June / July 2020

ECOTEXTILE NEWS

The environmental magazine for the global textile supply chain

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Together we can work to make a fashion-friendly AND planet-friendly ecosystem, beginning with your design room or factory floor.

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Upside down

The year 2020 was going to be the big green year. It's been five years since the 2015 Paris Agreement on Climate Change and our industry had unveiled new commitments, targets and tools to help global efforts to limit temperature rises below 2°C.

Things look very different now.

The COP26 climate summit has been postponed until 2021 and the deluge of news related to COVID-19 has wiped climate change discussions off the mainstream media map.

Meanwhile, prior to the global lockdown, we'd seen investor and market momentum move away from oil and towards cheaper renewable energy. But this is now in doubt, with fossil fuels so cheap that the benefits of switching to greener alternatives are less clear-cut.

What does this mean for apparel retailers and brands who have made ambitious targets to reach net zero or reduce their carbon emissions in line with science-based targets by 2030? These targets include commitments to source large volumes of product from recycled synthetic sources – that are no longer cost-effective thanks to the oil price crash (page: 28) .

All this raises longer-term questions.

To what extent will fashion's green agenda be hamstrung as the economic wheels of recovery start to turn in a post-corona world? After all, money and political capital that was being spent on a longer-term green transition will, in the short term, rightly be redirected to the immediate human and health crisis.

Corporations and governments may prioritise the rebuilding of the economy and health services saying there's no cash left for a climate problem that doesn't bite for 20 years.

> **There's no vaccine for climate change**

In the short term there's no doubt that survival will trump sustainability, but consider this: a successful vaccine would halt COVID-19. But there's no vaccine for climate change.

It's important to remember that every environmental impact the textile industry has, contributes in some way to the overarching issue of climate change. From fertiliser use on cotton farms, petroleum-based chemicals used to make synthetic fibres and dyes, to the use of coal-fired power generation, freight and logistics, land clearances, air and water pollution, landfill and perhaps, most importantly, the overconsumption of fashion.

The good news is that as we start to crawl out from under the black cloud of the virus outbreak, there are clear signs that policymakers and governments understand that we have an opportunity to 'buy one solution – and get another one free.'

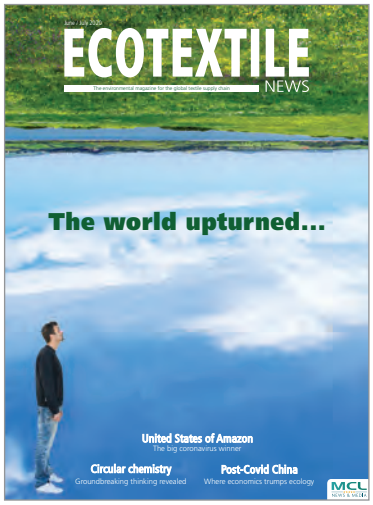
The European Bank for Reconstruction and Development (EBRD) has already suggested a post-coronavirus economic recovery strategy that stimulates the economy through investment in climate improvements.

It wants to resist stampeding – at great speed – out of a temporary healthcare crisis, only to slam headfirst into an accelerated, irreversible climate crisis that potentially has even more catastrophic consequences for life on earth.

It seems that a medium-term green transition away from COVID-19 is definitely on the cards and it's those companies in our industry that position themselves now for this coming change who will be the big beneficiaries.

Already, international organisations (see page: 72) and multilateral development banks, are sketching out a green-focused response to the coronavirus collapse. These institutions, which have both the financial resilience to take a long view, and in the EBRD's case a long-term political mandate to stay focused on climate change, are reminding overwhelmed national leaders that the next step is to bring climate action back to centre stage.

The coronavirus outbreak may have knocked society and the world economy off its axis, but the medium to long-term indications are that we will still inevitably tilt towards green.



Issue 97
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Image: © Gabriele Maltinti | Shutterstock

Cover story

11. How it's unravelled: COVID-19 and fashion supply chains
Reflective coverage of how the virus has impacted workers the world over. .

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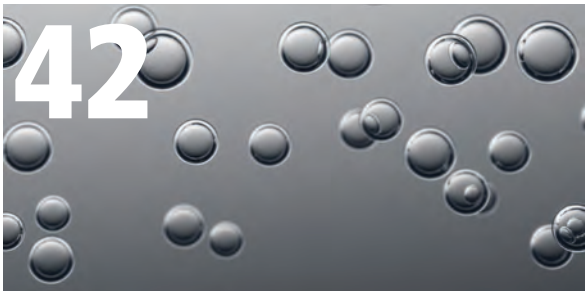

New agenda to guide fashion through COVID-19

The Global Fashion Agenda has released a new guide to help fashion leaders 'futureproof' their businesses post coronavirus pandemic.

Simon Glover reports.

As fashion brands and retailers focus on economic survival during the COVID-19 crisis, they would do well to put sustainability at the heart of their plans to thrive during the 'new normal' on the other side of lockdown.

That is the conclusion of Global Fashion Agenda's (GFA) newly released CEO Agenda 2020 report that's based on in-depth research , interviews with industry leaders and input from global management consultants McKinsey & Company. It's claimed to outline opportunities to rebuild the industry with guidance for recovering profitability and embedding greater resilience by advancing sustainability.

Eva Kruse, CEO, GFA, said: "I'm well aware of the battlefield fashion leaders are on every day in these weeks and months, and how sheer survival is the top priority for many.

"However, this crisis presents an opportunity for us to re-evaluate its entire system of operations. I urge fashion leaders to rethink and rebuild systems in a collective effort to ensure a just and resilient future post-pandemic."

The CEO Agenda 2020 details six opportunities for fashion executives to rebuild post-pandemic:

- Map social and environmental impacts along the value chain
- Build trust and brand loyalty
- Raise the bar on supplier relationships and shift to equal partnerships
- Address stock levels and markdowns by scaling new business models
- Accelerate the digitalisation of business processes
- Shape the e-commerce infrastructure of the future

It says, that while brands and retailers re-organise for the 'new normal' post-COVID-19, there is a range of win-wins to embedding sustainability in the recovery of their businesses, including the fact that stakeholders are also shifting towards more sustainable practices.

40%
of consumers, who did not shop online previously, started using online channels during COVID-19 and 26% expect to shop less at physical stores following COVID-19 – *McKinsey post COVID-19 consumer survey*

71%
of consumers plan to invest in higher quality garments and make use of circular business models, such as resale, rental or refurbishment, following COVID-19 - McKinsey post COVID-19 consumer survey

Two thirds of consumers state that sustainability has become even more important to limiting the impact on climate change following COVID-19, according to the McKinsey survey.

Investment communities are increasingly driving deeper reassessments of risk and asset values during this crisis. With sustainability's increasing impact on returns, sustainable investment can provide better risk-adjusted returns to investors.

Moreover, regulators are exploring bold green commitments as part of their stimulus packages during COVID-19 to integrate sustainable growth into recovery plans.

Karl-Hendrik Magnus, senior partner and co-leader of the apparel, fashion and luxury group at McKinsey & Company, said: "The sustainability of the fashion industry is becoming significantly more, not less, important to consumers, investors and regulators as a result of this crisis.

"Fashion industry leaders should therefore re-new their commitments and find ways to make use of the crisis as an opportunity to accelerate the transformation towards more sustainable business models."

Helena Helmersson, CEO, H&M Group, commented: "The current crisis forces all of us to take difficult decisions every day – myself being no exception."

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US Senate bill sanctions China on forced labour

WASHINGTON D.C. – The US Senate has approved a bill to sanction Chinese government officials responsible for forced labour camps in the western region of Xinjiang, where it's believed millions of Uyghur Muslims are held against their will and forced to produce goods for industries including fashion and textiles.

China's Xinjiang region is a cotton production hub.

Widespread reports dating back to 2017 have consistently shed light on what experts believe to be the largest mass detention of people since World War 2.

After reaching a breakthrough with legislation that began to take shape late last year, the n*ew Uyghur Human Rights Policy Act of 2020* will now be put in front of the US President and, if enacted, would require Donald Trump to submit a report to Congress identifying culpable Chinese officials.

Last December, Members of the House voted in a one-sided affair (407 – 1) to pass a version of the bill, but the President's impeachment proceedings had held back progress.

The Uyghur Human Rights Policy Act of 2020 bill condemns the continued oppression of Uyghur Muslims in what are described 'detainment camps', and recommends a tough response to human rights violations.

If enacted, not only would President Trump be required to submit a report to Congress detailing such violations, but the State Department would also be tasked with assembling a similar report on cases specific to Xinjiang, including estimates of how many people are confined in these camps.

Web: bit.ly/3e4azML

Cotton industry to collaborate on COVID-19

ZURICH — The Better Cotton Initiative (BCI), Committee For International Co-Operation Between Cotton Associations (CICCA), International Cotton Association (ICA), International Cotton Advisory Committee (ICAC) and International Textile Manufacturers Association (ITMF) will all work together to address the threat of the coronavirus on cotton supply.

The cotton initiatives say they have now come together to promote a common set of values and a shared commitment to safe trading and contract sanctity across the global cotton community.

"Our joint challenge today is to ensure that fair and equitable trade practices govern the commercial relationships throughout the cotton and textile supply chains. We believe that these principles have never been more important than they are now," they say in a joint statement.

Cotton consumption is projected to decline 11.8 per cent in the 2019- – 2020 season, according to the International Cotton Advisory Committee's (ICAC) monthly report.

The initiatives have jointly and collaboratively committed to act to 'contribute to the recovery of the cotton and textile sectors in 2021 and beyond; communicate, collaborate and be responsive to each others' needs; continue to respect the trade rules that govern the sectors; recognise and publicise positive behaviours – and identify and call out negative, counter-productive behaviours.

The joint statement continues: "The constraints we are currently facing will pass and many of the freedoms that we are used to are likely to return before too long. We have confidence in the future of our industry."

Web: bit.ly/3e3x70r

Global brands back UN-led Recover Better plan

GLOBAL – More than 150 global corporations - including H&M, Inditex owner Zara, IKEA and PVH, have signed a 'Better Recovery' statement urging governments to align post-pandemic socio-economic recovery with climate science.

The CEOs of Burberry, Arc'teryx, Vaude Sport, Grupo Malwee (Brazil) and zipper manufacturer YKK are also backing the initiative to target a net-zero recovery from COVID-19.

The Science Based Targets initiative (SBTi), the UN Global Compact and the We Mean Business coalition are behind what is said to be the largest ever UN-backed CEO-led climate advocacy effort.

A total of 155 companies – worth a combined US$2.4 trillion and representing more than five million employees – have signed the statement urging governments around the world to align their COVID-19 economic aid with the latest climate science.

The signatories, which span 34 sectors and have headquarters in 33 countries, are all part of the Science Based Targets initiative.

The statement comes as governments around the world are preparing trillions of dollars worth of stimulus packages to help economies recover from the impacts of the coronavirus pandemic.

"Saving lives and livelihoods, and building a prosperous, inclusive and sustainable future, are at the heart of our efforts to recover from COVID-19," commented UN Secretary-General António Guterres.

Web: bit.ly/3g7Hpyu

Environmental standards tool gets update

The latest edition of the 96-page Textile Standards & Legislation booklet which details over 72 environmental and social standards and complements an online searchable tool was released in May 2020.

Fully updated and revised since it was last published in 2018, the new guide walks textile professionals through the minefield of standards, voluntary labels, regulation and industry tools related to environmental and social compliance.

With live updates to all the standards that it covers also published in more detail at: www.textilestandards.com there have been several major revisions and additions since its last publication.

Updates to the Guide include details on the withdrawal of the Bangladesh Accord, which is now due to be covered by the Bangladesh RMG RSC after May 2020.

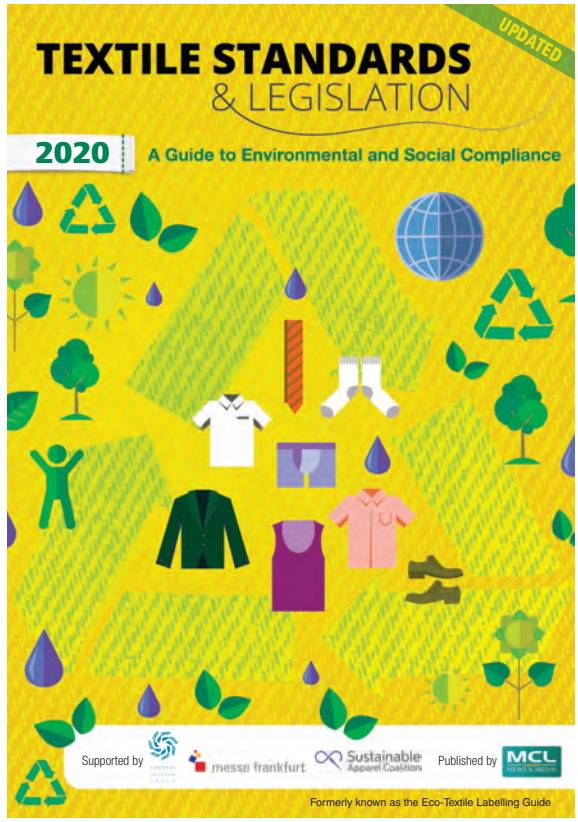
It also details the introduction of the new voluntary Bangladesh initiative, Nirapon, which includes member brands formerly signed up to the old Alliance for Bangladesh Worker Safety.

New additions includes the Responsible Mohair Standard from Textile Exchange launched in April 2020, along with new updates to the Responsible Wool Standard. The Australian National Wool Declaration is also documented for the first time, which completes a trio of new efforts on animal welfare and land use in the wool industry.

Other additions include details of the Grüner Knopf sustainability standard for textiles run by the German Federal Ministry for Economic Cooperation and Development (BMZ). This label is allowed to be shown on garments at point of sale for textiles that have passed certain social and ecological standards set by the German Ministry.

The Guide also gives details on significant criteria changes to the Global Organic Textile standard (GOTS), which was updated to version 6.0 and released in February 2020 along with updates to Oeko-Tex and bluesign standards which also took place recently.

In terms of chemical management, we've added the Oeko-Tex Detox to Zero standard and looked at how the Roadmap to Zero from the ZDHC Foundation has evolved, including its new plans to tackle air emissions and the man-made cellulosic fibre sector.



There is also a progress update on the Higg Index, which now includes a new Brand and Retail module to allows users to measure the impact of individual products they sell in their stores.

This year we've once again teamed up with long-time partners on this project Messe Frankfurt, the Sustainable Apparel Coalition and the European Outdoor Group who have supported this unique project.

Subscribers to the print copy of the guidebook can also visit a fully searchable website at: www.textile-standards.com to see further details of all these standards online with links to the relevant in-depth documents.

Web: www.mclnews.com/guidebooks/tsl-plus

How it's unravelled: COVID-19 and fashion supply chains

By Chris Remington

1st April: As April rolled in, India's impulsive lockdown measures left native garment workers stranded and unable to return to their home villages. Horrific local reports suggest that upwards of 20 people died after attempting long-distance journeys.

2nd April: The Garment Manufacturers Association in Cambodia (GMAC) warns that more than 60 per cent of factories could close as a result of retracted orders. Meanwhile, in Pakistan, trade unionists projected job losses of one million in its textile industry.

3rd April: Calls for garment factories to close for the entire month of April were made by 16 unions in Myanmar. Perhaps optimistically, the organisations asked for full pay throughout this period. Comparatively, the GMAC stated that native factories there couldn't afford to pay even 40 per cent of workers' wages.

6th April: In Bangladesh, garment factory owners were criticised after thousands of workers mistakenly flocked to their workplaces under the impression they had reopened. It came as a leading figure in the country's RMG sector called for his compatriots 'not to cut corners'.

7th April: The Better Buying initiative published guidelines for brands and retailers to best support their suppliers amidst the pandemic. The suggested improvements came off the back of a survey which found factories to be facing a "devastating range of issues".

8th April: Figures from the International Textile Manufacturers Federation highlight that brands have cancelled 31 per cent of orders globally. On the same day, workers' rights NGO Remake launched its #PayUp campaign which spotlighted brands' shortcomings.

9th April: Amnesty International says Egyptian workers are having to choose between their health and their livelihoods, as factories remain open. In India, concerns are raised of how home-based workers are offered financial protection, with many only sub-contracted with reduced entitlements.

14th April: As Bangladeshi manufacturers estimate that the COVID-19 outbreak has cost the country US$10bn, the Clean Clothes Campaign urged fashion brands, manufacturers and governments the world over to establish better social security measures in developing countries.

15th April: Reports surface of mass protests in Bangladesh's major production regions. Police reported separate incidents in four districts of the country's capital alone. Escalations heighten as employers are unable to pay staff for the previous month's work.

16th April: The Bangladesh Garment Manufacturers and Exporters Association (BGMEA) says local factories will reopen on April 26th in a bid to save the sector from economic collapse. BGMEA president Rubana Huq says the decision is based on the stance of competing sectors in Vietnam and Cambodia, which have remained open in parts.

17th April: India seeks an even closer return, suggesting it will reopen sites on the 20th. The country's Apparel Export Promotion Council needs the green light from government officials before it introduces mechanisms for partial industrial activity to begin once more.

20th April: ***Ecotextile News*** **becomes aware of negotiations to launch a cross-industry coordinated response to the pandemic, through which financial support is to be provided to suppliers, filtering capital down to impoverished workers in fashion supply chains. Progress is held up by stakeholders taking issue with the language used in the document.**

21st April: A coalition of ten international organisations including Amfori, Better Buying, Fair Labor Association and Fair Wear Foundation, look to usher in greater brand engagement with their suppliers via a campaign focused on social protection and responsible business conduct.

22nd April: Announced: brands endorse COVID-19 action plan led by the International Labour Organisation (ILO). Through this, companies – including Primark and H&M – commit to supporting those in fashion supply chains and vow to develop more robust social security mechanisms in future. ***Read more from p16.***

> "Factory owners should be held responsible if workers returning die of coronavirus
>
> *Nazma Akter*

23rd April: Factory owners in Bangladesh are in hot water as they're threatened with legal action after closing without paying staff. Labour ministry official Shibnath Roy says businesses that did not pay workers could be sued and would not receive any money from a US$588 million rescue package announced by the government.

24th April: The Clean Clothes Campaign fears for the safety of 120,000 garment workers across Europe being forced to work despite inadequate safety provisions. Meanwhile, in India, garment manufacturers plead with the government for financial aid as they're unable to pay their bills.

27th April: Despite lingering safety concerns, Bangladesh reopens hundreds of garment factories putting thousands of lives at risk. Despite a lack of public transport, workers across Dhaka, Gazipur, Narayanganj and Ashulia are counted on to continue operations amidst fears of economic turmoil.

28th April: The WIEGO (Women in Informal Employment, Globalising and Organising) network calls for urgent support for the "world's most vulnerable workers": home workers. It argues that while the plight of workers in garment factories has grabbed the headlines during the pandemic, homeworkers have been forgotten.

29th April: On a day when the CCC spoke of its concerns as workers returned to the factory floor, a Cambodian minister bizarrely looked to quash fears, insisting that workers in the country would only breach social distancing rules with colleagues and so would be safe.

30th April: As the number of workers laid off in Cambodia neared 100,000, calls from industry watchdogs urged owners to suspend operations, rather than close, to afford some income to those furloughed. Through a government scheme, workers are being paid 37 per cent of their wages, an estimated US$70 a month.

1st May: "Factory owners should be held responsible if workers returning die of coronavirus." This was the frank remark made by Bangladeshi trade unionist, Nazma Akter, at a time when factories were reopening in their droves. At this time, it's estimated that 1,100 garment factories are now operational once more.

4th May: After a troubling weekend, reports surface of a number of new COVID-19 cases in Dhaka's Savar district. Health minister Zahid Maleque

warns that factories may be forced to close again if a "significant number" of new cases surface in the coming weeks, though he fails to detail what number this might be before action is taken.

5th May: Garment factories reopen in the Indian city of Bengaluru, despite a nationwide lockdown, as government agrees to the resumption of some activities in private industries. In Indonesia, 70 per cent of factories face permanent closure as dwindling orders and exploitative state penalties cripple companies.

