were

**"The barriers to more sustainable and organic cotton have not changed"**

using non-GM seeds. South Africa is, in fact, the only country on the continent where BCI Farmers have the option to use GM seeds."

### **Consumer sentiment**

The new report concludes that "consumers are increasingly opposing GM agriculture while apparel and home textile brands ... are expanding their demand for organic and other GM-free preferred cotton". However, no real evidence for this is presented. There are no statements from brands or examples of recent consumer research. It needs to acknowledge that much of its mooted commitments to sustainable cotton are going to BCI - the 'preferred' cotton which includes GMOs. What would be useful is more evidence to describe Africa's capacity in finished textile and garment production, what investment commitments exist now and what can be built realistically, quickly and competitively.

This could balance out the findings of another recent report which shows how investors in African agriculture have failed to target agro-ecology, with most donors favouring industrial agriculture. Published by Biovision, IPES and IDS, the report *Money flows: What is holding back investment in agroecological research for Africa?* points to some of the reasons why sustainable agriculture in Africa **1**

## **Herbicide ruled illegal**

Dicamba, one of the herbicides filling the gap left as weeds become resistant to the Round-Up/Glyphosate used with current HT cottons, is in trouble in the USA. The Ninth Circuit Court of Appeals in the USA has ruled it illegal, according to the *Des Moines Register*. Dicamba has increasingly been used to substitute for Round Up as weeds become resistant to Round-Up ready cotton, with new GM lines with resistance to Dicamba launched. The lawsuit was filed by organisations including Pesticide Action Network. The ruling covers products by Bayer/Monsanto, BASF and Corteva.

Bayer immediately announced plans to re-register Dicamba for 2021.

The problem with Dicamba has been its tendency to damage non-resistant crops. We reported on this as far back as September 2017, following the launch of Dicamba resistant cotton, when the lawsuits were first filed. At the time Monsanto blamed "illegal and off-label products." We also reported at the time the claim by PAN that Dicamba, an older broad spectrum herbicide, was volatile and prone to drifting.

The main reason for the court's decision was said to be 'multiple errors' in the original three registrations in October 2018, with the risks of Dicamba understated, and errors made by the Environmental Protection Agency in reporting the area treated and volume of product used, ignoring evidence of damage to crops, according to Iowa State University . Bayer and BASF have both filed cases asking for the judgement to be rescinded.

Meanwhile, an emergency motion to stop Dicamba's use immediately was denied by the court, with use allowed until July 31, 2020.

The area sown with Dicamba resistant cotton is now substantial, with 60 - 80 per cent of cotton in Texas. Producers have been advised to use other herbicides like 2,4-D (which comes with problems of its own). One Syngenta dicamba product remains in use, as do Round-Up Ready cottons.

Rising herbicide use is a side-effect of increasing herbicide resistance in HT cottons; in India, their use is reported to be increasing as a result of the use of illegal HT seeds in Telangana. ●



Image: © Bannafarsai\_Stock

## COTTON HORIZONS

lags behind other regions. "The amount of development aid channelled into agricultural research, education and extension has stagnated over the last 10 years, representing only 14 per cent of agricultural aid in sub-Saharan Africa in 2017," the report reads. Only a few donors make serious investments in agro-ecology (France, Switzerland, Germany, the FAO and IFAD) and even donors like the UK, Belgium and the USA provide no or almost no funding to agroecology, while private donors like the Bill and Melinda Gates Foundation mostly fund industrial agriculture. Further, research institutions in Africa are poorly funded and depend on external donors who then set the agenda.

This needs to change to build the foundations of more sustainable agriculture, with a focus on training and education, led by African institutions for long term goals. Commenting on the report, Kater Hake, vice president Agricultural and Environmental Research, Cotton

Incorporated noted: "Any discussion of GM agriculture is woefully incomplete without acknowledging that more than 280 technical and scientific institutions around the world recognise the safety of GM crops and their potential benefits. These include the National Academies of Sciences in China, Germany, France, Italy, the European Union, and the United States. While the document presents an emotional appeal, it should not be viewed as objective or comprehensive on the topic." ●

## UN official World Cotton Day?

The UN is considering making October 7th official world cotton day in future after the successful first World Cotton Day was held on October 7th 2019, co-founded by ICAC, FAO, ITC, and UNCTAD.

To encourage this ICAC are asking people to organise events and promote them using its #WorldCottonDay hashtag and their online resources at [icac.org/Home/WorldCottonDay](http://icac.org/Home/WorldCottonDay). Mike McCue of ICAC told *Ecotextile News* there are not many confirmed events so far due to the uncertainty around COVID-19, but he expects there to be a range of events once the pandemic is over. He added that the focus was on communities and "a celebration of all the good that cotton brings to us, including poverty alleviation and the many things, other than fibre, that the cotton plant provides (animal feed, cooking oil, pharmaceuticals/cosmetics, etc)." McCue also wants people to celebrate a natural fibre in the context of concerns about synthetic microfibre pollution and the "deleterious effects of fast fashion." This is then very much an opportunity to focus on cotton that seeks change, including sustainable cottons and all programmes attempting to improve livelihoods. ●



## Preferred textile fibre report

A busy few months for Textile Exchange has seen the release of its latest *Preferred Fibers and Materials Market Report 2020*, which claims that preferred cotton now accounts for 25 per cent of global cotton production.

Preferred cotton, according to TE, includes systems by ABRAPA (Brazil), BASFs e3, the Better Cotton Initiative, Cleaner Cotton, Cotton made in Africa (CmiA), Fairtrade, Fairtrade Organic, Field to Market, ISCC, myBMP, Organic, REEL Cotton, Regenerative Cotton and Transitional Cotton.

No certified 'regenerative cotton' is grown as yet. It is not defined in the report, so being slightly wary of buzzword bingo, we asked TE to explain what exactly is regenerative organic cotton.

LaRhea Pepper, told us: "In 2018, the Regenerative Organic Alliance created the Regenerative Organic Certification (ROC). Based on the USDA organic standards, ROC also adds animal welfare and social standards to both standards' focus on soil health, so vital for carbon sequestration, biodiversity, and more." (Organic 3.0 from IFOAM includes much of this, although national standards such as NOP and EU standards are less comprehensive. See: *An Inside Guide to Cotton & Sustainability* for more information).

Textile Exchange anticipates further growth in this standard as apparel brands such as Patagonia are said to be interested already. This says Pepper, is because the system differentiates between *practices* and overall approach: "Regenerative practices usually address a single element or set of practices within the system whereas regenerative *agriculture* is a holistic philosophy that aims to positively influence bio-sequestration, biodiversity, ecotoxicity, climate resilience, water systems, micronutrients and ecosystem services. Common practices include no or low till ploughing, cover cropping, multi-use systems, agroforestry, rotational farming and intentional use of inputs that are landscape specific."

This is also the essence of agro-ecology.

Many standards will claim to be doing this, so how does ROC differ from the agro-ecological and IPM/IPPM approaches? Pepper responded: "Regenerative agriculture moves us to investments in soil, ecosystems and



biodiverse and holistic agriculture. Its sister focus, regenerative organic agriculture, adds organic criteria while also addressing animal welfare and social fairness standards. IPM focuses on long-term prevention of pests. This is vital yet still permits the use of synthetic pesticides when pests are above an economic threshold and does not include the other programmes' components."

Agro-ecology has been defined as going: "Beyond the use of alternative practices and to develop agro-ecosystems with the minimal dependence on high agrochemical and energy inputs, emphasising complex agricultural systems in which ecological interactions and synergisms between biological components provide the mechanisms for the systems to sponsor their own soil fertility, productivity and crop protection", by pioneers such as Miguel Altieri - a Chilean born agronomist and entomologist who is currently a Professor of Agroecology at the University of California, Berkeley.

In fact, it seems 'regenerative' is simply adding a principle around social issues, as IFOAM's organic approach has for some time.

We asked Textile Exchange whether this new definition meant there was something wrong with organic. In short: what are the failings with organic cotton and how will they be corrected? Pepper told us: "IFOAM continuously updates its norms as do various nations. The journey to organic will continue to require training, education and access to resources to expand its growth and fully deliver on its benefits."

The report says 6.4 million tonnes of cotton fit under the preferred umbrella. The bulk of this is BCI (22 per cent of all cotton) with its benchmarked programmes like ABRAPA (8 per cent), CmiA (2 per cent) and MyBMP (less than 1 per cent). Organic cotton is 239,000 tonnes, or 0.93 per cent. Together, this is roughly one quarter of all cotton grown, although much of the rest may also be within programmes looking to improve practices.

The report mentions a relatively new entrant, the ISCC (International Sustainability & Carbon Certification), which focuses on soil and water, carbon, deforestation and human, labour and land rights. All the cotton certified by this standard is so far is produced in Greece.

The report also covers some other plant and natural fibres as well as synthetics and cellulose. ●

## BCI report and Egypt launch

When the Better Cotton Initiative published its latest field report on production, it also announced it was launching in Egypt, where 2,000 cotton farmers are to be trained on BCI practices - with a view to possibly becoming licensed. The move follows on from a pilot project in the country last year.

Better cotton volumes have now reached 22 per cent of global cotton - a significant achievement. Although it labelled the report's press release as, 'Sustainable cotton reaches 22% of global production', sustainable cotton, as TE's report above shows, is 25 per cent of cotton.

Better cotton is grown or benchmarked in 23 countries for total production of 5.6 million tonnes, of which 1.5 million tonnes was taken up as such (this is a 26 per cent uptake - albeit BCI report this is a 40 per cent increase on the previous report). Total BCI cotton is grown in 12 countries and benchmarked cotton in 12 (Mozambique comes under both lists).

Data remains thin on the ground but the report states that BCI continues to work with the Delta Project, which includes the International Cotton Advisory Committee, to ensure consistent impact measurement. It is much overdue and hopefully will encourage more cooperation between initiatives and the wider cotton sector and will also ensure more rapid action. ●

## Life beyond Covid-19

Cotton is still being planted and cared for as we navigate our way through the COVID-19 pandemic. Early indications are that demand may be recovering albeit there will be growing stocks.

Meanwhile, the environmental crisis remains, and carbon emissions are creeping up once again. The 'new normal' with lower carbon emissions we all hoped for looks like it may need some help. Perhaps there is increased willingness, although a flurry of reports highlights how much each cotton standard exists in a silo, which remains one of the greatest barriers to managing the challenges of sustainability and climate change: we need fast, cooperative action. ●



# A forest of opportunities?

Forum for the Future and Textile Exchange recently spelled out how they believe man-made cellulosic fibres (MMCF) could revolutionise the textile industry. Simon Glover speaks to the key figures behind their vision.

Offering genuine potential to achieve circular fashion, regenerate ecosystems and provide vital carbon sinks to address climate change, the sustainability credibilities of man-made cellulosic fibres (MMCF) are clear.

But there is a downside. MMCF have also been linked with the logging of ancient and endangered forests, the use of hazardous chemicals, and even eroding the natural barriers between wildlife and humans which prevent diseases - such as COVID-19 - from jumping species.

Two international non-profits, Forum for the Future and Textile Exchange, recently combined to draw up their ambitious vision for fabrics such as viscose, modal and lyocell in a report entitled 'MMCF 2030:

*Envisioning the Future of Man-Made Cellulosic Fibres'.*

It says: "As a sector on the cusp of massive growth, MMCF has the potential to tackle some of the apparel and broader textile industry's most significant sustainability challenges.

"Just two examples of this are its unique prospects for realising circular fashion through pioneering the reconstitution of fibres, and its potential in regenerating ecosystems and providing carbon sinks within its value chain.

"Yet, to date, the MMCF sector has faced considerable social and environmental challenges - from deforestation and biodiversity impacts, as well as labour rights concerns related to raw material sourcing, to toxic chemical use and discharge in the production process."

Based on consultations

with 80 stakeholders from 100 organisations across the industry, the report aims to build on existing standards and industry initiatives to address social and environmental issues.

The MMCF 2030 Vision has the broad aim of driving the sector towards collectively putting more back into the environment and society than it takes out - from source to finished product.