7th May: Reports in India suggest that with eased restrictions on nationwide travel, COVID-19 cases have spread from densely-populated cities to more rural locations. With greater freedom of movement comes a higher likelihood of spreading the contagion which will be a concern for garment factory owners as they resume operations.

11th May: Myanmar's authorities are fearful a return to the factory floor for garment workers could cause a new spike in coronavirus cases, despite best efforts to ensure sites are inspected for health and safety purposes, because Singapore's workforce have registered a number of new infections since resuming business. Meanwhile, in Bangladesh, violent protests break out over pay.

12th May: The BGMEA partners with digital wellbeing assistant Maya to provide general and mental health support services to garment workers free-of-charge. Via smartphone app, SMS messaging or video call, people can contact licensed doctors and counsellors an unlimited number of times, and garment workers will be prioritised, it's been promised.

▲ Eased travel restrictions has led to a series of new cases in more rural areas of India.

13th May: There's confusion in Bangladesh as industry stakeholders are apart in their estimations of just how many garment workers have been infected by the virus since April 26. The BGMEA insists strict safety measures are in place and only 20 cases have been announced since the aforementioned date. Trade unions place the figure closer to 100 people.

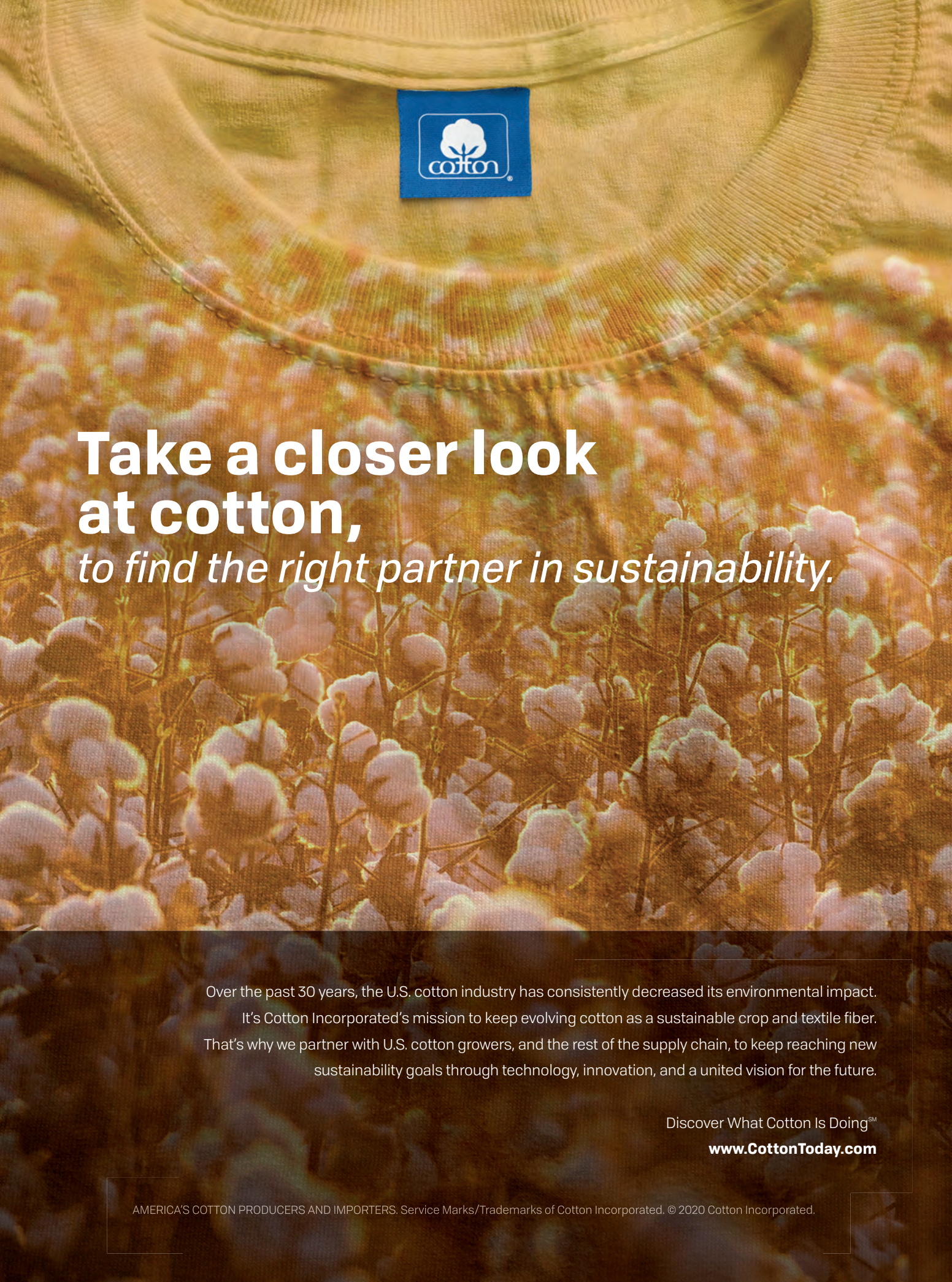
14th May: In Myanmar, it's approximated that more than 6,300 workers in the Yangon region alone have lost their jobs due to the pandemic, according to the Confederation of Trade Unions in Myanmar. This figure continues to grow with the CTUM insisting that even after collating its research, it had seen new sites reducing their workforces or closing entirely.

15th May: Garment factory owners in Bangladesh have reportedly agreed not to sack any workers before the next Eid-Ul-Fitr holiday. It was confirmed at a meeting in the presence of State Minister for Labour and Employment Begum Monnujan Sufian, according to ministry officials. Meanwhile, in Myanmar, brands agree to pay suppliers and trade unions to protect garment factories from worst impacts of COVID-19.

18th May: The Bangladesh government has urged the European Parliament to put pressure on brands and retailers not to cancel orders lodged with the country's garment factories. Commerce Secretary Md Jafar Uddin said in a letter to Bernd Lange, chairman of the European Parliament's Committee on International Trade: "Such unbearable and uncompassionate action by some European apparel businesses does not go with the idea of ethical and value-based trade as propagated by the EU."

19th May: New reports highlight that 73 more garment workers have now been infected by the virus in Bangladesh since sites re-opened in their droves. The International Trade Union Confederation Bangladesh Council accuses factory owners of not abiding by government rules and that, as a result, workers are getting infected.

To keep up to date with the latest developments, visit *www.ecotextile.com* ■



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Brands agree to protect Myanmar

Some of the biggest names in global fashion have reached an agreement with suppliers and trade unions to protect garment factories and workers in Myanmar from the worst impacts of the COVID-19 pandemic.

Simon Glover reports.

H&M, Zara owners Inditex, C&A, Next, Bestseller and Tchibo have all signed up to a deal with the Industrial Workers Federation of Myanmar (IWFM) and the IndustriALL Global Union to help the Myanmar apparel industry cope with the coronavirus crisis.

The agreement, which hopes to attract more industry stakeholders, aims to keep the doors of Myanmar's garment and footwear industry open to the world and its workers protected during and after the pandemic.

It was brokered by the ACT (Action, Collaboration, Transformation) initiative which links brands and retailers and trade unions to improve conditions for workers in the garment, textile and footwear industry.

As a first step, the parties negotiated a joint framework, entitled 'Myanmar during the COVID-19 Crisis: Working together to Protect the Health and Welfare of Workers and supporting the payment of Workers and Factories'.

In it, the parties agreed to work together to secure workers' health and safety, and to promote respect for the ILO Core Labour Standards, including freedom of association.

They also pledged to engage with relevant organisations to support rapid and innovative fund-mobilisation, and support the development of social protection in the garment and footwear industry in Myanmar.

The **signatories agree to support** research by the ILO (International Labour Organisation) to calculate how much funding would be needed to address the salary loss of workers in the Myanmar apparel industry from April to July and to seek funding to raise the money.

IndustriALL assistant general secretary Jenny Holdcroft said the Myanmar Freedom of Association Guideline, agreed upon by ACT brands last November, had laid the foundations which enabled the parties to reach agreement on how they would respond collectively to the COVID crisis.

Brands also agreed to honour contracts for finished goods and goods in production, to maintain communication with supply chain partners and to consider direct support to factories.

"This agreement is a concrete framework for further joint action to address the impacts of the next phase on factories and workers. We call upon all employers and brands sourcing in Myanmar to endorse it," she said.

Bestseller responsible sourcing and sustainability specialist Andrei Vasiliev said that progress on the ground would require all parties to work together with mutual respect and trust.

He added: "Cooperation and social dialogue between trade unions, employers and global brands is critical to addressing the impact of COVID-19 on the industry."

Paul Zhu, delegate and spokesperson of the employer working group of ACT brand suppliers, said: "COVID-19 is a massive challenge. Factories are struggling and we don't know when or how the industry will return to normal.

"Now is the time for employers and workers to work together, and we also need to work with the global brands to survive this crisis. The full cooperation of all the parties is the key for the country."

IWFM president Khaing Zar Aung said: "This framework for action comes with clear commitments by the unions, the employers and the global brands to support. We are calling on other brands and industry stakeholders to also join our cooperation. We need to work together." ■

Damage Control

Action plan lights fire under fashion's elite

By Chris Remington

A bold new strategy set out by the International Labour Organisation (ILO), International Organisation of Employees (IOE), International Trade Union Confederation (ITUC), and the IndustriALL Global Union, along with NGOs and finance institutions, is underway and helping to provide financial respite for supply chain workers amidst these uncertain times.

Following what were fraught discussions between **leading brands and retailers** during the on-boarding process, an outcome was reached and a agreement finally agreed.

Called *COVID-19: Action in the Global Garment Industry*, this new action plan aligns stakeholders from across industry with a common goal: to support those in fashion supply chains by providing capital throughout the height of the pandemic, ensuring infrastructure stands the test of time and that it can be bolstered going forward in case of future shocks to the market.

Companies endorsing the action plan include: Adidas, H&M, Primark, Inditex, PVH, Marks & Spencer, VF Corporation, Under Armour and Zalando.

Capitalising on an estimated US$14 billion, for a range of industries made available by the International Finance Corporation (IFC), of the World Bank, it aims to provide the foundations of restorative efforts, with all involved working collaboratively to ensure a much-needed cash-flow to those on the lowest rungs of supply chains. *Read on for our Q&A with the ILO's Dan Rees for further insight.*

Endorsing brands work by a checklist of actions as per their commitment, these include: paying manufacturers for goods completed or in-production; maintaining quick and effective open communications with suppliers; considering direct financial aid to suppliers where feasible; and promoting respect for the ILO's core labour standards.

In countries like Bangladesh, Cambodia, Myanmar and Vietnam, reports unfolding each and every day paint a picture of the crisis within their respective ready-made garment sectors. Whilst initial concerns stemmed from factory closures and the resultant financial hardship this would cause, a swift return to work for many has left industry watchdogs wondering how those on the factory floor can be kept safe.

"Jobs, incomes and social protection are the dividends of business continuity and this action plan calls for emergency funds and social protection for workers to guarantee industry survival in the poorest of our countries," the ITUC's general secretary, Sharon Burrows, said. "Leadership and cooperation from all stakeholders are vital to realise a future based on resilience and decent work."

Going forward, it's hoped this collaborative enterprise will prove a springboard to create more robust fashion supply chains, and as such, will continue for the foreseeable future, though first priorities will be to mitigate damage in a world acclimatising to the damage caused by virus.

Three cross-industry efforts see brands commit to: calling on government and

financial institutions to accelerate access to credit, benefits, loans and other forms of fiscal stimulus; engage with these authorities to mobilise funding through quick income support; and using funding to enable manufacturers to ensure business continuity, including payment of wages regardless of contract type.

"Our action will focus on protection for workers and employers in countries with the weakest health and social protection systems, and those whose work demands special measures to ensure their safety and health," the organisations' statement reads.

***Ecotextile News* speaks with Dan Rees, director of the International Labour Organisation's Better Work programme, to learn more about this new ambitious action plan and how exactly it will operate.**

Where did this idea come from and what challenges has the ILO faced with onboarding brands?

When the crisis broke out in January, it started to disrupt the industry pretty heavily, first in South-East Asia. I would say a conversation grew pretty organically in the industry. A lot of industry leaders and organisations were having conversations as there are already established networks in the industry. The ILO's role was simply to convene conversations between different industry stakeholders and the priorities you see in the document, the ones that rose to the top – there are many more issues – but I think these were the ones that reached the top as absolutely critical with respect to protecting workers and employers.

Why do brands endorse, rather than sign up to or commit to, this action plan? What are the distinctions and are you still able to hold brands accountable?

The proposition is that brands and other organisations make it publically clear that they commit to the things that are relevant to us and work together to achieve them. The discussion across the industry revealed a consensus that there needs to be collective action and then it was, 'well what are the means in which collective action is going to happen?' And an agreement on the common principles is the first step to doing that. That was seen as the most efficient mechanism in order to garner that commitment as a first step to the action that you see in the document.

With regards to apportioning funding, what mechanisms are in place to do this… how do the financial institutes operate in this equation?

The role of the big development banks and donors is essentially to provide funding that normally goes through governments. A number of those have been set up in response to the crisis: the World Bank, the International Finance Corporation, individual donors, the UN has a US$2bn fund; those are not specific to manufacturing or the garment sector, they're about the whole response, what I think this is about is creating an efficient way to align key stakeholders in the garment industry that represent the interests of manufacturers, workers, businesses along the supply chain and government, and having a conversation about how we can help. There's a lot of work to do here, I make no bones about that, we're all in a situation we weren't expecting and this is responding to an emergency we've heard about many times before on a scale we've never dealt with, but this seems like the most practical thing to move forward.

In practice, how will this work? Do the factory owners reach out or will authorities or even brands make the decisions?

I don't say this to be either evasive or irritating, but every place is different. We would have to be prepared for different mechanisms and different ways of working to take place in different countries and that's because of the priorities of government, about schemes that already exist in terms of providing protection, and the strengths of the industry actors. It will happen differently in different places, but the action plan is aligning different initiatives across the supply chain to identify what their added value is and what their

responsibilities are and how they can be seen to help. As it unfolds, in terms of the practical action, people in the process will be much more able to answer that question, it's just a bit early to be specific because right now we can't be.

How do you ensure that work in this action plan is transparent?
In discussions around that, I think workers' organisations have said that they feel they would have a role to play, clearly donors and governments will want to be really clear about what the accountability mechanisms are. In some countries of the world there are social security and other schemes that really administer the kind of bailouts that we're seeing. It's difficult enough in the UK. In countries that don't have that, there's no easy answer to that question, but it's a question that needs to be answered with context. Clearly, such schemes would need to be very well announced.

How will garment manufacturing regions be earmarked for capital through this project?
The focus of this initiative is really on the most vulnerable. There isn't a place where we work that doesn't need help, but I think the approach that's taken is, in the first instances, protecting the most vulnerable. Priority countries will be chosen on that basis, I think high on everyone's mind has been countries like Bangladesh and Cambodia, where there are large numbers of people employed, limited safety nets and need for much help. The first pieces of work for the working group are to clarify that.

▲ Dan Rees, director of the International Labour Organisation's Better Work programme.

How can brands contribute to social protection efforts given that this is typically government-led?
What's clear is that in some countries the crisis has come at such a speed and has really revealed the fragility of some of the businesses models and jobs within the industry. I think there's a very clear priority in this document that when you build back, you have to build something back with more resilience. I'm sure donors would have to ask why would we bailout an industry that could be just as vulnerable to these kinds of shocks that we're told are likely more and more in the future.

It's mentioned in the document that endorsing organisations will work with you to create the infrastructure for social security that's required. Is this a longer-term aspect of the action plan then?
Absolutely. I think it's a question for now in terms of if large sums of money are going to be put to bailouts like this, then the question arises of the impact of that and building back resilience in the sector that there isn't now, but of course, it takes time to do this. The goal is longer-term in growth recovery, but work on it and consideration of it needs to start now.

How do you monitor brand engagement in this action plan?
What this document does is call on organisations to endorse. There is no intention in this effort, which is really focusing on funding that's needed, to monitor the activity of individual organisations. It's clear that others outside of this process will play that role, it's clear that they can probably lever this to do that, but the role of this is not to monitor.

Is there any assurance that organisations endorsing this aren't using it as a marketing tool to say they're at the forefront of this work?
I think those assurances need to come from those organisations and doubtless the suppliers that they work with. They've made that commitment and they need to stand up and justify it.

How do you intend to get more brands involved with this?
In the end, it's up to the brands to decide whether to endorse this or not. The IOE has a particular responsibility in terms of coordinating in this role and getting businesses on board. ■

Will COVID-19 stifle retail's sustainability push?

Mike Barry, former head of sustainability at Marks & Spencer, sits down with David Styles to discuss COVID-19, curtailing consumption and coaxing the industry towards a more sustainable future – but perhaps not in a way the sector envisaged prior to the global pandemic.

Best known for his leadership of the Plan A sustainability strategy during a 19-year stint at Marks & Spencer, Mike Barry has long been at the forefront of sustainable progress – both in the fashion retail sector and nowadays far beyond.

Looking ahead to the coming decade, he sees that the uncertainty stemming from the coronavirus outbreak provides proof of just how far the textile industry has already come on environmental issues.

"If the outbreak had occurred five or 10 years ago, thoughts would have probably been about rebounding to where we were," Barry begins. "Instead, consumers are now being confronted with the entirely different question of whether they ever need to buy brand new apparel again."

With the exception of Plan A at M&S and a handful of other corporate plans, he explains, "most of the technical improvement in terms of sustainability has long been done at a middle-ranking level, with good stuff achieved but all the time with the sheer volume of consumption overtaking everything else." The pandemic, he says, has changed all this.

A departure from the heavy usage of virgin materials and the sale of brand-new apparel was already in motion, he continues, citing the exponential growth experienced by platforms such as ThredUP and Depop in recent years; but the months of global inactivity during lockdown could now see that trend gather yet more pace.

> "We're not racing to get back to what we used to have; that platform is burnt

Marrying together consumer incomes being at risk in a global economic downturn, the rise of resale outlets and a growing interest in sustainable products, "a very different future lies ahead", according to the former M&S director.

As CEOs are forced – for the very first time in some cases – to ponder the importance of sustainability, Barry predicts boardroom discussions are already under way to plot new ways of creating value.

While wholesale change may well be nearing, shopping habits won't alter overnight, he quickly adds. "We have to be slightly cautious because what we have seen is online retail booming even during lockdown; with fast fashion readily available. Nevertheless, the positive is that many of those garments will be resold on emerging platforms as the trend accelerates."

Food for thought

Calling on his experience in multichannel retail, Barry identifies distinct parallels between the paths lying ahead for fashion and food. He foresees a splintering of the respective markets into spaces focused on science, anti-consumption and a volume play.

In terms of apparel, the **science-led niche** will usher in a rise of 3D printed garments based on personal body scans; anti-consumption efforts will be led by an ever-growing slice of the market devoted to resale; and the highest volumes will still belong to 'middle of the road' brands who choose to gradually improve on the status quo.

While the latter may seem the least progressive, Barry knows from his own experience at a major retailer that the biggest ships take the longest time to turn around. "With Plan A at M&S, our primary focus was to ensure every garment was fundamentally better than it would have been in the marketplace normally. Over time this delivered significant gains."

Despite sharing a direction of travel, food and fashion aren't linked in every way, however. One large difference is evident in the way consumers engage with provenance, Barry tells *Ecotextile News*, particularly in relation to certifications and standards.

"The food scares of the 1990s – foot and mouth disease, mad cow disease and E. coli – drove safety fears to the point where people started to look for certifications as a way of feeling they were buying something better for them overall. That helped grow awareness around standards."

Fashion standards today, he notes, remain highly production focused – making it difficult to convey a message to the consumer of any sense that a given product is better for them.

▶ Mike Barry, architect of the Marks & Spencer Plan A initiative

Major retailers like H&M are already trialling this approach. See *Ecotextile News*, June 2019, pp. 38 – 41.

In 2019, the EAC proposed UK retailers should pay a tax of one penny per garment that would have raised £35 million a year to fund more collections and better recycling practices. Its advice was ignored.

> **"Fashion will be left to fend for itself – both in terms of bailouts and environmental standards**

To change this meaningfully, Barry believes, would cost hundreds of millions of dollars with no guarantee of success.

While no B2C standards have gained universal recognition, the sector coalescing around B2B signifiers has been far more successful.

Established at a time when Barry recalls lots of brands were looking at developing their own standards, the Higg Index did a "really good job of saying to the whole industry, we're all in this together and need a common way of describing product footprints and measuring them in a consistent way", he states.

The job of forging ahead sustainability work will have to continue emanating from within the industry, Barry continues, despite a heightened degree of political engagement in recent times. 2019 was, after all, a big year for governmental interventions in the fashion sector, with the French administration leading the way.

But the architect of Plan A believes COVID-19 and the knock-on economic depression may well have stifled such efforts for the foreseeable future.

"Of course, a degree of government intervention would help, particularly by placing a small levy on all garments – as was proposed by Mary Creagh's **Environmental Audit Committee (EAC) inquiry** into the fashion industry – to ensure the billions of garments produced every year can be recycled." Given that these proposals in the UK were ignored prior to the pandemic, there is little hope this issue will remain on the Government's radar.

"Government finances and bandwidth will be stretched to the absolute limit; the least of its interventionist interests will be focused on fashion," Barry concludes. "I think fashion will be left to fend for itself – both in terms of bailouts and environmental standards. As such, a lot will still depend on self-regulation and new market forces to drive change."

While another ten-year cycle has begun in tumultuous fashion, Mike Barry remains optimistic that a better industry will emerge by the time the much-discussed landmark of 2030 arrives. "While we were drifting steadily and slowly towards a better model, COVID's going to accelerate that. The key is that we're not racing to get back to what we used to have; that platform is burnt," he asserts.

"The next ten years won't be neat and tidy. It certainly won't happen in the lovely, managed way that many would have hoped for, but I do think we'll end up in a more sustainable place." ■

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Falsified data hampers supply chain policing

ITHACA – Apparel brands' efforts to police their supply chains aren't working because much of the information given to the auditors who inspect factories is inaccurate, according to researchers.

A report, by Cornell University's School of Industrial and Labour Relations (ILR), said that apparel brands had for years promised to police their supply chains to root out unsafe conditions and worker abuse.

However, despite their commitments, there has been little or no sustainable improvements in labour standards with inaccurate reporting – particularly in China and India – acting as a major obstacle to reform.

It's said that more than half of the 31,652 factory audits conducted in China and India over a seven-year period were based on falsified or unreliable information. They appeared to show that labourers working fewer hours per week and enjoyed much higher wages than more reliable audits.

As well as China and India, the researchers studied data from supply chain factories in Cambodia, Myanmar, Indonesia, Vietnam, Bangladesh, Bulgaria, Ethiopia, Mexico and Honduras.

The share of inaccurate audits was lower in the other countries in the study, but still the average unreliability of all 40,458 audits examined was about 45 per cent.

"This means that brands cannot see the results of the many corporate social responsibility programmes intended to track and improve working conditions in their suppliers' factories," said the Cornell team.

The study recommends that brands and retailers invest in intelligence from workers, unions and bona fide due diligence if they want reliable data on labour compliance.

Web: bit.ly/2Z0HVbb

Both Patagonia and Columbia Sportswear produce outerwear for people who enjoy exploring nature.

Outdoor brands link up against Trump

WASHINGTON DC – Outdoor clothing companies Patagonia and Columbia Sportwear have joined forces in a lawsuit challenging the Trump administration's effort to roll back former President Obama's Clean Power Plan.

The two brands filed an amicus 'friend of the court' brief in which it says the climate crisis threatens the world's wild places which both companies produced outdoor apparel, footwear, and equipment to help people enjoy.

"The US Environmental Protection Agency's (EPA) decision to rescind the Clean Power Plan (CPP) and replace it with the Affordable Clean Energy rule (ACE) — a rule which fails to fulfill the agency's statutory mandate to reduce harmful greenhouse-gas pollutants — is not only contrary to law and arbitrary and capricious; it will have significant negative impacts on the bottom line of the US$887 billion outdoor recreation economy," the lawsuit states.

It argues that the decision ignored the expertise of scientists from bodies including the US Global Change Research Program (USGCRP), and the United Nations (UN) which confirmed that the urgency of climate change was growing with every passing year.

"From the perspective of thousands of US businesses that depend on a stable climate and wilderness preservation — including those in the outdoor recreation industry — this is not an abstract concern," it continues.

"Climate change will have direct and meaningful negative effects on the outdoor recreation economy and the 7.6 million jobs it supports," the lawsuit warns.

Web: bit.ly/2WwhIjh

VF adds to traceability tool

DENVER – VF Corporation has added new products to its online traceability tool which now includes over 40 items of apparel and footwear from brands such as Vans, The North Face and Timberland.

Unique full supply chain maps enable consumers to track the journey of their products from tier 4 raw material suppliers all the way to the finished item in store.

The VF traceability tool began life as a pilot in June 2017 and has evolved over the past three years into a unique transparency tool for an organisation which sources product in over 40 countries.

The company says that for a single Vans brand product, it identified 78 unique suppliers in the full supply chain, with data from these companies being collected, checked and verified through site visits.

"It's not an easy process, given that our global supply chain spans across approximately 40 countries and includes thousands of suppliers, but we continually strive to achieve full traceability from raw materials to retail," insists Shanel Orton, senior manager, Responsible Materials & Traceability at VF Corp.

The product traceability maps are available in full on the VF corporate website with simplified versions available for consumers on its individual brand sites.

Web: bit.ly/2T6oD0t

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The United States of Amazon

One of the few firms to have seen profits leap during the coronavirus crisis, Amazon has never been stronger. With even greater clout in multichannel retail – including an ever-growing stake in fashion – the question lingers on whether the online superpower will use its might as a force for good.

By David Styles

On the 15th April – in the midst of a societal lockdown – the Bloomberg Billionaires Index revealed Jeff Bezos had seen his personal fortune swell to US$138 billion.

Having retained an 11 per cent stake in Amazon, which recorded share rises of 5.3 per cent in mid-April, Bezos cemented his position as **the world's richest individual** following a huge spike in online shopping by an isolated public.

The planet's 500 richest people collectively lost US$553bn by the same point in 2020.

Varying fortunes at this volatile time are highly predictable given the "sheer size and diversification" of today's retail sector, notes Richard Haigh, managing

director of Brand Finance. The latest data collected by the organisation points to COVID-19 as a positive for big names in e-commerce, with Amazon one of the major players set to "buck the trend and thrive as demand spikes in the online space".

This is in stark contrast to fashion retail's fortunes, with Haigh forecasting drops of up to 20 per cent in the value of many traditional apparel brands able to survive the ongoing economic slide.

Radical response

When lockdown measures first began to bite Amazon took the unprecedented step of temporarily giving the highest priority to essential products; a rare sign of the company acting in an interventionalist way.

Flying in the face of soaring unemployment figures, Amazon announced it would be taking on an extra 100,000 full- and part-time staff to increase capacity during the pandemic. The firm also confirmed it expected to spend over US$500 million on raising existing employee wages due to the growing strain the workforce is under. Further, certain workers were redeployed to head up efforts to deliver COVID-19 testing across the organisation. Despite having seized control during the crisis in a way that the Trump administration so plainly failed to do, Amazon's coronavirus strategy hasn't been without controversy.

While the company maintains it is "focused on protecting the health and safety of our employees while continuing to serve people who need our services more than ever", worker strikes and campaign groups have hit out at unfit working conditions which allegedly disregarded social distancing measures and didn't provide sufficient PPE.

> "In effect, ASOS and Zalando say: here's our stamp of approval"

Amazon points to 150 'significant process changes' at sites around the world to protect workers as evidence of its commitment.

Negative PR concerning workers' rights is nothing new to Amazon, and with Richard Haigh predicting its "brand value could grow a further US$4 billion thanks to the spike in demand" there is no reason anything other than optimism will reign at the firm's Seattle head office.

Economies of scale

"While large players currently have an advantage of being in the right place at the right time, the accelerated market shift could be eroded by a refocusing of activities by other players. It's not a *fait accompli* that the current scale players will have all of the action long-term." These are the thoughts of Professor Lawrence Bellamy, academic dean in the Faculty of Business, Law and Tourism at Sunderland University, UK.

Discussing certain limitations facing Bezos' company, Bellamy notes that while "price is a deciding factor on a number of items when considered in commodity terms", this doesn't apply "where features and quality help to protect the market price".

Having a differentiation strategy is key to "countering cost-leadership which is built on economies of scale," he adds, pointing to production quality and environmental credentials as prime ways of achieving this. "More focused strategies are likely to position smaller firms in sustainable niches which are harder or too small for the larger players to concentrate on," Bellamy concludes.

Unless Amazon decides to zero in on the sustainable fashion space, it seems there is a limit on how much of the lucrative apparel market it can engulf.

Despite Kara Hurst, the company's director of worldwide sustainability, claiming Amazon is "leveraging its scale to make a difference with goals, plans and programmes to address the urgency of climate change", this is usually focused on packaging and deliveries rather than product.

The firm is nevertheless a signatory of 16 national and international sustainability partnerships and initiatives, including the Sustainable Apparel Coalition and the landmark Paris Agreement – which it has pledged to meet 10 years early. There has been little to no evidence, however, of Amazon's commitment to greening its fashion offering – and it wouldn't need to reinvent the wheel to achieve major change. An online trail has already been blazed by the likes of ASOS and Zalando.

Simon Platts, sourcing director at ASOS, explains that the business is "continuously reviewing our buying habits so that customers don't have to change theirs", an approach which led the retailer to introduce an option to filter searches so that only **'responsible' garments** were included.

Removing the burden of environmental research from the consumer and simultaneously side-lining some partner brands which do not conform is undoubtedly a strong statement, but one which earned the retailer a lot of plaudits.

Similarly, Zalando also offers customers the chance to seek out items that have earned its 'Sustainability Flag'. Introduced back in 2016, this tool highlights products made using recycled materials or approved fibres such as organic cotton.

The Zalando criteria is aligned with industry standards such as the Higg Materials Sustainability Index and Textile Exchange's Preferred Fibers and Materials list, with third-party certifications such as Fairtrade and the Global Organic Textile Standard also communicated to shoppers.

"What they have done in terms of demanding brands meet minimum standards to sell through certain parts of their platform is very interesting," says Mike Barry, former director of sustainable operations at M&S. "In effect, ASOS and Zalando say: here's our stamp of approval so you can rest assured that we've done the checking for you."

While acknowledging this is "probably a little bit harder for wider market players", Barry adds that "as a department store in space, which is effectively what Amazon is, that could be an option". While the retailer may be considering it a choice, higher levels of self-regulation may soon become an obligation.

In a recent report, the Office of the United States Trade Representative claimed Amazon "does not sufficiently vet sellers on its platforms". Further, it asserts that "seller information displayed by Amazon is often misleading such that it is difficult for consumers and right holders alike to determine who is selling the goods", let alone how the products are made.

Should no internal action be taken, blacklisting Amazon in certain trading arrangements has already been mooted. If a chance emerges for President Trump to lash out at a more successful tycoon who has outperformed him on dealing with the COVID-19 outbreak, can anyone really expect the Donald to hold back? ■

▲ Amazon has made significant process changes at sites around the world to protect workers during the coronavrus pandemic.

H&M, Inditex, Esprit, Stella McCartney and Marks & Spencer are amongst the firms to have shown their support.

Perfect storm hits rPoly industry

The recycled polyester industry is facing a triple whammy of plummeting crude oil prices, competition from beverage companies for PET bottles and China's ban on the import of plastic waste.

Simon Glover reports.

The threats currently facing the recycled polyester (rPET) industry can be likened to a perfect storm. China's ban on importing plastic waste in January 2018, coupled with greater competition for recycled PET bottles from the likes of Coca-Cola and PepsiCo, were already limiting rPET supplies for apparel brands.

But then came the coronavirus pandemic and the subsequent economic slowdown – coupled with an oil price war between Saudi Arabia and Russia – which has seen the price of crude oil drop below US$20 a barrel for the first time in decades.

Late in April, the price of WTI Crude dropped below zero for the first time in history, meaning that oil had literally become a liability rather than an asset. In such unprecedented times, how can recycled polyester compete against virgin fibre?

Circulate Capital – a Singapore-based investment fund that aims to mobilise capital to build recycling infrastructure in South and South East Asia to help reduce the ocean plastic problem – is considering just this question.

> **"The ultimate goal is for CocaCola and Pepsi to turn bottles back into bottles and for Nike and Adidas to turn textiles back into textiles**
>
> *Michael Sadowski*

Michael Sadowski, an advisor to Circulate Capital, said that China's import ban was having a significant impact on the availability of recycled feedstock for rPoly manufacturers within China. Similar steps by countries such as Malaysia, Vietnam and Indonesia would increase these pressures.

Sadowski pointed to the Textile Exchange's latest preferred fibre report which shows that rPoly's market share doubled from eight per cent in 2008 to 16 per cent in 2016, but then fell back to 13 per cent in 2018. Textile Exchange cites the China import ban as being directly responsible for this drop.

Environmental commitments by the beverage companies, acutely aware of public concern over single use plastic and ocean waste, are another factor. Coca-Cola's plastic bottles already contain 25 per cent recycled PET and it aims to increase this to 50 per cent by 2030.

So, Coca-Cola and its rivals will need millions of the very clean, clear PET bottles required for bottle recycling. These make up only around five per cent of the market – but it is exactly the same share needed to make quality recycled polyester.

These are significant issues for apparel brands seeking to use more rPoly. However, Sadowski says the biggest problem currently is the rock bottom price of crude oil which analysts expect to remain at extremely low levels for the near term.

"The price of oil and natural gas is a bigger driver

right now, rather than what's happening in the recycling market," he said. "With virgin material so cheap, the economics of recycling and producing rPoly fibre are very challenging."

According to a 2018 Morgan Stanley report, oil needs to be above US$65 a barrel for recycled product to compete economically with virgin plastic.

"Recycling is going to remain a challenge with the oil price so low," Sadowski said. He is, however, hopeful that the current issues facing the industry are a temporary setback, pointing to investments in recycling facilities by a number of major rPoly players and investors, such as Circulate Capital.

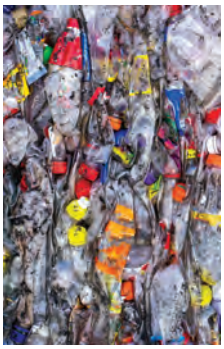
"Prices fluctuate. This is going to change, prices will go up again," he added, pointing out that the pricing volatility of oil meant that recycling offered more long-term stability and resilience in the supply chain.

Leading brands, including Adidas, IKEA, H&M, Inditex and Wallmart, had also made ambitious commitments to increase their use of recycled polyester, encouraging more manufacturers to invest in rPoly capacity.

"We are going to need a steady stream of rPET to make these commitments a reality," he said.

Ecotextile News asked Sadowski whether one option, in the long term, might be for textile recyclers to leave PET bottles to the drink companies and focus on recycling polyester back into new fabric?

Sadowski replied: "Textile



> **"You can't expect to pay the same for recycled polyester as virgin. It would be like expecting to buy an electric car for the price of a normal car**
>
> *Perpetual founder and CEO Vivek Tandon*

to textile recycling has been the holy grail for some time, though there are quite a few bridges to cross. A number of companies have demonstrated that textile recycling technology works – this might be the relatively easy part.

"How do you collect, sort, and deliver the material to the needed spot in the value chain? How do you do this without increasing the environmental footprint vs virgin material? How do you deal with blended fabrics? And so on.

"The ultimate goal would be for CocaCola and PepsiCo to turn bottles back into bottles and for Nike and Adidas to turn textiles back into textiles. But, this is a dynamic systems problem that will require innovation and investment across the value chain."

Meanwhile, in the short to medium term, Sadowski says the growing demand for rPET across sectors means that PET bottle collection will need to be significantly expanded and improved, and rPET production capacity will need to increase.

This view is shared by Perpetual founder and CEO Vivek Tandon but his company takes a different approach to the problem. Perpetual's chemical recycling technology aims to turn even dirty bottles into a high quality fabric.

Tandon said: "The total number of used bottles is running at 660 billion per year and increasing. However only 30 – 40 per cent are collected so the shortage is not of bottles but of bottles collected.

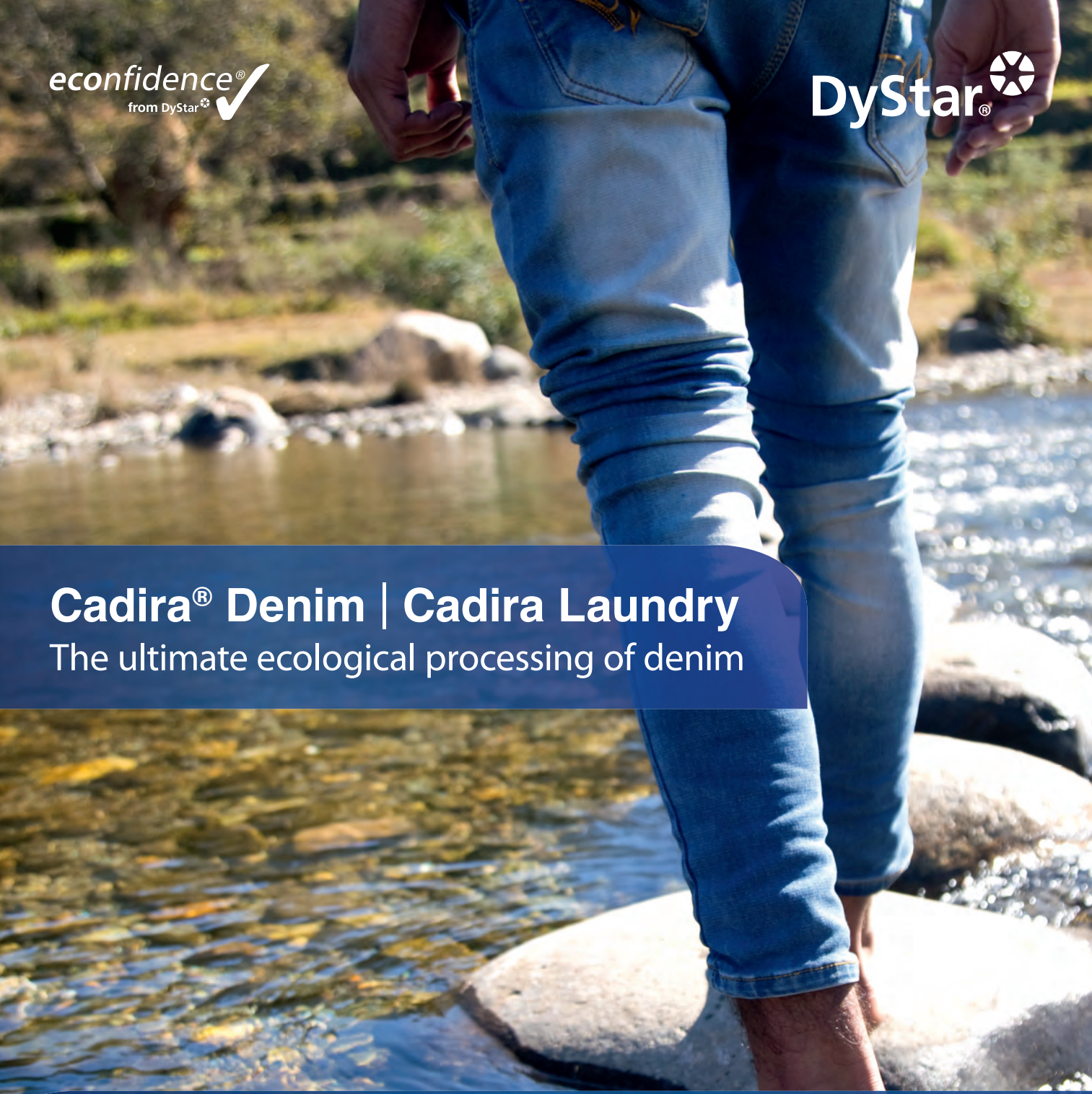
"I don't have a problem getting as many plastic bottles as I want for my plant because I'm willing to pay more for my bottles because of my technology. You can solve this by increasing the price you pay for plastic bottles by 10 per cent.

"There is a shortage of high quality bottles, no argument. But the question is why is there a shortage? It's because we're not using the technology that allows us to use lower quality bottles."