It sets out the actions needed to deliver the ambition within each of **five key areas**, as well as offering commentary on where challenges need to be overcome and the critical enabling factors needed.

However, it is not intended as a formal commitment document or standard against which organisations will be measured, which has led to questions from some leading figures over how effective it will prove.

Nicole Rycroft, founder and executive director of the Canopy initiative, which works to protect forests, commented: "We can all support the spirit and intent of visions like this.

"Our experience, of course, is that high level principles must be coupled with implementation of a specific standard like CanopyStyle and robust collaboration across the sector to achieve change on-the-ground."

Launched with the

## MMCF 2030's five key areas

- Regenerating ecosystems
- Producing with zero harm
- Enabling circular systems
- Creating prosperity
- Upholding community rights



▲ The report entitled *MMCF 2030: Envisioning the Future of Man-Made Cellulosic Fibres*

COVID-19 pandemic still hitting the MMCF sector, the backers of the shared vision hope it will be a guiding star for the industry as it aims to build resilience and reduce the likelihood of future disruptions.

Dr Sally Uren, CEO at Forum for the Future, told *Ecotextile News*: “Now is the time to create a vision that the industry can get behind.

“We’re at a crossroads as we emerge from this pandemic. Coming out of this major moment of crisis, there is the opportunity to reconfigure things differently and create a different economic model.”

She acknowledged there were already experts working in these areas, such as Canopy in the field of forest protection and ZDHC in chemical management, but said they had also been involved in the report.

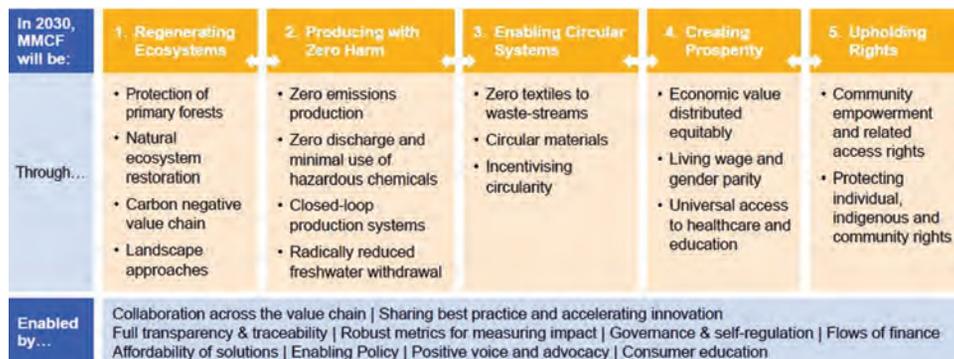
“Let’s value the brilliant stuff that’s going on already, our role is to provide a mechanism to join all this stuff up,” added Uren.

*Ecotextile News* asked if there wasn’t a risk that **MMCF 2030** would be seen as yet another well-intentioned report rather than a call to action?

“There is definitely that danger,” admitted Uren. “But we consulted across the entire industry throughout this process and I would say that all of the key players understand that they can create change together.

“There will always be a cohort who will pay lip service but think change isn’t really possible but, in the end, it’s going to be up to the industry to deliver. I hope they can see the

## NET POSITIVE MMCF 2030 A vision for building resilience and accelerating regeneration



▲ Dr Sally Uren, CEO at Forum for the Future.

Funded by Japanese chemical company Asahi Kasei and the Partnership for Sustainable Textiles, and supported by Target and C&A, it took a year to put the report together.

▼ Textile Exchange managing director LaRhea Pepper



potential of working together. The delivery of this vision would change the model by which we get clothes to market.”

For instance, she noted that MMCF could close the loop for fashion through ‘next generation’ solutions, such as the reconstitution of quality fibres from textile waste instead of using wood pulp as a feedstock.

“MMCF have the potential to demonstrate what a circular economy actually looks like when waste becomes an input, showing how alternative business models can work at scale in a way that they can’t for other fibres,” she said.

The vision will now be taken forward through the Textile Exchange’s MMCF Round Table forum. Stakeholders will convene in early November to give progress reports and identify the critical innovation areas required.

Textile Exchange managing director LaRhea Pepper said MMCF had been a core fibre for “many, many years” but now was the time for the industry to act together.

“There is a sense of urgency. It’s time to turn up the heat. It’s time for a cohesive, concerted strategy

that will turn islands of good into a platform for change,” she said.

Although MMCF 2030 was not a formal standard, Pepper said her intention was to “take the goals of this vision and use them as guidelines for our preferred fibre reports to measure suppliers and brands on their practices”.

She added: “There are going to be some very brave and courageous brands who talk about quality and who do what they can to shift the paradigm. Others will continue business as usual.

“How do we get Wall Street to see that it’s about how we get out of the red and into the black on environmental impact and social issues, as well as in the profit and loss columns?”

“It’s a different lens but I think we’re seeing some of that initiative, brands who volunteer to be judged on different standards by joining initiatives such as the Sustainable Apparel Coalition and the Fashion Pact.

“There’s a lot of work still to be done but we do have more brands joining these initiatives. It takes courage. They might not be perfect but they’re moving in the right direction.” ■



# PPE ... the new normal?

By Phil Patterson

**D**o I laugh, cry, get angry or shrug my shoulders? In a recent PR photograph a father sits next to his daughter, both wearing new 'virus blocking' face masks, with the father proudly announcing to the world that he's protecting the next generation from the coronavirus outbreak.

This pandemic has certainly changed the world. Maybe temporarily, maybe permanently, but in the midst of any crisis, normality seems a long way off. Yet the chances are that we will return to normal as we knew it, via a changed state that is being termed 'The New Normal', where different behaviours are required or are voluntarily practised on a large scale.

One of the things that has taken many of us by surprise during this pandemic is the intense focus on personal protective equipment, or PPE as it's more widely known.

The reason for the scrutiny is because we, as a

world, were simply not tooled up to protect healthcare and key workers with sufficient supplies of the appropriate kit over a relatively prolonged period of time.

A large part of the problem is that many pieces of PPE are single use, disposable items – so re-engineered, safely re-usable PPE has to be part of the future toolbox to deal with potential biological threats.

Logically, re-usable PPE should be better for the environment than single use and, if well managed, should ensure those who need it have a constant supply. This is something the textile industry should view as a long-term business opportunity and there are already positive examples of ailing textile businesses using moth-balled capacity to help out.

Yes, it was a new virus. Yes, it's mode and level of transmission were not well known. Yes, we have a complex scenario with an invisible pathogen where no-one knows who is

▲ Worker at textile dyeing facility in Morocco.

Image: © SplitSecondStock | Shutterstock

infected and whether PPE is there to protect the wearer, those in contact with the wearer ... or both?

But the world wasn't prepared. And people died because they were exposed to something hazardous. Just like what happens in the textile industry on an ongoing basis.

## **COVID vs industry hazards**

The astonishing difference with 'COVID dangers vs industry dangers' is that key workers crying out for PPE are desperate to protect themselves but, in the textile industry, the dangers are known but there is an attitude that is almost anti-PPE.

In many textile manufacturing regions, if you wear PPE you may be seen as weak. If you wear it, it's a nuisance. Bluntly, if you wear it, you may be less productive and you or your boss may make less money.

Over 30 years ago, developed nations were coming to grips with workplace health and safety

and new employees often had to go through rigorous safety induction programmes or gain formal qualifications.

Working as a researcher on a large chemically intensive production site, with a poor track record in safety (the site, not me!), this seemed entirely logical.

In any industry though, the first focus should be on the hazard (chemical, mechanical, electrical, slips, trips, falls etc) and whether there are any inherently less hazardous alternatives that can be employed. Secondly, exposure to any hazard should be reduced by engineering controls – such as guards, screens, local extraction, safety interlocks, basic repairs and so on.

Then, if exposure to hazards can't be reduced by these controls, PPE becomes a necessity.

To ensure those that should wear PPE wear it correctly, the workers must understand why they are being asked to wear it. Once trained, the wearing of PPE and adherence to safety procedures should be enshrined in contracts.

When I see what textile workers are routinely exposed to, I really don't understand why worker safety is so low down the pecking order of issues for industry apparel brands and other industry stakeholders – I tend to think it is related to price/productivity and also poor supply chain transparency. The fact is, it is really hard to say with any credibility that you care about worker safety when your business practices quite clearly demonstrate that you don't even actually

know or care who makes your clothing.

Thankfully, the management of chemicals on finished textile products is higher priority and becoming more widespread, but the unarguable truth is that the risk to consumers from traces of chemicals on clothing is pretty low.

#### **Not zero, but low.**

These deaths are across all industries – not just textiles – but, as we desperately scramble to get PPE for a virus that (at the time of writing) has caused under 20 per cent of that number of deaths, we should take a moment to think about how we, the fashion and textile industry, stop over-exaggerating the chemical risks to textile-wearing babies in developed nations and get real regarding the risks to textile-making workers in developing nations.

The chemical risks to workers are significantly higher than the risks to consumers because they are exposed to much larger quantities and they are used in physical forms where there are several routes of exposure. Chemicals in a factory can be ingested, inhaled, absorbed through the skin or even enter through the eyes, whereas chemicals on finished product can only realistically be transmitted to the skin or, rarely, ingested if someone sucks on a textile product.

The risk to workers can be viewed from both a short- and long-term standpoint. There are chemicals with a relatively low risk profile (ie, have no carcinogens, mutagens or toxins harmful to reproduction) that can

burn or create noxious fumes that asphyxiate. And there are chemicals that are seemingly benign on a day-to-day basis, but that store up serious trouble with long term exposure.

So, from a chemical risk perspective, the first thing that must be considered is the chemical inventory and factory management should try to use the least hazardous chemicals possible to get the job done. But, realistically, it's unlikely that a chemical inventory will ever be fully safe.

#### **Exposure reduction**

The next thing to consider is reducing exposure and to do this you have to identify the areas where exposure is greatest – this is normally where chemicals are weighed or dispensed but it can also be in areas where chemicals are used in open vessels or where dusts, fumes and sprays escape from the confines of machinery into the working environment.

Good practice dictates that engineering controls should be employed where possible in the form of general or targeted extraction – with the golden rule being that the work (or the problem chemical) is placed between the worker and the extractor to prevent chemicals being drawn past the worker and inadvertently increasing exposure.

And, if inventories can't be made fully safe and, if engineering controls can't eliminate exposure, then we need PPE. Not just any PPE but appropriate PPE, appropriately worn.

Even relatively benign **1**

Conversely, according to *IOSH industrial safety magazine*, global workplace deaths were 2.78 million for 2017. Over 85 per cent were as a result of workplace diseases – often caused by unavoidable exposure to chemicals.

“**Flip-flops and sandals are common footwear in textile wet processing units**”

chemicals such as softeners, lubricants, and anti-foams can cause skin irritation with prolonged exposure and almost any chemical in any inventory is going to cause damage to eyes. Any dust of any type must be viewed as a problem and workers must be protected.

It is therefore important that appropriate gloves are worn – ones that are not dissolved or degraded by the chemicals that are being used and they should be long enough to cover the forearms of the workers. They should wear appropriate goggles and even consider a full-face shield to protect their eyes and wear an appropriately rated dust mask when handling large volumes of powders, or a respirator when faced with fumes, aerosols or vapour that will not be stopped by a simple dust mask.

Bizarrely, flip-flops and sandals are common footwear in wet processing units where concentrated chemicals and splashes from process baths fall towards the floor on a routine basis. The excuse? "It's hot."

Closed safety shoes are a must.

And it's not just chemicals we're talking about. Protection from excessive noise via simple ear-plugs could save millions from premature hearing loss and the provision of physical guards could prevent the many serious cuts, bruises, crushes and amputations resulting from dangerous machinery.

I've even seen garment makers using band knives with no chainmail gloves.



Worse still, I've seen safety mechanisms willfully disabled to increase productivity – sometimes by the management and sometimes by workers who are paid on piece rate. Recently, I took a screen grab from the corporate video of the most heavily certificated dyehouse that I've ever encountered, which showed two workers wearing dust masks. The problem was they were not positioned or fastened correctly, the third worker in the frame had no mask. All were working on a coating line with no dust ... but possibly fumes that would require a respirator.