Tandon says that brands too have a part to play – by being prepared to pay a premium for recycled fabric because of the sustainability benefits that it brings to the table.

"The bottle industry is 250 years old while recycled PET is a new industry," he said. "You can't expect to pay the same, or less, for recycled polyester as virgin. It would be like expecting to buy an electric car for the same price as a normal car.

"If brands paid just a fraction more for recycled PET, my business would be very profitable. It's not a big difference. We're talking about paying 25p or 26p, instead of 23p for the polyester to make a replica football shirt that retails at between £30 and £70." ■



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Under strain

With some members embroiled in disputes with their suppliers, the Sustainable Apparel Coalition has moved quickly to ease global supply chain tensions and provide on-going advice. But will it work?

By John Mowbray.

With the societal and economic shutdowns due to Covid-19 effectively closing the textile and fashion industries, the Sustainable Apparel Coalition (SAC) kicked off a series of on-going member polls through the Higg Index platform and co-authored a new report with the Boston Consulting Group in a bid to help its members navigate a path through the crisis.

The SAC found itself between a rock and hard place as the immediate response to the pandemic kicked in; with member retailers and brands either cancelling orders or suspending future business to preserve cash and liquidity, resulting in fellow SAC supplier members closing factory doors and laying off worker – the very same suppliers that feed data into the Higg Index facilities module.

Apart from putting a huge strain on trust within its membership, this bad practise also opened up the SAC to accusations that it was too reliant on funding from some of its brand and retail partners. Would it dare to eject those members who did not practise in private, what they were preaching in public?

To be fair, the SAC's response to the situation was both swift and transparent. Initially, it conducted polling with member brands, retailers and textile manufacturers, via the Higg platform, to identify the most needed interventions to mitigate the **impact of the coronavirus** on supply chain relationships – and to support those that are the most vulnerable.

From April – May 2020 sales in the fashion and luxury industry fell by 60 – 70%, with retail footfall down 44% in the US, 52% in Germany, 78% in India, 59% in Brazil, says BCG.

But what will these interventions look like? Textile suppliers in various regions of the world will hope this ultimately means that payments for goods ordered and produced will finally wing their way over to them. And as we start to enter phase two of the pandemic, where

lockdowns are easing, some SAC member brands have clarified and, in some cases, reversed their earlier decisions to cancel orders at the outset of the pandemic.

To date, however, this has not been universal.

Speaking about the impact of Covid-19 on responsible sourcing, Jason Kibbey, CEO of the Higg Co appealed to the industry – and by extension those involved in the SAC – to do the right thing. "To my brand and retail friends who value sustainability: how you treat your supply chain partners right now will determine your ability to be sustainable, potentially forever, he said in a LinkedIn post. "Sourcing teams cancelling completed orders, recently with no compensation, are permanently undermining the ability of sustainability teams to do their work. If a company treats supply chain partners terribly during this crisis it won't have the trust of absolutely essential partners required to make a responsible, circular, regenerative, sustainable company."

Yet the organisation thinks that it would be too counter-productive to expel members who scrambled to cancel orders in order to manage short-term economic distress. "This crisis has really put a spotlight on some of the darker aspects of the textile industry," admitted Amina Razvi, Executive Director of the SAC. "I think that all brands and retailers regardless of whether they are SAC members or not, should really be following

> **"This crisis has really put a spotlight on some of the darker aspects**

- safeguard workers, employees, capital, value chain partnerships, channels, and the trust and support of their customers
- solve immediate inventory challenges in partnership with suppliers, cancelling orders only as a last resort, and never without consultation or collaboration
- integrate sustainability throughout business recovery strategies
- accelerate transparency while increasing sustain-ability ambitions

through on these commitments. Equal partnership across the industry is paramount, but I don't know if kicking members out of the Coalition gets us closer to our vision of an industry that is both equitable and sustainable. I think it creates more of a divide when what we need is greater collaboration. Our work with members has always been around how we consistently improve how they work."

The new, regular pulse surveys are intended to help to connect SAC members and global facilities to resources that can help them at this time and foster greater cooperation in what are expected to be even more difficult times in the months ahead.

Working with the Boston Consulting Group (BCG), the SAC was quick to co-author a new report that looks at ways to rebuild a more sustainable fashion industry post-COVID-19. It calls for a phased rebuilding of the industry, argues for greater – and not less – social and environmental commitments from stakeholders, while at the same time painting a bleak picture of the short-term post-crisis world for the fashion sector.

Entitled '*Weaving a Better Future: Rebuilding a More Sustainable Fashion Industry After COVID-19*', the report **offers four actions** that must be taken by brands and retailers to avoid backsliding on sustainability progress.

"This is a moment of truth for fashion industry players," said Javier Seara, BCG managing director and partner. "Relentlessly incorporating sustainability practices into these changes will be the critical factor that separates winners from idlers."

A survey of over 500 manufacturing facilities across all main production regions, conducted by the SAC and Higg Co showed that 86 per cent had been impacted by cancelled or suspended orders. Four out of ten suppliers were struggling to pay workers, leading to layoffs and factory closures.

However, the report suggests that those companies which maintain commitments to supply chain partners, proactively keep an open dialogue and collaborate on solutions will benefit from deeper trust from consumers and value chain partners alike.

Phased approach

The report says that brands and retailers should adapt their approaches to recovery across three-phases. Firstly, a short-term approach as an immediate response to surviving economic turmoil. This includes the avoidance of cancelling orders to prevent factory closures, deeper engagement with suppliers to maintain longer term trust, and focusing on fewer core activities during initial lockdown periods.

There is now evidence at the end of May the industry is already entering what BCG calls the medium-term phase, whereby a managed re-opening of the economy

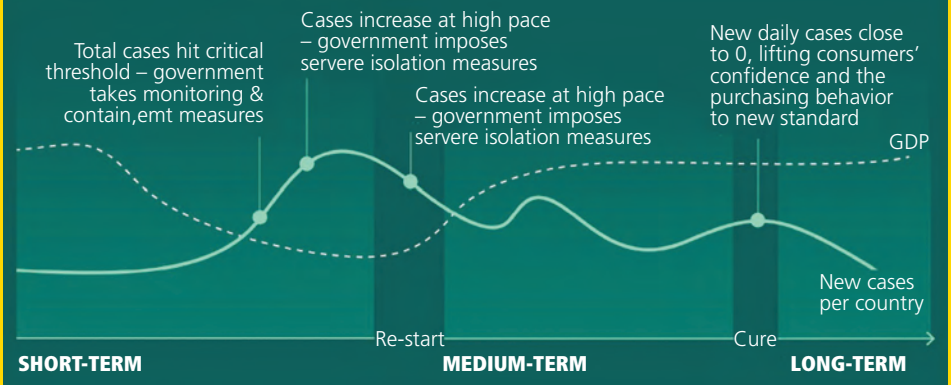
begins as daily cases of Covid-19 start to fall. With health and safety still a top priority the report calls for: 'the re-evaluation of decisions and actions taken under duress', a focus on marketing to maintain consumer trust (in the case of brands), and it urges companies to find 'responsible solutions quickly' to manage current stock responsibly given spring and summer lines will remain unsold.

This will be quite a challenge to SAC brands and retailers given many of them have publicly stated zero waste and circularity goals – and in some cases are already struggling with huge amounts of excess inventory.

It's suggested that the long-term phase of managed exit from the crisis is only likely to emerge after a 'cure' for the disease is found and where a new 'reality' awaits. After which it advises firms to focus on building an advantage through digital innovation whereby technology and artificial intelligence allow data-driven decisions to improve transparency to future proof businesses with sustainability at the heart of all business practice.

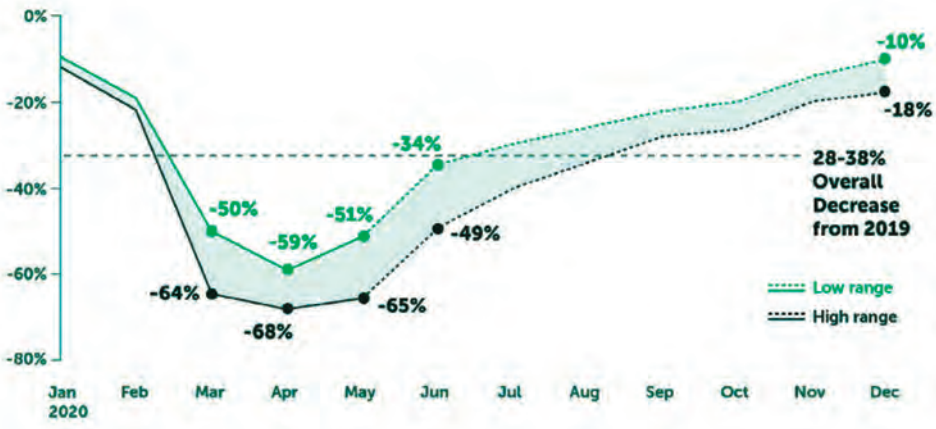
SAC executive director Amina Razvi said: "This crisis is showing us that anything is possible when you have individuals, communities, businesses and governments working hand in hand to solve a global threat. While this may not be how we wanted to realise this, we now know that collective action on a global scale is possible." ■

COVID-19 EVOLUTION & FASHION IMPACT



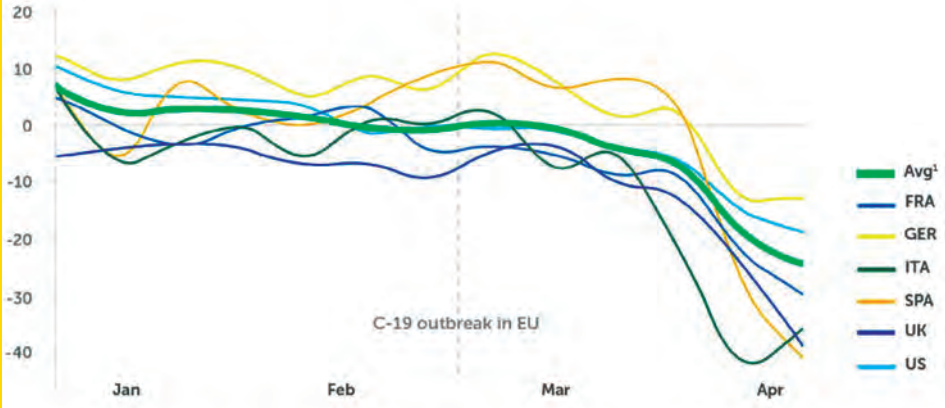
Source: Weaving a Better Future, BCG, Higg Co and SAC, 30th April 2020.

EXPECTED IMPACT OF THE COVID-19 PANDEMIC ON WORLDWIDE FASHION AND LUXURY SALES IN 2020



Fashion and luxury sales fluctuate throughout the year, down 59-68% in April to 10-18% in December, compared to 2019.

OBSERVED DECREASE IN RELATIVE WEEKLY WEB TRAFFIC, 2020 VS 2019



[1] Weighted average for US and top 5 European countries, including fashion, apparel, luxury, jewelry, beauty, and cosmetics.
Source: SimilarWeb; Google trends; BCG Analysis

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Edition 2020

HUNTSMAN

Enriching lives through innovation

Cream of the crop

Chemically recycled cotton said to give improved properties.

Chris Remington reports.

▲ Up to 50 tonnes of the fibre will be produced over the two years of the pilot phase.

A consortium of companies spread across both the Netherlands and Turkey has recently unveiled a 'new' type of cellulose fibre, which is said to boast both greater tensile strength and higher dye uptake.

SaXcell, borne out of the Saxion University of Applied Sciences, is the product of chemical engineering ingenuity which, for the past five years, has remained dormant as the innovators sought investment.

With a name that amalgamates both its founding institute and the material itself, SaXcell – a form of chemically recycled cellulose pulp – is produced across two nations, with co-owners in the Netherlands first tasked with sourcing and sorting **what would otherwise be cotton waste**, before it's processed to yield the cellulosic pulp.

Dutch companies Sympany and WevoTex manage this segment of production, which Ger Brinks, a researcher for SaXcell, says is the phase in which it differentiates its approach from others.

"We focus on making the pulp and preparing it and we're able to manipulate the properties of the pulp which makes this unique because what we get in the end is a fibre after spinning that has a higher dye-uptake, 40 per cent higher than cotton, which is of course a considerable saving.

"You can imagine that if something has a higher dye uptake that there's a considerable cost saving because you can achieve the same colour depth with 40 per cent less dyestuff, so it's a huge saving, also from an environmental point of view. The second one is that when you look at the mechanical properties of the SaXcell fibre, we found that it has a tensile strength that's at least as high as cotton, both wet and dry, and the yarn we produce is stronger than cotton," he continues.

In the Netherlands alone, 145 million kilos of textile are thrown away every year.

▼ SaXcell fibre can be used for homeware, as well as apparel and other textile-based products.

To create these yarns, this 'manipulated' pulp is transported to spinning partners in Turkey: Ugurlurar, Modeko and Selin Tekstil. The entire process, including transport, is said to take around a month.

Now though, with the introduction of a pilot scale facility in Enschede, Netherlands, the consortium will look to iron out the minutiae of its manufacturing process for SaXcell fibre, with hope that in two years' time, this cellulosic fibre will be available at mass commercial scale.

For now, the team has set the target of producing 50 tonnes of pulp over the next couple of years.

"It will take two years to make this pilot phase work, during that period we have a number of ideas to extend our patent position," Brinks says. "You need to have a long-term vision here… that's very important.

"We'll take our time with our investors to develop plans, these could be around production, licensing, there are other companies that are interested in what we're doing, so there are many possibilities," he concluded. ■

Blockchain helps to save the Mongolian steppes

Canadian digital transformation company Convergence.tech is teaching Mongolia's traditional herdsmen to use a mobile phone app to transform the cashmere industry and save the country's famous steppes from turning into desert.

Simon Glover reports.

Nomadic herdsmen, who for centuries have tended their goats on Mongolia's vast grasslands to produce the country's prized cashmere wool, are turning to some unlikely tools in the name of sustainability.

In recent months, some have been using mobile phone apps and blockchain technology to improve traceability and command a higher price for their cashmere which is regarded as the finest in the world.

Overgrazing by the country's estimated 27 million cashmere goats, coupled with climate change, is severely damaging this unique landscape – a quarter of which has already turned to desert, according to the United Nations.

The impact of climate change is higher in Mongolia than the world average, with a 2°C increase in temperatures over the past 70 years, while the number of goats has increased almost fourfold since the country's transition from communism to democracy 20 years ago.

Meanwhile, cashmere, once reserved for royalty, has become readily available on the high street. Prices have risen by more than 60 per cent since the 1980s, and the world cashmere clothing market is projected to be worth US$3.5 billion by 2025.

The dilemma for Mongolia is that global demand for cashmere continues to rise and about a third of its population is dependent on the industry. It somehow needs to capitalise on this demand while at the same time reduce cashmere's environmental impact.

Mongolia is the world's second-largest producer of raw cashmere after China, accounting for around a fifth of global supply, making it the country's third-largest export after copper and gold.

But while the country's cashmere is considered by many people to be the highest quality in the world, about 90 per cent of it is currently sold to brokers in China where it is

▲ Herdsmen tend cashmere goats on the Mongolian grasslands..

▶ Two Mongolian children with a new arrival among their family's goat herd.

▶ A traditional Mongolian yurt, or ger, where herdsmen live with their families.

▼ Erik Zvaigzne helps a herdsman scan a tag with his mobile phone.

processed and blended with Chinese fibres.

Realising that it could command a higher price if it were to be marketed as pure Mongolian cashmere, the United Nations Development Programme (UNDP) has been working with the country's government to transform the industry.

They also hope that buyers, and ultimately consumers, will be prepared to pay a premium for the fibre if they can prove that it is the product of more sustainable practices designed to save the grasslands from overgrazing.

That is where Convergence came in. The UNDP decided that making use of the company's digital expertise to improve traceability might be the key.

Convergence's role was to set up a pilot project that would use blockchain technology to trace the cashmere from the goats on the grazing lands to new processing plants being built in the capital city, Ulaanbaatar, so the country can process its own cashmere and sell it as 'Made in Mongolia'.

Meanwhile, the herdsmen were trained in a wide array of sustainable practices by the Sustainable Fibre Alliance, from good animal welfare and husbandry practices, to rotational grazing strategies and fibre harvesting techniques.

Erik Zvaigzne, the company's VP for product innovation, went out to north-eastern Mongolia's Eastern Steppe to work with about 70 local herdsmen and show them how to use the blockchain system.

▲ Erik Zvaigzne, of Convergence.tech, shows a herdsman how to use the mobile phone app.

> **"Helping to reduce the effect that overgrazing is having on Mongolian pasture lands while protecting the livelihoods of herders is a delicate balance**
>
> *Convergence.tech CEO Chami Akmeemana*

▼ An RFID tag is attached to a bale of cashmere.

Convergence developed an Android app, which enables farmers to register their cashmere bales with location tagging. These bales, along with packing slips, are attached with radio-frequency identification (RFID) tags.

The journey of the bales can then be tracked from the herders' co-operatives to the processing factories in Ulaanbaatar. The blockchain system can also provide buyers with proof that the cashmere was produced using sustainable practices.

Zvaigzne reveals that introducing android apps and blockchain technology to the herdsmen was not quite the stretch it sounds: "They were actually quite mobile phone savvy, which is just a sign of the times in a lot of the world these days," he said.

"Many had smartphones and used apps like Facebook to communicate with each other, and we made the user experience of interacting with the app very easy. There wasn't a need to communicate the finer details of Blockchain as it's less about how it works and more about what it does.

"Shifting the cashmere industry towards sustainability while still protecting or enhancing the livelihoods of those involved in it is a big challenge, but we think technology can help be a catalyst for change and something that can help unify education and intervention efforts for the better."

Zvaigzne explained that herders saw the main benefits of his company's digital solutions as increased market access and better connections with buyers, which they hoped could increase their revenue from cashmere.

However, he added: "There was also a sense of pride in the fact that the cashmere could be traced back to them and be seen as 'Made in Mongolia', which is important in driving behaviour away from just producing high volumes and instead producing higher quality cashmere with smaller herds that can then command real market premiums."

Chami Akmeemana, CEO of Convergence, said that leveraging blockchain technology to transform the industry had the potential to provide benefits for cashmere herders, buyers and sellers alike while reducing environmental impact.

"Helping to reduce the effect that overgrazing is having on Mongolian pasture lands while also protecting the livelihoods of the herders is a delicate balance," says Akmeemana.

"Digitising parts of this traditional supply-chain in order to give herders better market access and prices to sell their sustainably produced cashmere is an important step forward with this goal." ■

Sustainability in China 'at crossroads' post-COVID 19

As China looks to boost its economic growth after plunging by around 10 per cent in the first quarter of this year, Ma Jun, director of the Beijing-based Institute of Public and Environmental Affairs gives *Ecotextile News* an exclusive insight into what sustainability in the textile industry will look like for China in the immediate post-corona era.

John Mowbray reports.

As shopping malls in China start to open back up for business in the wake of the COVID-19 pandemic and clothing retailers see the first trickle of customers returning to their stores, environmental protection measures in China are now firmly at a new 'crossroads', according to Ma Jun, director at the environmental not-for-profit Institute of Public and Environmental Affairs (IPE), which runs the **Green Supply Chain Map**.

With exports from some Chinese textile regions still down by as much 20 per cent post-lockdown, it's clear that economic recovery is going to take precedence over pollution control with the government now favouring 'market-based solutions' rather than top-down government intervention to control the problem.

Brands on the map: Adidas, Bestseller, C&A, Carrefour, Esprit, Gap, H&M, Inditex, Kontoor, Levi Strauss, New Balance, Nike, Primark, Puma, Target, Tesco, VF Corp.

But how long will this last?

"After four years of the most stringent environmental enforcement in China, I think we are now again at some kind of crossroads because of the massive impact of this coronavirus," Ma Jun told us in a Zoom interview. "And the economic recovery will be made an absolute priority after this with a new stimulus package."

The former investigative

Image: © Robert Way | Shutterstock

◀ Shanghai shopping malls in April 2020.

journalist and environmentalist who founded IPE says he's seeing "more green lights" given to projects that aim to rapidly stimulate the economy and anticipated local governments will give more priority to these new development projects in a bid to stimulate rapid growth. "So I'm a bit concerned," he noted. "We are anxious that, although it (pollution control) won't be side-lined, the priorities are simply being shifted in China."

> **"Priorities will shift in this post-Covid 19 era, we're going to see that**

The world's second largest economy shrank 6.8 per cent in the first quarter of 2020 compared to a year earlier, according to government statistics released last month. That's slightly worse than analysts were expecting, and amounts to about 693 billion yuan (US$98 billion) in lost output. Retail spending dropped 19 per cent, while exports plunged more than 13 per cent – a historic moment for the country.

But Ma Jun thinks that in China, government injections of cash to mitigate this on-going downturn will come with a caveat. And he says money won't simply be squandered on businesses that are badly run or those that are serial polluters. It's here that he says that his organisation can provide guidance on which companies are low risk through its suite of online tools to monitor live pollution incidents.

In particular, he points to the IPE's Blue EcoChain tool, where brands and retailers get a live push notification on their mobile devices if a pollution incident has been recorded at one of their Chinese suppliers. It's an example of how the government can assess where funds could be better directed. This tool, together with the NGO's 'Dynamic Environment Credit Assessment', which is based on 'big data', assigns millions of factories with a credit score based on their previous environmental due diligence.

"This has been accepted by some of the largest banks in China who say that only if the company has reached a certain level of assessment can they access a bank loan," he told us, adding that during the past four weeks as China emerges post-corona, "we have actually more companies coming to us to go through this process – motivated by their banks." He also claims that some textile mills going through the assessment have been motivated to do so by their brand clients. "So far 195 companies have taken these measures in the past few weeks."

Jun thinks engagement with the IPE environmental credit assessment will accelerate in the coming months. "Because after this coronavirus outbreak, banks will be pushed by the government to give loans to small and medium size companies. But they have to manage the financial risks. The environmental credit assessment actually provides some sort of perspective for them to look into the overall performance," he says. "It's a kind of demonstration of the overall performance, or overall management level of the companies."

In addition, such is the number of Chinese companies looking for investment during this severe economic downturn, that using the IPE tool is more efficient than "tens of thousands of companies" going through the traditional due diligence route, he noted, pointing to the IPE Blue Map app which works in a similar way using a carbon calculator for businesses. "We have now

already started with hundreds of firms who have borrowed money from the banks, and we hope that by end of May, this will be extended to 2,000 applicants and eventually that 70,000 factories will go through our process."

Cutting through the red tape in this way doesn't just help to decide how to hand out the cash, it also provides a stark example of how many companies are struggling with cashflow – an indication that survival will initially take precedence over sustainability in China's textile sector.

"I'm concerned that, as I mentioned, the priorities will shift in this post-COVID 19 era, we're going to see that. In some ways it's quite natural. But central government also realises that, but it doesn't want to miss environmental targets either, so it's in some sort of dilemma. It's up to everybody to try to find innovative solutions which can balance these two targets."

A dilemma shared

China is not alone in this dilemma. In a remarkable move in April, the US Environmental Protection Agency suspended most of its enforcement activities to help stimulate growth despite being at least eight weeks behind China and still in the middle of COVID crisis management.

It was a decision that infuriated Gina McCarthy, president and CEO of the Natural Resources Defense Council – the USA's largest consumer facing environmental non-profit organisation. "This is an open licence to pollute. Plain and simple. The administration should be giving its all toward making our country healthier right now. Instead it is taking advantage of an unprecedented public health crisis to do favours for polluters that threaten public health."

▲ Ma Jun, director of the Beijing-based Institute of Public and Environmental Affairs

Meanwhile, back in China, Ma Jun says that as the country starts to emerge from the crisis, it won't abandon regulation altogether, but will instead "pass on" some of the environmental responsibilities to the market – and it has already published a series of 'market-led solutions' to minimise the environmental impact of an impending rapid economic bounce.

"We are going to try and continue to engage with the government, try to advocate that we should not allow any environmental enforcement to be relaxed. We need to continue to enforce and disclose. Of course, we don't have to resort to over-simplified measures to shut all these (polluting) factories you know. But if you can enforce, then monitor and then disclose, you give the market the ability to help. And I think it's very important for the apparel brands and now for the financial institutions, the investors, to weigh in because we all now realise that on the local pollution side, we need them and on global climate change, we need them even more at this time."

In conclusion, Ma Jun perhaps saved one silver lining to the dark coronavirus cloud for last. "What you need to remember is that in China, most people still have pretty sharp, pretty serious memories of the old days when we suffered so much from smog and pollution. So, I don't think people would want that coming back. The matter of fact is that every year smog has killed more people, far more people, than the coronavirus," he explained. ■

China textiles

- China's textile exports plunged in April despite the resumption of almost all Chinese fabric manufacturing operations by the end of March.
- China National Textile and Apparel Council says clothing exports fell US$22.7 billion in the first quarter compared to a year earlier, a drop of 18 per cent.
- Prices of luxury fabrics such as silk have fallen about 30 per cent since the start of the year.

Source: CNTAC

Chemicals in clothing – a taxing issue

Sweden looks set to press ahead with its proposals to introduce a tax on potentially harmful chemicals in clothing and shoes despite opposition from brands and retailers including fashion giant H&M.

Simon Glover reports.

The Swedish government predicts that its proposed tax on clothing and shoes containing hazardous chemicals would lead to them being phased out altogether in the country five years earlier than if it did not act.

The plan, due to come into force on 1st April 2021, revolves around a default tax of 40 SEK (US$4) per kilogram of a product's weight, with tax reductions of up to 95 per cent for those that do not contain any harmful chemicals.

A government report claims the market share of clothing containing hazardous chemicals would fall by up to 20 per cent during the first year of the tax and be phased out altogether in Sweden five years earlier than would otherwise be the case.

H&M is unhappy the tax would cover all clothing and shoes when – it says – the bulk of these do not contain potentially hazardous chemicals, meaning brands would need to carry out costly tests for substances they know not to be present to qualify for tax reductions.

However, Sweden overcame opposition from business to introduce a tax on chemicals in electronic products in 2017, and it seems determined to extend the system to cover clothes and shoes.

The tax would focus on 'substances of very high concern' (SVHCs), as identified under the European Union's REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals) system, and other chemicals deemed to fulfil the same criteria.

Special attention would be given to weather-resistant products likely to contain PFAS (per- and polyfluoroalkyl substances) which would attract an additional 19 SEK (US$1.90) per kilogram in tax. Sweden wants to address "three fundamental problems" – the effect on the health of people wearing clothes, the harm to the environment and human health through the release of microfibres as clothing is washed, and pollution caused during the production and disposal of apparel.

▲ Sweden seems determined to introduce a tax on hazadrous chemicals in apparel

> "The best way to ensure that recycled textiles are free from hazardous chemicals is to make sure that they are not included as ingredients from the beginning

The report says: "For the average consumer, the tax is expected to lead to additional costs of SEK 100 (US$10) per year. The tax is expected to reduce sales of clothing and footwear to Swedish consumers by almost one per cent and reduce sales in Sweden by more than one per cent.

"This will result in important environmental benefits because the production of clothing and footwear has a major carbon footprint, demands large volumes of water and has other adverse effects in countries of production."

ChemSec, the International Chemical Secretariat, which is funded by the Swedish government, broadly welcomed the proposals which it hoped would be broadened to apply to other textiles, as well as clothing.

ChemSec policy adviser Frida Hök said: "The best way to ensure that recycled textiles are free from hazardous chemicals is to make sure that they are not included as ingredients from the beginning."

However, H&M said that brands would face increased costs as they would have to prove the absence of these chemicals which would mean carrying out tests for "substances we do not usually find in our products".

"H&M supports incentives that lead to increased sustainable behaviour and push forward that agenda, but we oppose a tax in the name of sustainability that clearly doesn't speak to this issue specifically," the company said. ■

Phil Patterson
Correspondent,
Chemistry & retail

Chemical circularity – in practice

In a new, groundbreaking report on textile chemistry, **Phil Patterson** argues the industry should not look at chemicals as 'waste-in-waiting' but treat them as a valuable resource for re-use in a circular system.

When I was asked by the Laudes Foundation to produce a scoping report on the subject of 'chemical leasing' in the fashion sector, I was very hesitant.

That's because chemical leasing is an abstract concept where firms charge for the 'function' of a chemical – rather than for 'units' of the chemical itself.

In simple terms, you may for example pay someone to come and lubricate your machines with grease rather than buying a tub of grease and lubricating them yourself – the idea being that an expert machine greaser will use the minimum amount to do the job properly with no need for you to hold stores of grease on-site. The machine greaser may remove and re-purpose old grease resulting in less being used, less being wasted, more being recycled and less being produced. So far so good.

But most definitions of chemical leasing say that the concept is only applicable to 'non-core' activities in processes where there are no chemical reactions and that the concept doesn't lend itself to small companies.

A reasonable description of the textile industry would be: 'vast numbers of small companies using chemicals as part of their core processes, many of which involve chemical reactions.'

On the face of it, it's a terrible place to consider rolling out a dictionary definition of chemical leasing and had the Laudes Foundation insisted on a pure, intellectual appraisal of chemical leasing in textiles then I may have walked away before we started.

Thankfully the outcomes of the proposed report were explored in a little more detail – to see if chemical leasing could reduce the net amount of chemicals used in textile processing and the amount discharged into the environment via lower levels of deliberate consumption in any process and by increased re-use and recycling.

Once the overarching aims became clear, it was obvious that these had to be addressed – and in a way that provided tangible, practical solutions that can be rolled out relatively quickly and at scale.

This isn't a topic for blue sky research and small-scale pilots. It isn't a topic that can be selectively pushed into consumers faces to deflect observers' attention away from business as usual. And it isn't a topic that can be ignored.

Why not?

During my 31 years in the textile industry, I've had an evolving relationship with chemicals that has largely been shaped by health, safety and environmental concerns – and I'd like to think that I've played a small part in changing things for the better.

My relationship with chemicals is typical of a lot of people in the textile industry with, over time, an increasing focus on which chemicals are used and a search for safer alternatives.

Whilst deciding whether to pitch for the chemical leasing project, I had to take a step back and look at how chemicals are used – I was rather embarrassed by what we've collectively seen as being acceptable.

For the past couple of centuries, we've treated chemicals as single use items that are used by someone for their own benefit and then simply passed along, or tossed away into the environment, for the wider world to share the damage.

The 'buy it, use it, dump it' mode of operation is now normal. And we've all been complicit in making it normal. Even the so-called 'good guys' in the textile chemical sector.

Over recent decades, the damage caused by discharge of untreated textile chemicals has been somewhat

Image: © Inked Pixels | Shutterstock

mitigated by the introduction of effluent treatment plants, which forcibly biodegrade chemicals prior to release into the environment.

More than most observers, I have lauded those who treat effluent 'properly' but the horrible truth is that it's still just a variant of the 'buy it, use it, dump it' model and, with the benefit of detachment, I can see it's a deeply flawed model.

Chemicals, and even chemical restrictions, have been developed with that model in mind and in many instances biodegradability and suitability for dumping into the environment have been prioritised over effectiveness of the chemical in doing the job that it's designed to do.

Textile chemicals are viewed according to their function:

- Stay on finished product at point of sale. These include dyes, softeners, coatings and performance finishes.
- Process chemicals present on a substrate temporarily. For example, a weaving size or a fabric lubricant in a process bath to avoid creasing and abrasion marks. These are typically removed and typically discharged to the environment in effluent.

The report will hopefully provide a compelling argument that we have to change our relationship with chemicals, and some suggestions about how that may be achieved.

Before looking at whether specific approaches, such as chemical leasing, can provide solutions that result in reduced net chemical consumption and discharge to the environment it was necessary to take a very cold, analytical look at how chemicals are being used within the current 'buy it, use it, dump it' model.

The key feature is that it's *primarily* a selfish model.

The user will buy a chemical, use it in a way that benefits them and then either pass it down the chain on a textile product, dump it into the environment or partially remediate it before dumping it into the environment.

Limited consideration is given to downstream recipients of chemicals from upstream processes and it generally falls on wet processors – that's dyers and printers – to remove chemicals used in upstream processes and then partially remediate them, along with the chemicals they apply for dyeing and finishing.

For some time, there have been calls for the textile chemical industry to take full responsibility for the remediation of chemicals it manufactures and sells – the so-called extended producer responsibility (EPR) scenario.

It sounds good. It sounds tough. But it's pretty much implausible.

Chemicals are used in fibre production and all stages downstream: yarn spinning, fabric production, scouring and bleaching, dyeing, printing and finishing and also at the effluent treatment stage at which point we have a complex chemical soup for the wet processor to remediate. The chances of all the chemicals in this soup coming from the same supplier are precisely zero.

The CURE model

So, the main point in the report is that before we start making any significant noises about EPR, we have to introduce the concept of chemical user responsibilities – the snappily titled CURE model.

This simple concept opens up a whole world of opportunities for chemical re-use, recycling, reduced net consumption and ultimately literal zero discharge of hazardous chemicals.

If chemical users are not permitted to send any chemicals downstream unless absolutely essential then we could have a situation where cotton growers remove natural impurities at source and find other uses for them (similar to what wool growers do with lanolin); yarn spinners remove and re-use their spinning oils; and weavers remove and recycle weaving size from fabrics before sending clean fabrics to dyers and printers. This could more than halve the amounts of chemicals they use – because they would no longer have to focus on chemical removal before they got on with their own jobs.

By viewing each textile sub-process as a single, distinct chemical step, we open up the opportunity to remove single chemical formulations after they've completed their function and stop the inevitable creation of a chemical soup.

This simple CURE model also opens the door to much more re-use and recycling.

If the chemical user doesn't have the time, know-how or inclination to remove and re-use the chemical they are using, then they could get chemical service companies in to do that for them. Ironically this starts to look very much like chemical leasing, the concept I originally dismissed as being impractical.

By working through various scenarios, models and case studies I've come to the conclusion that chemical leasing and EPR for chemical suppliers cannot be readily applied to the current 'buy-use-dump' industry model at any scale – but the introduction of a CURE model where chemical users take responsibility for the chemicals they use could become an industry game changer.

Chemicals as a resource

The ability to imagine used chemicals as a valuable resource creates a

'can-do' environment for chemical and process development. There still may be some chemical soups produced but, with this mentality, that soup is viewed as a mixture of potentially valuable chemicals that can be separated or, with a little chemical tweaking, a source of useful building blocks.

Those that have seen the report tend to like it and the bigger better chemical companies have so far viewed this as a challenge they would relish. Indeed, most chemical companies are veterans of a waste-as-a-valuable-resource culture, with 'by-products' being the name given to the 'unwanted' products of chemical reactions to make dyes, softeners, pigments and so on.

Making chemical circularity happen may essentially be a case of moving that chemical industry expertise out into a fragmented supply chain – the bigger challenge being logistical rather than technical.

The textile industry is notoriously sloppy with how chemicals are managed and for chemical circularity to become mainstream there will need to be either upskilling or importation of chemical engineering expertise to minimise the exposure of workers and maximise re-use of chemicals.

> "We've treated chemicals as single use items

This will be particularly relevant if the focus on chemical function and re-use leads us down a path of using highly effective but harmful substances – something the chemical industry successfully practices on a day-to-day basis.

Of course, safer, effective chemicals are preferable but, quite frankly we can't wait forever for 'green chemistry' to become mainstream, so the better approach in the short to mid-term is to use the chemicals we currently have at our disposal, in a more responsible way.

And that may involve the use of techniques like solvent scouring – something many brands are understandably wary of.

But what's worse, the use of aqueous-based washing systems with detergents, dispersants, lubricating agents, antifoam and pH control to remove single-use oils from fibres, which are then disposed of – or a solvent such as perchloroethylene in a fully enclosed system that allows re-use of the oil, no worker exposure, no emissions to air and no effluent discharge?

Hazard versus risk

I know which of those is better for the planet and, if we can find safe solvents or develop chemical inputs that can be easily removed by safe solvents, we can make huge strides forward. However, as long as the current obsession with chemical hazard persists (rather than risk), we will have well-intentioned obstacles put in our way that inadvertently perpetuate greater damage.

But, let's not forget, this obsession with hazard stems from the textile industries historical inability to manage chemicals safely and an in-built assumption that the 'buy-use-dump' model will operate and the textile industry will need to improve chemical management practices to persuade those supportive of a hazard-based approach is unnecessary.

There are now already moves underway to set up an independent advisory board with the ZDHC to create a unified framework for chemical circularity. The medium-term aim is to market good chemical circularity practice at point of sale.

In the longer term, in line with the CURE model, I believe the logical end point is zero discharge of chemicals from the textile industry. Not zero discharge of hazardous substances, but zero discharge of substances. Once we stop looking at the chemicals used in textiles as waste-in-waiting and start to consider what would ordinarily be considered waste as a valuable resource, the industry can make rapid environmental progress. ■

APPROXIMATE AVERAGE CHEMICAL USE AS A PERCENTAGE OF SUBSTRATE WEIGHT

Process	
Spin Finish	~1%
Weaving size	~7.5% to 25% applied to the warp threads of woven fabrics ~ 4%*
Scouring and bleaching	~3% (Average of 3g/l of additives at 10:1 liquor ratio)
Dyeing	~2% dyes ~3% dyeing auxiliaries
Wash off	~2% auxiliaries
Finishing	~1.5% chemical finish
	Total ~16.5%

Source: Colour Connections, 2020


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Single use – double trouble

The Covid-19 health crisis has shown how the complexities of sourcing and using single-use personal protective equipment (PPE) has puts a severe strain on both people's health – but also on the environment.

The COVID-19 pandemic has created a mass scramble for personal protective equipment (PPE) with several developed nations reporting critical shortages of goggles, gloves, gowns, aprons and masks, that many believe are putting patients and health care workers at risk.

A large part of the problem is down to the fact that many items of PPE are single use, disposable items and, although mega-hospitals can be built in 10 days, governments also now need to source more textiles that can be rapidly cleaned, sterilised and re-used.

Image: © GPointStudio | Depositphotos

▲ Several developed nations are reporting critical shortages of PPE.

The textile industry can step into help solve these problems by designing new types of PPE products that are not only re-usable and made locally to alleviate supply in the event of a much feared 'second wave' of infection; it's also beneficial for the environment by lowering the volumes of material being manufactured in the first place – much of which is covered in potentially hazardous chemicals that could be released to air if incineration guidelines are not followed.

Any such moves could be a good early example of how to reset industry thinking to solve two problems at once: more efficient supply chains around healthcare needs, while at the same time substantially reducing waste and the environmental impact of PPE production and disposal.

The coronavirus is more easily spread than first anticipated and the numbers of people having the virus whilst displaying no symptoms is also higher than originally thought. This is both a blessing and a curse – the high number of asymptomatic cases indicates the virus is less deadly than it was first assumed, but the mass panic accompanying the fact that anyone can catch it from anyone else is fuelling the massive demand for personal protection.

In hospitals it isn't entirely clear who is being protected from who and, unlike in a normal workplace where the worker is being protected from something, PPE is being used as a two-way barrier to protect the doctor from the patient – and the patient from the doctor. A dust mask that stops something going in but allows breath out via a **one-way valve won't suffice**.

Before the pandemic, half the world's masks were manufactured in China; now, the figure may be as high as 85 per cent.

> "Some glaring problems around single-use products, waste and how to dispose of it properly

Those asked to put themselves in harm's way to treat patients should have access to appropriate PPE at all times and be fully trained in how it is used – including how long it can be worn before being replaced.

Disposable problem

The sad, unforgivable truth is that a large part of the problem is down to the fact that many items of PPE are single use, disposable items and few people have looked seriously at the rapid cleaning, sterilisation and re-use of PPE. Pursuing bigger orders of billions of items of disposable products seems to be the only solution right now.

Thinking out loud to help alleviate COVID-19 has been given a bad name courtesy of some ill-judged presidential thoughts. And

although we know this is a highly contagious virus that's deadly to a small percentage of individuals – we also know it's pretty feeble in many respects. Washing with soap and water, domestic laundering at 40C or the use of alcohol gel will remove the fatty coating from the virus and render it useless.