When I visit factories, I often see swathes of brand new, upside down dust masks below the furrowed brows of puzzled workers who have been told to wear them in non-dusty environments. I see completely ineffective dust masks being worn in areas where there are solvent fumes and I occasionally see someone dressed head to toe in PPE: respirator, face mask, goggles, gauntlets, rubber apron and knee length boots standing by an enclosed dyeing vessel with no realistic chance of exposure to anything.

Not understanding what's needed is a massive problem

▲ PPE is not always worn in the correct circumstances in the textile sector.

and textile factory managers often get workers to temporarily wear any available PPE, as I put it: 'for the cameras.'

Which brings me back to that PR photo.

The caring father actually sells chemicals that are applied to the virus blocking masks they are both wearing. The picture is being used to advertise the chemicals and the masks.

Children of that age have an infinitesimally small risk of being badly affected by coronavirus so, statistically, he's 'protecting her' from a virtual non-risk, which is a parental prerogative. Does the mask actually work? The honest answer is I don't know.

What I do know though is that the child has been taken into a bulk chemical storage area in a flimsy summer dress and sat on top of a one tonne container of a liquid chemical. They are both surrounded by other one tonne containers of liquid chemicals.

You couldn't make it up.

The actual risks to which the child is being exposed and the risk mitigation device being advertised are from two different galaxies.

The potential message this sends out – that chemicals are safe and don't require appropriate PPE and viruses are unsafe – is not correct. I don't know whether to laugh, cry, get angry or shrug my shoulders.

Let's hope a legacy of the COVID-19 pandemic is an appreciation of PPE and an appreciation that its appropriate use could save millions of lives per year. Every year. ■

SPONSORED CONTENT

# C3.tools to simplify chemical compliance

Multiple RSLs, risk matrices per materials, age, use, etc. multiple limits and substances aggregations, tests and more tests. Even in the ZDHC era we are still far from the harmonisation of chemical management. Life for suppliers is now more complicated. C3.tools can simplify it.

The growing focus on circular fashion issues cannot distract the supply chain from chemical safety: the new password is safe&ircular.

With the end of the DETOX campaign, the baton of responsible chemical management has passed to the ZDHC, leading to a substantial harmonisation only for chemical inputs and wastewater testing. At the finished product level, however, this did not happen. An opposite tendency towards fragmentation persists, even from those brands adhering to ZDHC: with a proliferation of P-RSLs, considerably different from each other, including individual substances and their groupings, detection limits and acceptability and methods of analysis.

**This state of affairs makes life difficult for suppliers aiming to be compliant and wanting to deploy their strategies: while conforming to the ZDHC M-RSL, they can find themselves not to be compliant with the P-RSL of a brand which also belongs to the ZDHC.** Besides, the trend towards a stratification of brand requests, with various levels being added to each other, and on top of all that, environmental certifications protocols, complicate compliance management further.

Managing such complexity needs smart and affordable tools. C3.tools is a unique service, developed to simplify the verification of compliance with the RSLs of customers. **Based on a proprietary algorithm, the software allows, in a few clicks and starting from laboratory tests or certifications, evaluating compliance with the various chemical safety protocols and with the P-RSLs and M-RSLs of fashion brands.**

C3.tools has been realised in collaboration with the Department of Chemistry, Materials and Chemical Engineering of the Milan Polytechnic and is already in use in Italian companies and laboratories.



# C3.tools

## CHEMICAL COMPLIANCE CHECKER

The software uses a continuously updated database consisting of:

- **1,500 substances** present in the RSLs of the brands
- **Over 100 specially developed harmonisation algorithms** that solve cases of non-comparability between the Brands RSLs
- **RSLs (P-RSL + M-RSL) of over 50 of the world's major brands**, the brands available are continuously increasing.

Overall, the database consists of over 300 RSLs, for each brand there are enough RSLs needed for direct comparison depending on inputs, outputs and age class of the user. For the M-RSLs, there is a specific RSL for each input or output: chemical formulations, waters and sludge. For P-RSLs, there is a specific RSL for each product category: fabrics, leather, plastic, metals, other natural materials, coatings and printings, recycled materials, packaging, paper and so on.

To facilitate the use, C3.tools include, already partially pre-filled, **over 60 laboratory report templates** from 10 international and Italian laboratories.

*Who we are: Blumine Srl is an Italian research and consultancy company that supports fashion and design suppliers and brands in the development of sustainable products and projects. Born in 2010, it has accompanied the first supplier in the world to the Greenpeace DETOX commitment in 2013 and is operating in chemical responsibility since then.*

For info mail at [c3tools@blumine.it](mailto:c3tools@blumine.it), for demo visit <https://c3.tools>

## Better Cotton Initiative launches in Egypt

GENEVA – The Better Cotton Initiative (BCI) has expanded its programme into Egypt with support from the United Nations Industrial Development Organisation (UNIDO). Around 2,000 smallholder cotton farmers in Egypt will receive training and support on growing cotton more sustainably while improving their livelihoods under the initiative. The BCI says the development follows "many years' engagement and preparation", a successful pilot project in 2019, and completion of the necessary new country start-up process. It says it is confident that a high level of multi-stakeholder engagement in Egypt will allow the BCI programme to be implemented in a robust way. Alia Malik, director of implementation at BCI, said: "BCI supports all initiatives that seek to make cotton production more sustainable. "Making the Better Cotton Standard System accessible to smallholder farmers is BCI's priority – 99 per cent of the farmers BCI works with today are smallholders." The BCI programme in Egypt is funded by the Italian Agency for Development Cooperation as part of the Egyptian Cotton Project which aims to increase sustainability and improve conditions for Egyptian cotton farmers.

Web: [bit.ly/2CpWrQt](http://bit.ly/2CpWrQt)

## WRAP relaunches textile recycling grant fund

BANBURY – UK waste recycling charity WRAP is relaunching its £1.5 million (US\$1.9m) textile recycling grant scheme to make funding more accessible because of the

coronavirus pandemic.

The organisation has streamlined the application process so that funds can be allocated more quickly for innovative projects that

are designed to keep textiles out of landfill.