So, couldn't we use autoclaves or low boiling point solvents to cleanse individual sets of PPE locally for re-use? Maybe the single use nonwoven products that are currently being used won't even stand up to that cleaning regime – hence the need for incineration? Going forward, this leaves the textile industry with an opportunity to design and create textile PPE products that are effective, durable, locally cleanable and re-usable (clearly supported by other industries for more complex items such as goggles and breathing apparatus).

The industry has stepped in to supplement the supply of textile-based PPE during this crisis but in the longer term there needs to be more joined up thinking with respect to materials, construction and local cleaning methods in the giant healthcare industry worldwide. It's OK having a local dip-and-clean station based on a low boiling point solvent, or a handy autoclave for healthcare professionals to kill all virus' on their face masks and have it dry, safe and re-usable in 60 seconds – but not if all the elastic has dissolved or the **meltblown nonwovens** have deformed.

US PPE shortages – China

- In 2019 the USA imported some 92.5 million dozen packs of disposable medical apparel – 1.1 billion items – directly from China.
- Disposable medical apparel items – which include surgical gowns, scrubs, caps shoe covers and disposable bedding – all have to be individually sewn, as opposed to being converted by automatic equipment, (ie diapers).
- Labour rates for sewing machinists in the USA average about US$9 an hour, compared to US$1 in China.
- In January 2020, the pipeline of supply from China to the USA for all of these products was completely cut off due to an export ban.

Source: Sustainable Nonwovens magazine

Tests in 2019 from the Frankfurt-based independent testing house, Warringtonfire, showed that highly-toxic hydrofluoric acid (HF, up to 63 ppm) and hydrochloric acid (HCl, up to 36 ppm) are released at high concentrations when incinerating PTFE (polytetrafluo-rethylene) membranes. EU occupational exposure guidelines (2000/39/EC) for these gases is set at 30 ppm.

The price of meltblown in China stood at $56,500 as we went to press. Twenty times its pre-crisis price.

Hazardous coatings

Not only would the provision of re-usable PPE alleviate any supply issues related to future virus outbreaks, it would be much better for the environment with much lower volumes of material being manufactured. It's not commonly known, but a lot of PPE is covered in PFC-based fluid repellents – if used only once and then incinerated under sub-standard procedures then what **goes into the atmosphere?** In the UK in April, the Environment Agency (EA) released a regulatory position statement (RPS) to allow municipal waste incinerators to accept COVID-19 infectious waste without varying their environmental permits, and similar relaxations can be expected globally.
This could result in a future spike in the levels of bio-persistent fluorocarbon residues in polar regions – which in the past has been blamed on the manufacturers of durable water repellents used in high-quality waterproof coats – that are worn hundreds of times over a period of many years.

Meanwhile, anti-microbial agents and electrostatic treatments are also often embedded into PPE materials and medical textiles to mitigate the spread of pathogens (viruses don't multiply outside an organism) and their environmental fate is still a contentious issue.

The current pandemic has no doubt presented entrepreneurs and innovators in the textiles industry with some big opportunities, but it has also highlighted some glaring problems around single-use products, waste and how to dispose of it properly.

It's often difficult to get textile workers, factory owners and brands to take the issue of PPE seriously and trying to protect people from acute and chronic problems associated with chemicals or other hazards in the workplace doesn't always have a high rate of success.

Yet, one day it may be possible to look back and find that the COVID-19 pandemic also inadvertently saved millions of lives.

The reason? This tragic, global pandemic that has been so crucial to the global healthcare sector, could finally give PPE, and personal protection, a good name in the global textile manufacturing industry. One where lives that have often been lost or ruined unnecessarily due to the misuse of pesticides, dyes, chemicals and finishing treatments – including mechanical fabric abrasives (sand-blasting) due to a lack of basic protection. ■

▲ Thousands of animal rights activists gather in New York.

Lifeline

A vegan fashion revolution is underway," says PETA director of corporate projects, Yvonne Taylor.

By Chris Remington

Over recent months, amidst a period of contemplation for many in the industry, animal rights organisation PETA has doubled down on its commitment to ban animal-based products from the fashion industry, and is now reaping the rewards.

For years, the campaign group – whose motto in part reads "animals are not ours to wear" – has battled to get onside stakeholders, and can now fall upon **an ever-growing marketplace** of vegan alternatives as reason enough for brands and retailers to make the switch.

"Brands respond to consumer demand, and the market is definitely moving in favour of vegan fashion: it's predicted that the vegan leather industry will be worth US$89 billion by 2025, and a report by Bain & Company shows that animal welfare is *the* key concern for consumers under 35," notes Taylor. "

As a result, vegan fashion is now readily available from British high-street stores, luxury labels, and independent designers.

"A vegan fashion revolution is underway, and it's here for the long haul," she continues. "The climate crisis has forced many people to think about the impact that our buying decisions have on the planet and the animals we share it with. The more we come to understand animals, the harder it becomes to justify tormenting and killing them for a handbag or coat."

This on-boarding of fashion's biggest names has not come easily by any means. As such, the organisation has taken to routinely buying minimal shares in culpable businesses, in order to gain a seat at their annual meetings from which it can speak directly with those capable of enforcing change.

PETA has recently bought shares in: Kering, Target, Guess, Ralph Lauren, Burberry, Urban Outfitters, Lands' End, Under Armour and Capri Holdings, amongst others.

Hugo Boss, H&M and Chanel have each used 'pineapple leather' in their apparel, whilst other material alternatives include Koba: a recently developed, partially plant-based faux fur made from corn.

"As a shareholder in publicly traded companies, PETA and its appointees have been able to speak directly to CEOs during meetings and bring resolutions that encourage the company to eliminate cruel practices and products," Taylor tells us.

"After a PETA US representative attended Gap Inc's annual meeting in 2014 and asked why the company was still selling angora – which is torn out of rabbits as they scream in terror and pain – its CEO agreed never to sell the cruelly obtained fibre again and to pull all angora items from its websites," she continues.

In just the past few months alone, **PETA has kickstarted this approach once more** across the fashion sphere, and hopes – at a time where all stakeholders have been forced to reconsider their approaches to business – that they too can accelerate the momentum towards vegan fashion.

After all, "once consumers learn the truth, opting for vegan clothing becomes the obvious, logical, and lasting choice," Taylor says. ■

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Saline solutions

If we ever see zero liquid discharge mandated, then salt-reduction technologies will be essential to make water-recycling cost effective and energy efficient.

By Phil Patterson.

Image: © davidtran07 | Depositphotos

▲ Salt contamination of water isn't a single chemical – it's many different compounds.

We have previously brought it to readers' attention that discharges of salt into the environment from wet processing factories can cause major damage to aquatic ecosystems and the availability of freshwater.

Since salt isn't remediated in a standard effluent treatment plant (ETP), any type of salt used in textile dyeing processes will pass through into the environment – and this happens in responsibly operated world class facilities, not just those polluters who don't care what they discharge.

Generally, when mentioning salt problems, we are referring to the deliberate use of large quantities of salt in reactive dyeing of cotton, viscose and linen, where salt is added at levels of up to 100g per litre to attach dyes to the surface of fibres before they chemically bond to give wash fastness.

Salt isn't a single chemical – it's a generic term that covers many different compounds and in reactive dyeing one of two salts are used: sodium chloride and sodium sulphate. Both of these have significant consequences for the freshwater environment if released in high concentrations.

But it isn't just deliberate use that needs to be considered – as any 11-year-old chemistry student will tell you, the first thing they learn is:

[Acid + Alkali → kASalt + Water]

And, in layman's terms, acid plus alkali equals neutralisation, a process that is routinely carried out on a frequent basis in dyeing, printing, finishing and effluent treatment.

> **"It is estimated that for every tonne of powdered indigo dye used a tonne of salt is formed**

Typically, the most common acid is acetic acid and the most common alkali is caustic soda (sodium hydroxide) – put them together in large quantities and, following basic chemistry, you get loads of sodium acetate formed. It's a salt – and will pass through an ETP into the environment.

When all the process baths from a dyer, printer or laundry arrive at an ETP they are mixed together and the resultant pH must be approximately neutral to protect the pH-sensitive microorganisms that biodegrade chemicals prior to discharge. The neutralisation process will also create additional salts – it's unavoidable.

The pH swings in the solutions and neutralisation can't be eliminated entirely but care should be taken to avoid excessive use of acids and alkalis as the amounts of salts formed do add up. If methods for salt-free

reactive dyeing do become commonplace, it is not inconceivable that legislators will feel emboldened with respect to lowering the permissible limits of salt in effluent, referred to as **TDS** and this could start to shine a light on unintentional salt formation.

Total Dissolved Solids is a measure of the combined total of organic and inorganic substances contained in a liquid – primarily minerals, salts and organic matter that can be a general indicator of water quality.

Denim production

But it isn't just neutralisation reactions that create problematic salts.

Denim is a big volume business and it's no surprise that we frequently discuss its virtues and problems in this publication.

The re-usable dyebaths employed for dyeing the warp threads of denim fabrics typically contain three main ingredients – indigo dye, sodium hydroxide and a 'reducing agent' called sodium hydrosulphite, or hydros to give it its common name.

Oxidation and reduction are reversible chemical processes. They are possibly best illustrated by an iron nail – if it is oxidised (reacts with oxygen), it goes rusty and then if it is 'reduced' it transforms back to shiny pure iron.

Indigo dye is blue in the presence of oxygen (its oxidised form). In that form it's also insoluble in water and incapable of dyeing cotton so, in order to make it soluble, it has to be 'reduced' and placed in an alkaline solution. Hydros is a cheap, effective reducing agent that is used in enormous quantities across the denim dyeing industry. In highly alkaline conditions, hydros turns the indigo dye into a green solution into which cotton yarns are dipped. The green yarns are lifted out of the dyebath and exposed to air (containing oxygen) at which point the dye is oxidised and it turns back to blue again.

This is repeated multiple times to build up a thick layer of blue dye on the surface of the yarn, leaving the central core undyed.

Unfortunately, when you mix hydros and caustic soda together in the dyebath they react to form our friend sodium sulphate – in very large quantities. It is estimated that for **every tonne of powdered indigo dye** used a tonne of salt is formed.

An estimated 52,000 tonnes of sodium sulphate is released by dyehouse effluent treatment plants (ETPs) each year.

When the dyebaths become too contaminated with debris from the cotton yarns, the dyer is unable to achieve a high enough pH for the dye to be soluble because of a process called 'buffering' or if the salt levels get too high the dyebaths have to be dumped – and treating the effluent from a denim dye range is a very challenging job.

Solids, such as unused dye can be settled by gravity, organic materials from cotton can be biodegraded and alkali can be neutralised – but salt is a problem and, unlike in a conventional fabric dyehouse, there are few other process baths to offer dilution. There are some post-dye wash baths, but these too have high salt levels because of carry-over from the dyeing process and, therefore, meeting TDS standards for effluent discharge can be very challenging for a denim dyer.

DyStar, which has been a leader in the production of pre-reduced liquid indigo dye for many years – a development which itself requires much lower levels of hydros compared to indigo dye powder – recently developed an interesting reducing agent based on hydroxy acetone to complement the liquid dye. The reducing agent allows dye reduction for solubilisation and dyeing but forms little or no salt in the process.

Trials conducted at Raymond Uco Denim in India, claim to have shown that indigo dyebaths based on pre-reduced indigo and hydroxy acetone contain around "60 times less salt" than powdered dye reduced by hydros and around "23 times less salt" than pre-reduced indigo with hydros.

Unsurprisingly the post-dye wash baths also contain hugely reduced amounts of salt and thus make effluent discharge compliance much easier.

If we are ever to see a crackdown on TDS limits for freshwater discharge, as would be logical, then initiatives such as this will be key, and if we ever see zero liquid discharge mandated, as would be desirable, then salt-reduction technologies will be essential to make water-recycling cost effective and energy efficient. ■

Karl Mayer's GreenDye indigo dyeing technology.

Could COVID-19 help cotton find a future?

Cotton 2040 has revealed details of the next stage of its mission to increase the global mainstream uptake of sustainable cotton.

Simon Glover talks to the initiative's chairwoman.

Perhaps ironically, Sally Uren believes the current coronavirus pandemic could help the Cotton 2040 initiative find a way forward towards more sustainable practices in the medium to long term.

"I think COVID-19 is shining a really bright light on the inherent difficulties of cotton, and the broader apparel industry, in the global economy," she said.

"Going forward there is an opportunity, the system doesn't work terribly well. As consumers come out of this crisis, are they going to vote with their wallets and stick with the brands looking after their suppliers or those running for the hills?

"There is an awareness now of the fragility of global supply chains, and the need to create a more resilient system, and not go back to what we had before.

"This COVID-19 is a dress rehearsal for the next crisis, it could be a climate crisis or another pandemic, but it will come because that is the time we're living in. It's an enormous opportunity for the cotton industry moving forward. I'm actually getting positive about that.

"The question is how do we use this crisis to create something that's better and more resilient, something that offers us all hope to navigate these difficult times that we're living through."

To that end, Cotton 2040 is embarking on a new three-year programme of work with renewed financial backing from the Laudes Foundation, formerly known as the C&A Foundation.

> **"I think COVID-19 is shining a really bright light on the inherent difficulties of cotton**
>
> *Sally Uren*

Uren, who is also chief executive of Forum for the Future, told *Ecotextile News* how the initiative's next phase would focus on delivering three interconnected workstreams between now and 2022.

These would aim to prepare the industry to adapt to climate change, drive up demand from brands and retailers for more sustainable cotton, and identify new business models to encourage its uptake.

On climate change, Cotton 2040 will work with producers, brands and retailers, as well as other industry initiatives, to develop a common understanding of the challenges.

Uren said: "We will develop a common understanding across the cotton system as to how climate change is likely to impact key stakeholders and regions, and agree on a shared set of priorities for action.

"We realised there was no climate change vulnerability map for cotton. We want to create a sector-wide understanding of how climate change is going to impact the cotton industry."

To drive up demand, the organisation will look to build on its existing work, using its 'CottonUp' guide to sourcing sustainable cotton, to help brands and retailers develop more sustainable sourcing strategies.

"We think there's more to do, particularly outside the US and Europe, where brands don't necessarily have targets on sourcing sustainable cotton," she explained.

"We will drive sustainable cotton uptake by creating a robust business case, drawing on perspectives from investors and consumers, to help brands and retailers to create and implement sustainable sourcing strategies.

"We want to help apparel industry professionals develop and implement sourcing strategies across multiple cotton standards such as organic, Fairtrade, the Better Cotton Initiative and others, through the CottonUp guide, bespoke education and capacity building programmes."

Uren said the third part of the new strategy – identifying sustainable business models that meet the criteria of a viable, future-ready cotton value chain – would be the most difficult to achieve.

"It's the hardest because it requires a new economic system. How do we create new sustainable business models that take into account environmental and social values, as well as economic factors? Existing business models are based on market rules and the drive for short term profits," she said.

The aim would be to work with stakeholders from across the cotton value chain to identify a range of sustainable business models, or market-based mechanisms, and then develop and pilot these business models and facilitate routes to scale.

"Securing the future supply of cotton will require a move towards alternative business models which ensure a fairer distribution of value and risk between stakeholders and enable the regeneration of land and resources," explained Uren.

"We want to understand what an alternative business model might look like. One that would take into account the value of waste, one that would support a circular economy, one that would cater for blended finance, including philanthropic investment; investing in education for smallholder cotton farmers, for instance, could really underpin the long term resilience of the industry.

"It's really difficult, massively ambitious, but it's going to be really critical to achieving our sustainable development goals."

On top of these three workstreams, Cotton 2040 will continue its existing work to improve the traceability of cotton by seeking to simplify and harmonise the various sustainable cotton standards, programmes and codes, and work towards greater alignment on impact reporting.

> **"We want to try to understand what an alternative business model might look like**
>
> *Sally Uren*

"We need to make it easier to commit to sustainable cotton. Smallholder cotton farmers find it difficult to comply, standards are too complicated, impact reports are very detailed, we need to harmonise reporting on environmental and social performance," Uren added.

With this in mind, Cotton 2040 has been working with the Delta Project, a collaboration of bodies including the Better Cotton Initiative (BCI) and International Cotton Advisory Committee (ICAC), to align measurement and reporting on sustainability performance at farm level.

The number of initiatives already devoted to improving sustainability in the cotton industry, from the BCI to the Soil Association's Organic Cotton campaign, might lead some observers to question the need for Cotton 2040.

But Uren is in no doubt that her organisation has a key role to play: "We felt there was a need for a unifying platform," she said. "There was an array of great activities happening but they were not joined up which was limiting their rate of progress.

"We realised that unless we did something very differently, we were not going to be able to address the social and environmental challenges of cotton or even guarantee future supply. We set up as a neutral space for brands, retailers and industry initiatives to come and work together." ■

Sustainability helps drive material innovations

BOSTON – Sustainability is among four key 'megatrends' driving innovations in materials needed for the future success of the textiles and apparel industry, according to a new study.

The report, Emerging Materials Opportunities for the Apparel Industry, by US research and data company Lux Research described the industry as a "ubiquitous behemoth" but said it faced uncertainty due to the coronavirus pandemic.

Government regulations and consumer demand were playing important roles in the move towards increased sustainability but brands themselves were spearheading change across the value chain, from upstream sourcing and manufacturing to downstream reclamation and recycling, according to the report.

This movement was being executed both individually, by brands such as Adidas and Patagonia, and collectively, in initiatives such as the Fashion Pact, the UN's Fashion Industry Charter for Climate Action, and Greenpeace's Detox 2020 initiative.

Key textile innovations included sustainable processing techniques such as water-free dyeing, advancements in fibres, functional improvements such as smart textiles and special coatings, and end-of-life recycling options for polyester and cellulosic materials.

End-of-life recycling opportunities for polyester and cellulosic materials pose medium term opportunities for growth, according to the report.

While polyester recycling was close to scale, improved supply chain logistics and better-quality feedstock were needed to achieve a scalable solution.

Meanwhile, cellulosic recycling of cotton-based materials was providing companies with an opportunity to develop post-consumer recycling options that capitalise on future feedstock opportunities, especially in the EU, which was leading in textile waste separation infrastructure.

Web: bit.ly/3cLO6nP

Unused fabric platform wins MIT funding

MASSACHUSETTS – The Queen of Raw platform, which connects buyers and sellers of unused fabrics, has won funding from the Massachusetts Institute of Technology's MIT Solve initiative.

Queen of Raw works to give new life to the estimated US$120 billion of unused fabric stowed away in factories by making it available to be bought and sold online through its marketplace.

It is one of three startups to be the first to benefit from the MIT Solve programme which distributes funding from the Solve Innovation Future venture fund to support entrepreneurs trying to solve the world's most pressing problems.

Queen of Raw, which also recently announced it had raised US$1.5 million in seed funding, claims to have already saved more than a billion gallons of water through its efforts.

Factories, brands and retailers post their unused fabric for resale on the platform so that purchasers can have easy access to new materials at lower price points.

Orders can vary from as little as one yard to as much as one million yards of fabric, according to co-founder and chief executive officer Stephanie Benedetto.

The other two projects to gain support from MIT Solve so far are Access Afya, a Kenya-based health-care centre for the urban poor, and Kinedu, an app that provides video-based, research-supported activities for young children.

Web: bit.ly/2AnrQSD

Queen of Raw is working to give new life to an estimated US$120 billion of unused fabric.

Mongolian farmers certified to Good Cashmere Standard

HAMBURG – The Aid by Trade Foundation (AbTF) has announced that the first cashmere farmers in Inner Mongolia have been certified to the Good Cashmere Standard.

"We can now provide the textile industry with 500 tonnes of certified cashmere wool, thereby making our first important contribution to improving sustainability in the cashmere industry," said AbTF executive director, Tina Stridde.

It's reported that eight cashmere farmers with a combined 4,000 farms and approximately 1.3 million cashmere goats undertook the verification process, led by independent auditing firm Elevate.

Through this, each farm is required to complete a self-assessment before ensuring that they meet social, environmental and animal-welfare criteria. They're also subject to certain 'exclusion' criteria, after which farmers can receive certification to the Good Cashmere Standard, a seal of approval verified on an annual basis to ensure best practices are abided by going forward.

"We can build on our years of experience with Cotton made in Africa. We know that training material is necessary for the successful and sustainable implementation of a standard," said Stridde.

Web: bit.ly/3fK7B1I

Pandemic closes down recycling markets

The textile and clothing recycling industry has been thrown into chaos by the coronavirus with prices plummeting and most international markets closed, according to the Textile Recycling Association.

Simon Glover reports on the implications.

Retailers offering clothing take-back schemes, along with charities and local authorities, are in for a big shock when they see what price – if any – they can command for used clothes and textiles in a post-pandemic world.

That is the stark warning of Alan Wheeler, director of the Textile Recycling Association (TRA), Britain's trade body for textile collectors, graders and processors, who says that prices are close to rock bottom.

Historically, used clothing has attracted a high economic value compared to most other recycling streams, and suppliers have come to expect a significant income running into hundreds of pounds per tonne.

▲ The textile and clothing recycling industry has been thrown into chaos by the coronavirus with prices plummeting and most international markets closed.

But Wheeler says: "This is no longer the case and indeed our suppliers may find that they will have to pay to get their goods taken away. Since the lockdown started the value of goods collected through textile banks has plummeted."

The *Letsrecycle.com* website reveals that the price paid for collections from textile banks – the only source currently open – dropped to just £30 (US$37) per tonne in April, down from £130 (US$160) the previous month. "This could well drop further beyond May," adds Wheeler. "So household waste recycling centre operators, local authorities and charities must understand that they may not get any income at all through banks and a gate fee could be introduced."

The main problem is that most international markets for used clothing have closed because of COVID-19, either through direct banning of imports, through lockdown measures imposed in recipient countries or because of other reasons.

> **"I don't think there will be an economic market for used textiles for the foreseeable future**
>
> *Alan Wheeler*

By value – Sub-Saharan Africa is the biggest market for used clothing in the world and the two biggest markets in Africa for the UK are Kenya and Ghana, both of which are currently refusing to accept deliveries.

Kenya has banned imports of all used clothing until further notice – citing used clothing as a potential conduit through which the coronavirus might be spread – even though there is little scientific evidence to support this can happen.

In Ghana, the market has come to a complete standstill because of government lockdown restrictions to limit the spread of the virus. Wheeler says both markets need to reopen as quickly as possible to keep supply chains moving.

"One of the biggest operators told me that ~ there were only five countries in Africa still accepting any form of clothes, and these represent only a very tiny market share," explained Wheeler.

Although Africa is the biggest market by value for UK exporters, Pakistan takes the most volume as it is prepared to accept lower grade textile waste and has an established fibre recycling industry.

And India, which has become one of the largest importers in the world for second hand clothing, has also stopped taking deliveries. "The whole market is clogged up. It's a real problem. I don't think there will be an economic market for used textiles for the foreseeable future." ■

Transparency report – some progress; could do better

The annual Fashion Transparency Index tracks major brands and benchmarks their performance in five key areas.

Simon Glover reports.

Fashion Revolution, which aims to raise awareness of the industry's most pressing issues, says the high scores in its 2020 Fashion Transparency Index show that progressive brands are taking tangible steps to reveal more about their social and environmental policies.

H&M is the top brand in the latest index, scoring 73 per cent of 250 possible points for publishing detailed information about its supply chain and approach to a range of social and environmental issues.

This was the first year any brands had scored 70 per cent or higher in the index. C&A was second with 70 per cent, followed by Adidas and Reebok at 69 per cent, Esprit with 64 per cent, and both Patagonia and Marks & Spencer at 60 per cent.

However, more than half of the 250 brands reviewed scored 20 per cent or less, suggesting there is still a long way to go towards transparency amongst the world's largest fashion brands and retailers.

"While we are seeing notable progress made on transparency, there is still much more fashion brands can do to provide credible and comprehensive data that enables consumers to make better decisions, unions and NGOs to help brands do better for workers and the living planet, and any other stakeholders to drive further progress," said policy director and report author Sarah Ditty.

The lowest scoring brands, with a score of zero, were Swiss luxury house Bally, Italian brand Max Mara, denim brand Pepe Jeans, the eponymous brands of Tom Ford, Elie Tahari and Jessica Simpson, Dutch high street brand Mexx and Chinese retailers Belle, Heilan Home and Youngor.

Since 2016, Fashion Revolution has tracked major brands and benchmarked their performance against five key areas: policy and commitments, governance, traceability, supplier assessment and remediation, and spotlight issues.

▲ Garment factory in Cambodia.

> **"While we are seeing notable progress made on transparency, there is still much more fashion brands can do**
>
> *Sarah Ditty*

This year's index included an additional 50 brands and retailers, including UK brand Pretty Little Thing which scored nine per cent.

Ditty added: "The Fashion Transparency Index has enabled us to have constructive conversations with major brands about what they can do to be more transparent. We believe transparency is the first step in holding them to account for the impacts of their business practices.

"We will continue to use the index to measure brands' annual progress on transparency and to push them harder and faster towards taking greater responsibility for their policies and actions on social and environmental issues."

The average score across the **250 brands** was 23 per cent, two points up from 2019. Amongst the 98 brands reviewed each year over the past four years, there has been a 12 point increase in their average scores, illustrating how - according to Fashion

Revolution – the exercise is putting pressure on them to disclose more information.

The brands with the highest score increases this year were Monsoon, up by 23 points; Ermenegildo Zegna, up by 22 points; Sainsbury's which rose 19 points; Dressmann, up 17 points, and Asics, Urban Outfitters and Anthropologie which all rose by 15 points.

Gucci was the highest scoring luxury brand at 48 per cent, up eight points on 2019, and was the only brand to score a perfect 100 per cent in the section on 'policy and commitments'. Ermenegildo Zegna was also singled out for praise after becoming the first luxury brand to publish a detailed list of its suppliers.

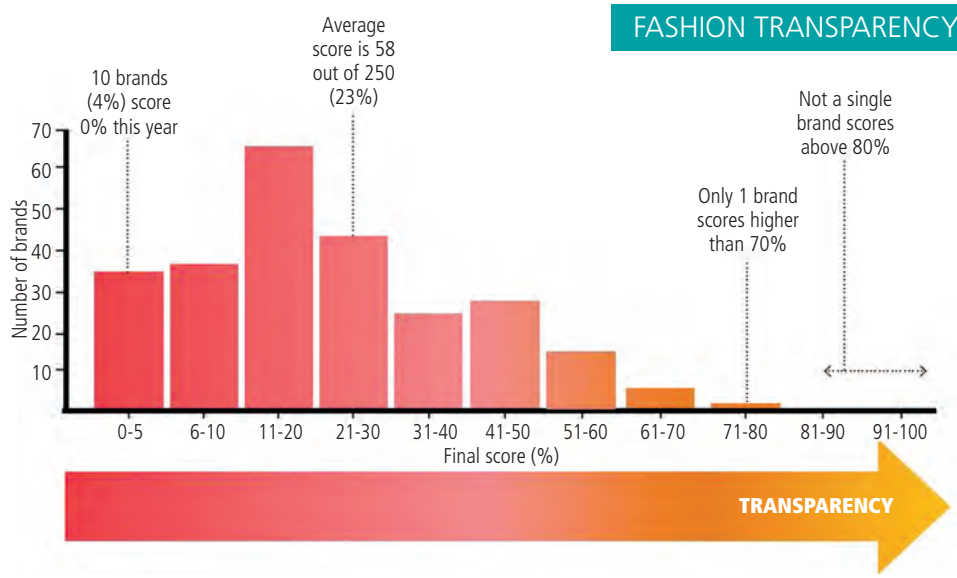
Four out of ten brands surveyed had published lists of their **first tier manufacturers**, up from 35 per cent in 2019. Fashion Revolution hopes this number will rise above 50 per cent next year.

The index found that, as in previous years, the majority of brands and retailers published little information about their efforts, if any, to improve pay and achieve living wages in the supply chain.

Less than a quarter (23 per cent) disclosed their approach to achieving the payment of living wages to workers in the supply chain – and only five brands published a measurable roadmap or strategy for how they would achieve this.

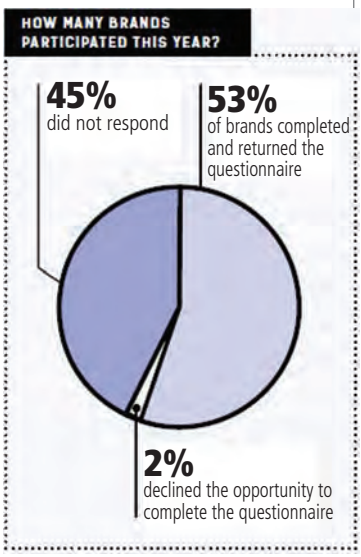
"This is an urgent issue for so many workers in the textile supply chain who struggle to afford life's basic necessities. While it is a complex issue to solve, without more collective action and greater transparency from major brands and retailers, it will be a very long time before workers are paid decent and fair wages," said the report.

The index found that 78 per cent of major brands published a policy on energy use and carbon emissions. But only 16 per cent had set Science Based Targets to align their environmental goals with the Paris Agreement's aim to limit global warning to below 2°C above pre-industrial levels.



> **"This pandemic proves exactly why transparency in the fashion industry is so vital**
>
> *Sarah Ditty*

Nearly a quarter (24%) published details of processing facilities, up from 19% in 2019, while just 7% revealed details of raw material suppliers.



COVID-19

Fashion Revolution said the 2020 index showed that brands and retailers had been evading their responsibilities over the COVID-19 pandemic by failing to disclose key details of their purchasing practices.

It revealed that only six per cent of brands disclosed whether they had a policy to pay suppliers within a maximum of 60 days, and just two per cent revealed how often they paid suppliers on time.

Ditty accused many of the world's biggest fashion brands of evading responsibility, and its associated costs. Only 15 per cent of the 250 brands assessed had published responsible exit strategies, detailing the progressive steps they take when they stop working with a supplier, rather than simply taking a cut-and-run approach.

"In order to build a more responsible fashion industry as we come out of the other side of this global crisis, brands and retailers must disclose much more information about their purchasing practices, their pricing model and how they work with their suppliers," she said.

"The vast majority of these workers lack social protection systems and have no savings to fall back on due to the low wages they continue to earn making clothes for some of the world's most profitable companies.

"This pandemic proves exactly why transparency in the fashion industry is so vital and why we cannot afford to return to business as usual."

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Money talks

#PayUp campaign gives fashion's supply chains a voice.

By Chris Remington.

A modest petition launched in late March by workers' rights organisation Remake has galvanised industry action in just a couple of months and has forced the hand of leading apparel brands and retailers at a time when their supply chains had been left at sea.

News at this stage in the COVID-19 saga was divisive… with fashion's heavyweights either pledging to pay for goods ordered but not yet received, or choosing the more frugal alternative which has been lambasted by many.

Taking the fight to the brands, Remake has garnered the support of more than '4.7 million' people, with its petition signed by more than 15,000 people. As support for the campaign has grown, so too has attention from the brands in question.

"We have heard directly from several brands and retailers who have been anxious to be removed from our petition. However, there are still a handful of brands who are denying our allegations and telling the press that they are going to pay their garment makers," Ayesha Barenblat, Remake's founder and CEO tells us.

▲ More than 4.7m people have shown their support for the campaign.

Thus far, 14 companies have pledged to pay their suppliers and have taken action to start these payments. These include: H&M, PVH, VF, Target, Next, Tesco, Zara, Kiabi, M&S and LPP, Uniqlo, Adidas, Nike and Under Armour.

In practice, these repayments are said to total US$7.5 billion globally, US$600 million of which has been dispersed across Bangladesh alone. As such, according to figures from the Awaj Foundation, 71 per cent of garment workers in Bangladesh were paid in April. This sum could have painted an entirely different picture of the plights of Bangladeshi people had the PayUp campaign not come to be the driving force that it has.

Still, there's work to be done, with more than 15 brands yet to make such commitments. These include: C&A, Primark, Gap, Bestseller, Kohl's, JC Penney, URBN, ASOS, Arcadia and American Eagle Outfitters.

"Kohls and JC Penney have been two of the biggest culprits, by not paying up or engaging in any way to work with their suppliers to find a path forward," Barenblat notes. "We have also heard from suppliers that Gap is asking for discounts. While we recognise that brands and retailers are also in difficult financial circumstances, the factories operate with even slimmer margins and the workers bear the most risk when Gap tries to negotiate on previously agreed upon contract terms.

"The most critical and urgent focus for our campaign right now is to get owed money into the hands of garment makers before social unrest erupts globally as these makers are unable to pay rent and acquire food," she continues.

Going forward, the organisation says work will focus around health and safety, as the number of garment factories re-opening, despite lingering concerns, continues to surge. Though sceptical, Remake's priorities lie with worker wellbeing, wherever that may apply.

"We are treating this crisis as a reset moment. Going back to business as usual is not an option." ■

Paid up includes:

- VF Corporation
- H&M
- Zara
- PVH
- Target
- M&S
- Next
- Kiabi

Yet to pay up includes:

- C&A
- Primark
- Gap
- Bestseller
- Kohl's
- JC Penney
- URBN
- ASOS

Simon Ferrigno
Correspondent,
Cotton & agriculture

Cotton Horizons

Focus on resilience

In the short term, the impact of the coronavirus continues to affect cotton, as orders decline and stocks rise, prices fall and uncertainty reigns. The latest USDA FAS Cotton: World Markets and Trade report for May 2020 says there will be lower consumption and trade in the rest of the season with much higher stocks, although there may be some recovery in 2021. Yet, this is all uncertain and farmers may indeed plant considerably less.

However, environmental and social pressures in cotton remain, and lower forecast prices will affect farmers and workers. It is imperative that efforts to make cotton more sustainable continue, but it is also important that a focus on resilience in the face of crisis continues, especially ensuring that farmers can resist shocks both financially and agronomically. Price stabilisation mechanisms will be important, as will attention to diversification. Cotton farmers cannot easily switch to food crops. Cotton supply chains are well organised and easier as cotton is non-perishable; food crops need to be faster, with rapid transit to market, or good processing and storage facilities.

GOTS standard update

Version 6.0 of the Global Organic Textile Standard (GOTS) was released on 19th March 2020 (see: www.textile-standards.com). It now features stronger social and environmental criteria including a nod to OECD due diligence guidelines. We caught up with Rahul Bhajekar, managing director of GOTS, to find out about this and other changes to the standard, as well as implications for fibre sourcing and organic farmers, traceability and fraud control.

He describes this version as "one of the most prolific ever in terms of comments from stakeholders, with 250 inputs received with much work for the committee, coming from a broad spectrum of interests including many new stakeholders, reflecting the growth in GOTS".

One result is a much more complex Section 3 (social standards) which includes much more detail. "Where, for example, the previous version talked about 'no discrimination' as a blanket statement, now things are spelt out, including the protection of pregnant women from discrimination, which is now an explicit requirement."

In the same spirit, the revised GOTS standard includes the requirement that OECD due diligence guidelines form the basis for when certification bodies (CBs) are doing risk assessments, to decide what to evaluate in more detail. "And alongside due diligence", Bhajekar continues, "there is also a section on ethical business behaviour (Section 5), which also references the OECD."

On sourcing, the revised standard has also been updated with more detail based again on ethics and due diligence. In the specific example of mulesing sheep, Bhajekar confirms wool fibre derived from this practice is now banned, "including where conventional wool might be used as an additional fibre". Under the standard, fibres coming

into GOTS-certified supply chains also have to be certified under the IFOAM Family of Standards. In the case of Australian wool, for example, this means the standard requires no mulesing, with certifiers having to check declarations and perform a due diligence check.

GMO testing of fibres is now also mandatory, where previously it was based on risk assessments. Testing will now be done even in countries where no GM cotton is grown. The test follows ISO protocols and is more stringent. GOTS will also proscribe the use of any traceability systems using genetic markers, as for now it remains unclear how they might affect cotton. "So, for now, like GM based enzymes, they remain banned," said Bhajekar. But the situation is under review as markers are not presently in widespread use, but this may change as systems clarify how they work and whether or not they modify fibre and fibre properties.

Meanwhile, anti-fraud measures are changing, with an updated GOTS transaction certificate policy. There is now a specific reference to raw material with a farm scope certificate, or transaction certificate, for cross-checking. This can be done manually but also via a database, in development with Textile Exchange. This will be a mass balance type approach checking total reported volumes of raw cotton with certificates to avoid duplications.

The database (when online) will extend possibilities for fraud reduction, enabling checking with certifier information and national standards and organisations registering organic products, such as NOP (regular readers will note similarities with the system offered by Check Organic, which cross-references certificates with certifier databases and other information to ensure that goods sold match goods in).

Bhajekar hopes the system will launch towards the end of this year, when they will start populating the system, so that there can eventually be checking before Transaction Certificates are issued.

Additional changes include a positive move on the Living Wage. All Certified Entities are now required to work out a living wage (using BSCI template), or where one exists, to identify the wage gap and how they will close it.

On chemicals, all formulations must now be audited. During visits, environmental health and safety checks will review environmental management systems and safety every third year, with the use of personal protective equipment (PPE) included in the social audit. Certified entities must also have product stewardship in place, including regular testing, and quality assurance.

Cotton and water data

Continuing with the data theme, Australian start up, Farmbot (https://farm.bot), is working with real time data and the 'internet of things' to compare present and past data in real time, to provide farmers with up to date information on water, availability, climate, soil moisture, and so on.

From this data predictions are made for hours and days ahead in terms of planting and cultivation actions. The device predicts savings of Aus $ 2,500 per unit.

Climate change as a foreign policy

Writing in *Asia & The Pacific Polity Society*, Cecilia Tortajada and Theodore Lai emphasise that national security is threatened by climate change, which means nations must work together to solve it to avoid water shortages and other problems, including conflict and mass migration (this is also timely in how nations should respond to the present COVID-19 pandemic).

The implication for cotton is that cotton consuming countries (those which grow and process cotton and textiles, as well as those using finished goods) should seek to stabilise cotton sectors in countries vulnerable to climate change, including protecting farmers and workers from crisis and ensuring cotton production is resilient. The authors say: "The integrity of borders in the global north involves the environmental wellbeing of countries at risk of climate-related crises."

In this sense it's timely that under the present crisis governments such as the UK are offering financial support to textiles businesses with supply chains in the global south to help them support suppliers and communities. These types of efforts should continue in future to address climate change and other human induced global problems. See https://www.ukft.org/grant-vulnerable-supply-chains/ for more detail on this scheme.

Cotton and digitalisation

Katharina Au of Bayer Crop Science, in a recent interview conducted by the Bremen Cotton Exchange, noted how digitalisation in the cotton supply chain promised more efficient use of energy and water and improved input use, as well as soil management.

So far, not so very new.

But Bayer now see digital tools as the third pillar of their strategy alongside seed and crop protection.

It is promoting a new tool called the 'Climate Field Viewer'. Coming from a 'precision agriculture' approach, it uses data to provide more detailed information on field conditions 'using simple navigation and map visualisations'.

Of course, better data can improve the accuracy and precision of input use and irrigation, as well as planning. However, systems under the control of large companies can raise concerns over data ownership and excessive concentration in agri-business, which risks reducing farmer choice, while proprietary systems also risk locking farmers into one company's products and one type of approach, i.e. GM and pesticides.

Positively, Bayer is thinking of more limited applications suitable to developing countries, such as providing weather reports.

However, there is a big question to ask. if digitalisation can help, is it helping from the right starting point? If we had known such tools as digitalisation and robotics, soil testing and so on at the dawn of agriculture, would our present farming systems look the same as now, or different? In other words, should we look to redesign systems from the ground up rather than patching a system that tends to address every system failure with a new version of the same approach (i.e., replacing one pesticide with another, or with herbicide resistant crops)?

Cotton Australia sustainability report

Cotton Australia recently released its second sustainability report (the previous one was in 2014). The headline release claims reductions per bale of cotton of 48 per cent for water, 34 per cent less land, and 97 cent less insecticide (since 1992), with the report tracking changes on eight criteria since 2014.