Beneficiaries will also no longer be required to put up match funding – originally set at 10 per cent for not-for-profit and 50 per cent for commercial organisations – towards successful projects.

Grants of between £20,000 and £170,000 are available to organisations of any size, both commercial and not-for-profit, for schemes which can demonstrate "innovation beyond normal practice".

Applications will be assessed on a rolling basis until WRAP closes the scheme or all funds are allocated. The money is part of an £18m Resource Action Fund set up by the Department for Environment, Food & Rural Affairs (DEFRA) to support key priority policy areas.

It will be released in milestone payments and can be spent on capital expenditure only, either for equipment or technologies that enable recycling or re-use of clothing or linen waste textiles.

The grant can also be used to fund capital costs to reconfigure a business to comply with guidelines on COVID-19 safety measures, where this forms an integral part of a project.

WRAP director Peter Maddox said: "We have responded swiftly to feedback from the textile sector."

Web: [bit.ly/3dqyZ2t](http://bit.ly/3dqyZ2t)



The 'Design to Fade' project is a collaboration with Living Colour and Streamateria.

## Puma explores biodesign textile alternatives

HERZOGENAURACH – Sportswear brand Puma is exploring sustainable alternatives for making and dyeing textiles in a new biodesign project. The 'Design to Fade' project is a collaboration with Dutch project Living Colour and Swedish design studio Streamateria. Living Colour uses bacteria which are fed with a nutrient to make them produce a pigment which can then be used to dye textiles without harmful chemicals. Streamateria makes fabrics in closed material loops which become a source of raw material after they have been worn in a circular production chain. They are designed to decompose after

a certain period of use.

"Our times require us to rethink not only what to create but also how we create," said Romain Girard, senior head of innovation at Puma.

"With Design to Fade, we are working on a future, which focuses on sustainable production methods and recyclable materials."

Design to Fade is Puma's third biodesign project since 2016, in which the company is seeking new ways to reduce the environmental impact of fashion and sportswear. None has so far reached the commercial stage, but Puma says they are an important step towards making the company more sustainable in the future.

Web: [bit.ly/3i0B6xA](http://bit.ly/3i0B6xA)



**Taiwan EcoTextiles** - [eco.textiles.org.tw](http://eco.textiles.org.tw)

## Think Taiwan for Eco-Textiles

- Recycled PET Bottle Textiles — Reclaim, Manufacture, and Sell
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- Solution Dyed Nylon Yarn — Performance for Consumers, Protection for Earth
- Ecological Polypropylene Fiber
- Normal Pressure Dyeable Polyester Fiber — Environment Matters
- Solvent Spun Fiber
- Biodegradable Textiles — Sustainable Textiles for the Earth
- Heavy Metal Free Polyester Fiber
- Bio-based Textiles (Bio-PET and Sorona®) — Reducing Petrol Consumption and CO<sub>2</sub> Emission
- Instant Cooling Fiber — Feel Cool in the Summer
- Organic Textiles
- Cotton — Natural and Sustainable
- Charcoal Fiber
- Intelligent Textiles — Sense and React
- Eco Composite Textiles — New Opportunity for Eco Textiles
- Get Certified — a Ticket to the Global Market
- Development in Printing Technology Help Save Energy



## Sateri partners to launch recycled fibre

SHANGHAI – Viscose producer Sateri is partnering with fashion brands to launch a new next-generation cellulosic fibre containing recycled content. The company says that Finex - which is short for 'Fibre Next' - represents a breakthrough in the commercial production of viscose using recycled textile waste.

Outdoor brand Lafume is already producing Finex apparel for '618', China's major mid-year online shopping festival, while independent Chinese designer Rico Lee will launch his Finex line next month.

Sateri has worked closely with its downstream yarn and garment manufacturing partners to bring the recycled fibre product to the consumer market. "We're pleased to collaborate with Sateri as one of their first brand partners for Finex. Sateri's dedication to this partnership made it possible for Lafuma to produce T-shirts with this fine quality fibre in a short time," said Wu Qian, general manager of Lafuma China.

Tom Liu, Sateri's commercial vice president said: "Innovation and technology has made cellulosic textile fibre recycling possible and Finex represents how nature not only renews itself but that products made from nature can also be regenerated.

"This, at its heart, is what circular fashion looks like. Our brand promise to customers remains constant – Sateri's products are sustainable, high quality, efficient, and cost-effective."

Web: [bit.ly/2zS44yi](http://bit.ly/2zS44yi)

## All Inditex stores to be 'sustainability hubs'

ARTEIXO – Zara owner Inditex has unveiled its plans for the next two years in which it says that each of its stores, along with its websites, will become 'sustainability hubs'.

The group, the world's biggest fashion company, says each store, whether

online or physical, will use renewable energy, eliminate single-use plastic, recycle more materials and foster the reuse of garments.

All stores will be equipped with the Inergy environmental control platform, apply a ticketless e-receipt system, and recycle or reuse

surplus cardboard and plastic packaging.

Inditex also aims to increase clothing circularity by collecting clothing after use. It plans to reuse or recycle these garments through organisations such as Caritas and the Red Cross, while financing research into new recycling techniques.

And it will continue its existing commitments on raw materials which include ensuring that more than half of all fabrics used by any of its eight brands will be sustainable, organic or recycled by 2025, and that 100 per cent of its viscose will be sustainable by 2023.

Inditex will also broaden and complete its store technology upgrade plan, which will continue the policy of opening larger stores and absorbing smaller units.

Inditex executive chairman Pablo Isla commented: "This strategy is a culmination of the project the company has been investing in steadily and significantly since 2012, a project that will transform its profile notably.

"The overriding goal between now and 2022 is to speed up full implementation of our integrated store concept, driven by the notion of being able to offer our customers uninterrupted service no matter where they find themselves."

Web: [bit.ly/2BqBN2q](http://bit.ly/2BqBN2q)



## Stella McCartney commits to Canopy's Pack4Good project

GLOBAL – Eleven apparel brands and retailers, including Stella McCartney and PrAna, have committed to environmental NGO Canopy's Pack4Good initiative, which tasks partnering businesses with addressing the use of paper packaging in their supply chains.

According to figures cited by Canopy, 245.8 million metric tonnes of paper packaging was produced in 2017, which is expected to increase by a further 20 per cent by 2025.

"It's never been more important for forward-thinking companies to shift from high-impact paper packaging to smarter and planet-friendly alternatives," said Canopy's founder Nicole Rycroft. "We're enheartened by these companies' leadership."

With a 2022 deadline, the

Pack4Good project aligns companies around the following goals: using packaging free of materials from ancient and endangered forests; re-designing packaging to reduce material usage; maximising recycled and alternative 'next generation' fibres; and using FSC-certified paper where virgin forest fibre continues to be used.

The new cohort of fashion industry businesses has joined the Pack4Good initiative in a pledge to stray from virgin material, in particular from ancient and endangered forests. In addition to Stella McCartney and PrAna, the companies to have committed to the cause are: Aritzia, CV Studio, ELK, Lindex, Mara Hoffman, NER, Telus, Tensei and Varner.

Web: [bit.ly/2Bu1KxU](http://bit.ly/2Bu1KxU)

# UNICEF addresses children's rights in textile factories

GENEVA – Global children's charity UNICEF and Norges Bank Investment Management (NBIM) have teamed up to develop guidance for clothing and footwear companies to better address children's rights in their global supply chains.

Having collaborated with leading brands including Adidas, H&M and VF Corporation, the pair insist that now is the time for firms to reflect on their operations and ensure the rights of children are made paramount.

UNICEF deputy executive

director, Charlotte Petri Gornitzka, says: "As the socio-economic consequences of the COVID-19 pandemic threaten the livelihoods of millions of workers in global supply chains, children's rights must be at the heart of business action."

The new guidance tool provides practical steps for companies to embed children's rights in their sustainability strategies and approaches.

UNICEF has called on its peers to gather evidence on how children are impacted within this industry, identify bottlenecks and take subsequent proactive steps to manage their supply chains.

Going forward, it's said that UNICEF and NBIM – which heads up the assets of the Norwegian Government Pension Fund Global – will support the measurement of and reporting on children's rights. The two partners have laid out key areas for companies to address. These include: assessing child rights risks and business preparedness to address them; integrating policies on such rights into management systems; engaging stakeholders and workers in implementing grievance processes; collaborating and investing in multi-stakeholder initiatives; and supporting governments and advocating for children's rights.

**Web:** [bit.ly/2BqGDwD](http://bit.ly/2BqGDwD)



Spinnova says the technology could be an "environmental game changer".

## Spinnova partners to develop dyeing solution

HELSINKI – Finnish textile innovator Spinnova has partnered with chemicals company Kemira to develop an inherent dyeing technology said to reduce resource consumption compared to widely used alternatives. Spinnova's method works by mass dyeing cellulosic fibre before extruding the filament. This, whilst cutting back the excessive volumes of water, energy, heavy metals and other substances attributed to alternate methods of textile dyeing, is also said to result in a high-quality finish. Spinnova CEO and co-founder, Janne Poranen, commented: "In addition to being the most sustainable way of dyeing, the fibre maintains this in-built colour really well. We have

already made some successful trials, and the results are very promising." Tipped to be "an environmental game changer" by Spinnova, its inherent dye technology could prove particularly effective in denim production, which is resource intensive by nature. "In collaboration with Spinnova, we can extend our unique know-how into the development of new innovations in the textile industry; not only in dyeing but also to improve other properties of sustainable textile fibre, such as hydrophobicity and strength," said the firm's director of global business development, Mats Berg. The strategy from here on out is said to be on engaging with brands to identify commercially viable industry applications.

**Web:** [bit.ly/2Z0g350](http://bit.ly/2Z0g350)

## Epic group signs wastewater treatment deal

HONG KONG – The Epic Group, a major apparel manufacturer for global brands, has signed an agreement with wastewater treatment company Arvind Envisol to reduce pollution and conserve water at its factories in Bangladesh, Vietnam, Ethiopia and Jordan.

The strategic partnership, which will also cover planned Epic factories in India, will employ best practices of water and waste water treatment to reduce the company's environmental footprint.

Arvind Envisol, a subsidiary of Arvind Limited, is a water management company providing end-to-end solutions for water treatment, industrial waste water treatment, sewage treatment and zero liquid discharge solutions. The partners will also work together to develop and implement technology solutions to reuse treated wastewater in processes to significantly reduce the use of ground water.

Epic Group chairman Ranjan Mahtani said that the partnership would help both companies meet their sustainability targets and implement best in class wastewater treatment. Punit Lalbhai, chairman of Arvind Envisol, said the company would provide technological solutions to achieve ZDHC progressive discharge standards using technologies such as membrane bio reactors (MBR) and ultra-filtration (UF).

**Web:** [bit.ly/2Y1aAqQ](http://bit.ly/2Y1aAqQ)

## Primark, Bestseller join Green Supply Chain Map

BEIJING – Fashion retailers Primark, Bestseller and Suitsupply are amongst the latest batch of firms to join the Green Supply Chain Map, a platform which makes the names, addresses and geolocations of supplier facilities readily accessible to anyone with a vested interest in the industry.

Launched at the start of 2018 by the Natural Resources Defense Council (NRDC) and the Institute of Public & Environmental Affairs (IPE), the site compiles up-to-the-minute data on suppliers for brands including Nike, Levi's, Kontoor Brands and Adidas. For Primark, it means 200 businesses can now be scrutinised for any malpractice on the environmental front.

Meanwhile, 95 Bestseller suppliers join the map, a cohort made up of garment manufacturers, dyehouses and cut-pack factories which span both tier one and two. Finally, US brand Suitsupply has 37 of its suppliers logged on the map, responsible for upstream waste treatment and raw material manufacture. All together, this sees the Green Supply Chain Map surpass 2,000 suppliers on its platform. It signals an increasing industry effort for supply chain transparency at a time when consumers are demanding exactly that.

**Web:** [bit.ly/37QHRNC](http://bit.ly/37QHRNC)

## IKEA joins Ellen MacArthur on circularity

LEIDEN – Swedish homeware giant IKEA has entered into a strategic partnership with the Ellen MacArthur Foundation to accelerate its transition to circular business practices.

Lena Pripp-Kovac, chief sustainability officer for the Inter IKEA Group, said: "To become circular is one of our big ambitions and challenges for the future."

IKEA already prides itself on its use of recycled

materials with 59 per cent of the polyester used in textile products, including rugs, curtains, roller blinds, bedding, pillows, quilts, sofa covers, storage boxes and bags, being recycled polyester (rPET).

"It is a transformational shift for our entire business. Our goal is to give products and materials a longer life through reuse, refurbishment, remanu-

facturing, and, as a last option, recycling," Pripp-Kovac noted.

"One of our first projects together will be to develop a global common dictionary on circular economy that can support an industry-wide transition."

The partnership will also aim to inspire a new generation of designers into circular practices, lobby for legislation to accelerate the transition to a circular economy, and promote circular offers to customers.

"The circular economy empowers businesses to rethink how they create value, in ways that benefit the environment, society, and the economy," Andrew Morlet, CEO at the Ellen MacArthur Foundation, said.

**Web:** [bit.ly/2NkvnV3](http://bit.ly/2NkvnV3)

At present, 59% of the polyester IKEA uses is recycled.



## ZDHC ventures into Africa with new project

ADDIS ABABA – With the support of the German government and leading chemicals supplier Dow, the ZDHC Foundation is embarking on a two-and-a-half year project in Ethiopia centred on sharing knowledge and raising awareness of the impact of textile chemistry.

Marking ZDHC's first workings of this kind in Sub-Saharan Africa, Ethiopia in this case has been selected having experienced exponential growth over the past five to six years, with the country's government backing ambitious plans to mobilise its

textile industry to become a frontrunner in Africa. Implemented by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, on behalf of the Federal Ministry of Economic Corporation and Development (BMZ) through its 'develoPPP.de' project, efforts to this end will be executed via a two-pronged approach. The first 'work package', as it's described, will hone in on textile chemistry education. For this, ZDHC has partnered with Bahir Dar University to provide a curriculum that it's hoped will best equip students

with the understanding necessary for a career in this industry. Lecturers will initially receive training in this regard, before they're trusted to pass on their knowledge to the next generation.

The second package is designed to enhance the capacity of consultants and experts, with the goal of accrediting at least four experts that can train and advise factory operators and managers in the implementation of better chemical management in the day-to-day practices.

**Web:** [bit.ly/2V4odZe](http://bit.ly/2V4odZe)



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## GLOBAL TRADE EVENTS IMPACTED BY COVID-19 OUTBREAK – UPDATE

### Outdoor Retailer Summer Market

Colorado, USA  
<https://www.outdoorretailer.com/>  
**23-25 June**  
**TO BE HELD DIGITALLY**



### Copenhagen Fashion Summit

Copenhagen, Denmark  
<https://www.copenhagenfashionsummit.com/>  
**12-13 October**  
**TO BE HELD DIGITALLY**



### Neonyt

Berlin, Germany  
<https://neonyt.messefrankfurt.com/berlin/en.html>  
**13-17 July**  
**TO BE HELD DIGITALLY**



### Performance Days

Munich, Germany  
[www.performancedays.com](http://www.performancedays.com)  
**9-10 December**  
**SET TO GO AHEAD**



### Intertextile Shanghai + Yarn Expo Shenzhen

Shenzhen, China  
<https://intertextile-shanghai-apparel-fabrics-spring.hk.messefrankfurt.com/shanghai/en.html>  
**15-17 July**  
**SET TO GO AHEAD**



### INDEX 2020

Geneva, Switzerland  
<https://www.indexnonwovens.com/en/>  
**POSTPONED UNTIL 7-10 SEPTEMBER 2021**



### Munich Fabric Start

Munich, Germany  
<https://www.munichfabricstart.com/welcome.html>  
**1-3 September**  
**CONSOLIDATED SHOW TO GO AHEAD**



### Sustainable Apparel Coalition's General Members' Meeting

Bangkok, Thailand  
<https://apparelcoalition.org/>  
**POSTPONED – TO BE HELD DIGITALLY**



### CINTE Techtexil

Shanghai, China  
<https://cinte-techtexil-china.hk.messefrankfurt.com/shanghai/en.html>  
**2-4 September**  
**SET TO GO AHEAD**



### Kingpins Amsterdam

Amsterdam, Netherlands  
<http://www.kingpinsshow.com/amsterdam>  
**CANCELLED UNTIL 2021**



### Première Vision

Paris, France  
[www.premierevision.com](http://www.premierevision.com)  
**15-17 September**  
**SET TO GO AHEAD**



### Kingpins Hong Kong

Hong Kong  
[www.kingpinsshow.com](http://www.kingpinsshow.com)  
**CANCELLED UNTIL 2021**



### FESPA

Madrid, Spain  
<https://www.fespa.com/en>  
**6-8 October**  
**SET TO GO AHEAD**



### Outdoor by ISPO

Munich, Germany  
[www.ispo.com](http://www.ispo.com)  
**CANCELLED UNTIL 2021**



### Techtextil | Texprocess North America

Georgia, USA  
<https://techtextil-north-america.us.messefrankfurt.com/us/en.html>  
**1-3 October**  
**CANCELLED UNTIL 2021**



### Dornbirn Global Fiber Congress

Dornbirn, Austria  
<https://www.dornbirn-gfc.com/>  
**16-18 September**  
**CANCELLED UNTIL 2021**



Although every care is taken over the compilation of this diary to ensure accuracy of the dates, these can sometimes be changed due to local circumstances. It is therefore advisable to check with the appropriate organisers before travel arrangements are made.

20 YEARS  
AHEAD

since 2000

bluesign®

# EXCEL ALONG THE BLUE WAY

It started 20 years ago, with an idea for a responsible textile industry. The idea became the Bluesign mission: to provide service-based solutions that help the industry realize responsible manufacturing, globally. THE BLUE WAY is a mindset towards advancements for supply chain inputs and outputs. From improvements in resources and chemical usage to emissions and waste reduction – THE BLUE WAY creates a positive impact and better textiles. As global society begins to catch up, we are taking our momentum into the next 20 years. We look forward to walking the walk together with you.

Let's be 20 years ahead.

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