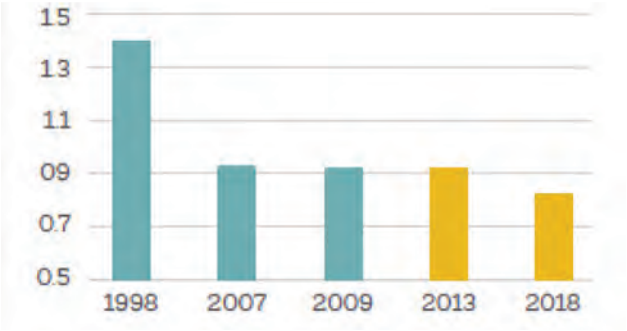
Water use since 2014 has decreased 9.4 per cent. But the report snapshot also highlights a rise in carbon emissions from increased nitrogen fertiliser use. This is welcome transparency, and there is an explicit commitment to address this in future, with development of five and 10 year targets based on the latest data.

The report snapshot highlights a reduction in 'toxic pressure' from pesticide use, and there is a new measure on well-being and social capital. The report shows a decrease in young people involved in the cotton sector, a reduction in injuries but sadly an increase in fatalities.

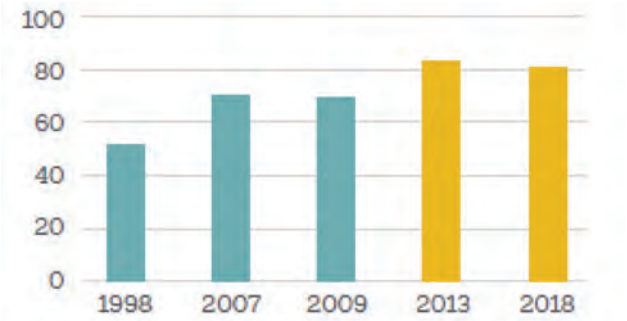
The MyBMP programme, the sustainability programme by Cotton Australia, had 630 cotton growing businesses in 2019, or 66 per cent of the Australian cotton industry. The report says 234 of those farms 'had completed a third-party assurance program to be myBMP accredited', up from 43 in 2014.

Progress in water is down to improved irrigation, management of slopes and better understanding of field variations, the report claims. On carbon, the report says:

GROSS PRODUCTION WATER USE INDEX (ML/BALE)



WHOLE FARM IRRIGATION EFFICIENCY (PER CENT)



Source: 2017-2018 Water Productivity Benchmarking study.

"Cotton production emits about 0.2 per cent of Australia's greenhouse emissions." Fertiliser accounts for 58 per cent of emissions, with farm fuel (15 per cent) and ginning (10 per cent) the next biggest contributors. The report suggests sequestration is not yet well measured, while solutions trialled are four-year rotations of cotton with other crops (corn, wheat, mungbeans) and on-farm vegetation reserves such as riparian forest. One farm is claimed to be carbon negative, with soils acting as a carbon sink.

On pesticides, insecticide use has declined due to GM and IPM, but herbicide use has increased (again due to GM). However, the report says that Australia has reduced its indicator for the toxic load to bees by 18.2 per cent in the four years to 2018.

Cotton Australia also use the Environmental Toxic Load indicator to monitor other hazards, including herbicides, which reduced 20 per cent in the same four years.

The wellbeing indicators look to take the report away from economic and environmental issues to evaluate areas such as social capital, and resilience.

Anthropocene

More data around the concept of the Anthropocene, the notion that we live in the age of human determined ecosystems. *The Anthropocene – The Earth in Our Hands* (Reinhold Leinfelder, 2020) highlights a 60 per cent decline in the populations of 4,005 vertebrate species, but also that humans and their livestock now account for 96 per cent of the total biomass of living mammals. In other words, wild animals make up only four per cent of mammals.

Poultry accounts for 70 per cent of all birds, while humans have produced 8.3 billion tonnes of plastic so far. This is more than the biomass of all living humans. Only 2.5 billion tonnes of this are still in use, with 4.9 billion tonnes in the environment as waste. This document urges use of the Sustainable Development Goals to link life to environmental issues, but says they need further development to link them to different models of sustainability.

Insetting and cotton farming

A webinar in February by the *International Insetting Platform* on the topic of scaling up regenerative organic cotton farming presented different techniques and programmes looking to reduce carbon emissions through action in supply chains.

Many of the mechanisms proposed will be familiar, such as using compost to replace chemical fertilisers. Windbreaks are also proposed, which can also help carbon sequestration, and which have been used in RARE China's organic programmes.

As we have previously reported, RAREs scenarios do show huge potential for carbon sequestration if all methods applied across all farms and land, with potential mentioned of emissions reductions of up to 2.3 tCO_2eq/hectare (a 65% improvement compared to baseline) and a carbon sequestration potential of up to 10.7 tCO_2eq/hectare.

However, presentations showed that organic fertilisation can lead to higher costs in early years.

The platform's members include WWF and Textile Exchange, as well as RARE, Chanel, Kering, H&M, Ecocert, FSC, South pole, and other brands.

Satellite data for Africa

Although most African cotton is rain-fed, the need for better water data in many areas is acute and with variable rainfall in some areas, this may become more significant. The International Water Management Institute (IWMI), a not-for-profit working on water and land management in developing countries is working with a satellite service (Digital Earth Africa), to use remote sensing and data management to deliver information based on present observations and past records of satellite data to provide real time information to African governments and communities on water.

Initially it will focus data on available water resources to help determine allocations, but in future, information could help decide whether crops such as cotton need irrigation. As many African regions become more water stressed, crops that currently depend on rainfall may need to consider irrigation, cotton included.

Better knowledge could also help plan water harvesting to provide water for rural communities and farmers to manage dry periods and conversely to siphon off excess rainfall against non-rainy days. Again, potentially valuable for cotton.

Data and resources will also be made available to innovators in Africa to try and spur the development of new applications.

Artificial soil

Artificial soil has been developed by researchers at Khalifa University in the United Arab Emirates. The soil is said to be customisable, with the first trials based on soils from Thailand and the Ukraine.

The main ingredient of the artificial soil is sand.

The project is based on the need to increase food production in the UAE, but if there are large scale opportunities to make soil, many regions of the world where farming is marginal or where soil has been destroyed by modern farming methods could benefit from such approaches (much as protecting, maintaining and repairing existing soils through more sustainable farming would be preferable).

Please, back off

Humanity's encroachment on pristine natural habitats is often cited as a key reason why new pathogens emerge, so should industries such as fashion take some of the blame for the emergence of COVID-19?

John Mowbray reports.

What we eat, breathe and drink all rely on biodiversity, but in some cases what we wear depends on natural textile fibres growing in places with a distinct lack of biodiversity, or no biodiversity at all, thanks to habitat destruction and modern agricultural practices.

It's not this slash and burn as such, that reveals new pathogens though, rather, it's the behaviour of new communities that come to work in these environments that rub up against wildlife that humans have never before encountered at close quarters.

Many of the natural textile fibres we all wear, cotton, viscose, wool, lyocell, have always relied on agricultural practices and forestry. And in many cases, growing the raw materials used to make fibres has over centuries, placed huge pressure on ancient ecosystems and landscape not previously subjected to human interference.

It's something that's not lost on Nicole Rycroft, founder and executive director at NGO Canopy, who said in a recent blog post: "Five of the epidemics in recent years — Ebola, SARS, bird flu, MERS and now COVID — have all crossed the human-animal barrier due to the unsustainable exploitation of animals, the wildlife trade and disruption of intact forest landscapes." Rycroft, whose organisation campaigns to eradicate the use of pulp from ancient and endangered forests to produce fabrics such as rayon/viscose, modal and lyocell, says: "a growing body of science shows that the degradation of these ecosystems not only erodes our climate and the health of biodiversity, it also creates dangerous conditions for new diseases that pose unprecedented threats to humanity. Good relationships between ourselves and our planetary home can be one of the 'aha!' moments from this (COVID-19) crisis and must be central to our path forward."

> **"When a virus needs a new host, often we are it**

Rabies and the plague crossed from animals centuries ago. Others include: Mers linked to camels in the Middle East; Lassa fever from rats in Nigeria; Nipah from pigs in Malaysia; H5N1 and SARS from bats in China; and some like Zika, a West Nile virus, are now established in the Americas.

The risk of transmitting pathogens from animals to humans is always possible. However, in the instance of forestry and agriculture – especially in developing regions – then it is our interactions with that risk which need to change. This means community engagement and education. International businesses must listen to and work with people at the

community level and understand that they may no longer be only exporting valuable raw materials for industries such as the fashion sector – with diseases much more likely to travel further and faster than ever before.

"We invade tropical forests and other wild landscapes, which harbour so many species of animals and plants – and within those creatures, so many unknown viruses," David Quammen, author of *Spillover: Animal Infections and the Next Pandemic*, recently wrote in the *New York Times*. "We cut the trees; we kill the animals or cage them and send them to markets. We disrupt ecosystems, and we shake viruses loose from their natural hosts. When that happens, they need a new host. Often, we are it." The US Centers for Disease Control and Prevention (CDC) estimates that three-quarters of new or emerging diseases that infect humans originate in animals. And the pathogens that cause these diseases **largely come from** animals (zoonotic) located in areas where biodiversity is under threat.

"Evidence points to bushmeat trade and consumption as the likely driver for the emergence of COVID-19. But the emergence of SARS and Ebola was also driven by bushmeat consumption and trade," says Florian Liégeois, virologist at the Institut de Recherche pour le Développement (IRD). "However, when looking at past outbreaks caused by a pathogen with a wildlife origin, land use changes, generally due to changes in agricultural practices, has been the leading driver."

Apparel sector analysis

In 2016, the IUCN (International Union for Conservation of Nature) produced **a 41-page document** on how the issue of biodiversity could be impacted by the activities of the global apparel sector. Supported by Hugo Boss, the report detailed key parts of the apparel value chain which had impacts on biodiversity and wider environmental aspects.

The findings of the report were not too surprising, with the farming of textile raw materials such as cotton having an impact on biodiversity – in the same way that most agricultural monocultures can do – if farmed in an 'unsustainable' way. "Area expansion could result in the loss, degradation and fragmentation of natural habitats in tropical and sub-tropical regions of the world," said the report's authors, who noted that cotton represents between 30 and 40 per cent of all fibre used for textiles and occupied 2.4 per cent of global cropland, (50 per cent irrigated land) with production expected to grow from both yield increases and area expansion, especially in the Africa and South Asia regions. This, the report says, "could result in the loss, degradation and fragmentation of natural habitats in tropical and sub-tropical regions of the world."

Irreversible loss of natural habitat through conversion and fragmentation from expansion for pastures, or irreversible degradation from over-grazing or reduced water availability for natural habitats due to diversion for irrigation put natural fibres in the 'high risk' category of the report for biodiversity loss.

Biodiversity Risks and Opportunities in the Apparel Sector. D. Aiama, G. Carbone, D. Cator, D. Challender, IUCN, 2016.

The world lost more than one football pitch of forest every second in 2017, according to data from a satellite survey conducted by Global Forest Watch.

What to do?

- Move to deforestation-free supply chains.
- Ensure major product lines using raw materials that are based on terrestrial ecosystems (such as cotton or plantation agro-ecosystems, or natural forest ecosystems), will only source from existing managed landscapes for agriculture or forestry activities.
- Brands should promote land restoration for raw materials or commodities that have a potential impact on land use.
- Join or develop land restoration initiatives at the landscape level to bring back productivity to adjacent areas, thereby reducing the risk of natural habitat conversion for other land uses, including food production.

One way forward

The causes of the biodiversity crisis are well known and so are the remedies. First and foremost is stopping the destruction of the environment – **deforestation**, the world trade in any commodity or living species, the transport of exotic animals – for short-term gain, often just a few percentage points of profitability compared to local production. With respect to commodities such as raw materials derived from at-risk regions that are still being used to make textiles, one way to mitigate this risk is plugging into the concept of a circular economy where waste is recovered, and products are reused – minimising the chances of pathogen encounter. Such a global policy would even allow for re-wilding some areas currently used to harvest fibre raw materials. This time last year, this suggestion would have sounded unnecessarily alarmist – perhaps even outrageous. But in the wake of Covid-19, leading strategic thinkers are already in consultation with policymakers on how to ensure that businesses can think more strategically to implement a recovery model that incorporates circular economic principles (see page:11). ■

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Breaking the cycle

Could re-evaluated business relations do wonders for sustainability and transparency?

Chris Remington reports.

▲ Could consolidated, circular supply networks create more robust partnerships?

American product testing, inspection and certification organisation NSF International has urged the textile industry to ditch the "outdated" term of 'supply chains' in favour of 'supply networks', which the firm's senior business development manager, Jeff Wilson, believes better reflects the modernised landscape that can enable a shift to a better connected, circular and more sustainable sector.

"If the definition of insanity is saying and doing the same things over and over and expecting different results, it's time to start saying and doing things differently," he insists.

Wilson draws comparisons between the linear production cycle of 'take>make>use>' waste and the rigidity of conventional supply chains to highlight the regressive nature of the term at a time when brands and manufacturers are looking to set a new precedent with regards to social and environmental sustainability.

"A linear model promotes a lack of transparency, traceability and visibility into all aspects of production. The figurative distance in the typical chain-based flow diagram between brands and their suppliers – especially between raw material and intermediate processing – actually creates very real distance and a lack of visibility and relationships with companies' suppliers. The solution? Change the model, change the language," Wilson suggests.

With his alternative – a supply network – the business development manager believes the industry can strike a new tone, one which presents what is typically a standard supply chain as an ecosystem of collaborative networkers utilising "lateral thinking, state-of-the-art technology and processes; omnidirectional flows of data, information, innovation and materials; and valued, respected long-term relationships".

What is instrumental in mounting this charge is modern technology: digitised processing machines, artificial intelligence, blockchain, robotics and other solutions which enable greater speeds and, more importantly, connectivity between partners.

What's more, Wilson alludes to the potential for substantial waste savings if brands choose to operate with a more compressed network of partners, one which doesn't require goods to be passed from pillar to post.

> **"If the definition of insanity is saying and doing the same things over and over and expecting different results, it's time to start saying and doing things differently**

"I could go on with benefits from creating closer and longer-standing partnerships among all stakeholders, improving quality of products, faster and better problem-solving, and probably the most important: creating trust and credibility with consumers, who are the focal point of this network," he says.

To this end, Wilson says a new model is "integral to meeting increasing consumer expectations" of the industry; this, with regards to ensuring a decent standard of living for those in the lowest paid roles.

"Consumers want a better product at a fair price that doesn't hurt people and the environment, and expect brands/retailers to deliver. And why wouldn't they expect it? Why would we ever think to ask them this, and more importantly, ask them how much they'd be willing to pay to not hurt people and the environment? We continue to give consumers a false choice," Wilson says.

He concludes: "Let's move this industry beyond the archaic model, language and behavior of our current chain-based model. The time is now to move past the status quo and reconceive our model." ■

The legacy of coronavirus

COVID-19 has forced the Apparel Impact Institute (AII) to take an innovative approach to its efforts to reduce the environmental impact of the fashion and textiles industry - leading to some new ways of working.

Simon Glover reports.

Although it has proved a huge challenge to the work of the San Francisco-based Apparel Impact Institute (AII) to reduce the use of energy, chemicals and water in textile mills, the coronavirus pandemic has also sparked some creative thinking.

All site visits and in-person events had to be suspended – although some are now being resumed – while temporary factory closures are expected to cause delays of up to six months in current projects.

However, AII vice president Kurt Kipka says the crisis has also forced the team into new ways of working, such as virtual factory visits, webinars and Zoom meetings, some of which he believes could outlast the pandemic.

"It has caused us to change the way we look at things, we have been looking at remote offerings such as webinars, which historically we may not have been fond of, as a way of making improvements in this industry and found a surprising appetite for it," he said.

"I think some of these changes will last. We need to try new things. We don't need to fly as much as we do. We don't need to meet as much as we do, we have to make sure that we meet or go on-site, only when it's absolutely necessary and that we get the most that we can from those visits."

Virtual plant visits have been proving valuable for some aspects of AII's work, such as initial inspections, although less useful when it comes to verifying completed improvement schemes to ensure crediblity.

Kipka admitted: "There is no substitute for boots on the ground, to see what is happening at first hand, but we're having to change the way we think about that. This could lead to some new approaches.

> **It has caused us to change the way we look at things... we need to try new things**
>
> *Kurt Kipka, vice president AII*

▼ AII works to reduce the use of water, chemicals and energy in textile mills

"But there are both technical and psychological issues in convincing the owners of facilities that a retrofit is necessary and that improvement schemes will benefit them. It takes trust and it's difficult to do that on Zoom."

However, Kipka said remote engagement opportunities had proved successful at maintaining interest and momentum for impact work while the company was now resuming on-site activities in some regions where it had been deemed safe to do so.

AII has developed a five point strategy for the pandemic: approach the market with sensitivity; offer flexible solutions; support suppliers; stay in close contact with brand partners; and react with the future in mind.

The NGO fears that, with the industry taking a huge financial hit during the pandemic, sustainability initiatives could suffer when the immediate crisis is over as brands and other players look to balance reduced budgets.

Kipka added: "Brands are struggling financially, and that's been passed on to their suppliers. Those relationships are strained, understandably so, and the reality is that uncertainty in the business environment means less money to focus on energy, water and chemical impacts.

"There is no question at all

that brands will be looking at their budgets for the foreseeable future. Historically, we know that some of the first things to go are the programmes and initiatives that we work with.

"It's going to be difficult. It's still to be determined if we can maintain the same high level within the activities that we have been undertaking or whether we have to re-evaluate what success looks like."

But in the long-term, AII sees a greater opportunity for alignment and efficiencies throughout the apparel industry as a result of the pandemic.

"Coming out of this crisis, the most important thing companies should be thinking about is how to double down on proven programmes and sustainability models," added Kipka. "AII is committed to helping our partners and the industry identify and scale those proven efforts."

▼ Lewis Perkins, president, Apparel Impact Institute.

AII launched in October 2017 and was founded by the Sustainable Apparel Coalition (SAC) in collaboration with the Sustainable Trade Initiative, financial support was also provided by Target, PVH, Gap and HSBC.

It subsequently took control of the Clean by Design programme, previously run by the Natural Resources Defense Council (NRDC), and aims to be the industry-leading resource for apparel brands that want to improve their environmental and social performance.

AII president Lewis Perkins said that, while the pandemic had sparked uncertainty throughout the industry, the organisation was committed to continuing its work.

"While many things seem uncertain right now, AII is staying the course. We are still here to help our partners meet their goals, and we look forward to supporting those teams make progress, with our team acting as an extension of theirs," he said.

"We have our eye on the future, knowing there's an opportunity to help rebuild this industry and create the world we want to see." ■

Europe tends green shoots of recovery

Leading businesses - including fashion giant H&M and home furnishing chain IKEA – have joined a new alliance with politicians and environmentalists in calling for an EU-wide green recovery strategy after the COVID-19 pandemic.

Simon Glover reports.

Close to 300 company CEOs, politicians, trade union leaders and environmental activists have so far signed up to the Green Recovery Alliance which urges Europe to embrace a post pandemic recovery plan with the environment at its heart.

The alliance aims to develop a "new model of prosperity" which would be based on sustainability, the protection of biodiversity and the transformation of the EU's agri-food system.

As well as Helena Helmersson, CEO of H&M, and Inter IKEA CEO Torbjörn Lööf, signatories include EU ministers, MEPs, business associations, the European Trade Union Confederation, NGOs, and think tanks. "There will be a future after the crisis we are facing, and we see this call to action as a step to support and help make sustainable decisions along the way," said an H&M spokesperson.

Lööf commented: "We will continue to be long-term in everything we do and remain committed to our ambitious sustainability goals for 2030. This is not an either/or situation, the challenging situation today makes us even more determined to accelerate our efforts to tackle climate change."

The Green Recovery Alliance is the brainchild of Pascal Canfin, a French centrist MEP who chairs the European Parliament's committee on environment and public health, who said: "After the crisis, the time will come to rebuild.

"This moment of recovery will be an opportunity to rethink our society and develop a new model of prosperity. This new model will have to answer to our needs and priorities.

"We therefore consider that we need to prepare Europe for the future, and design recovery plans, both at the local, national and at the EU level, enshrining the fight against climate change as the core of the economic strategy."

Perhaps significantly, the alliance has also attracted more than 50 signatories from the world of finance, including AXA, Allianz, BBVA, BNP Paribas Asset Management and Santander.

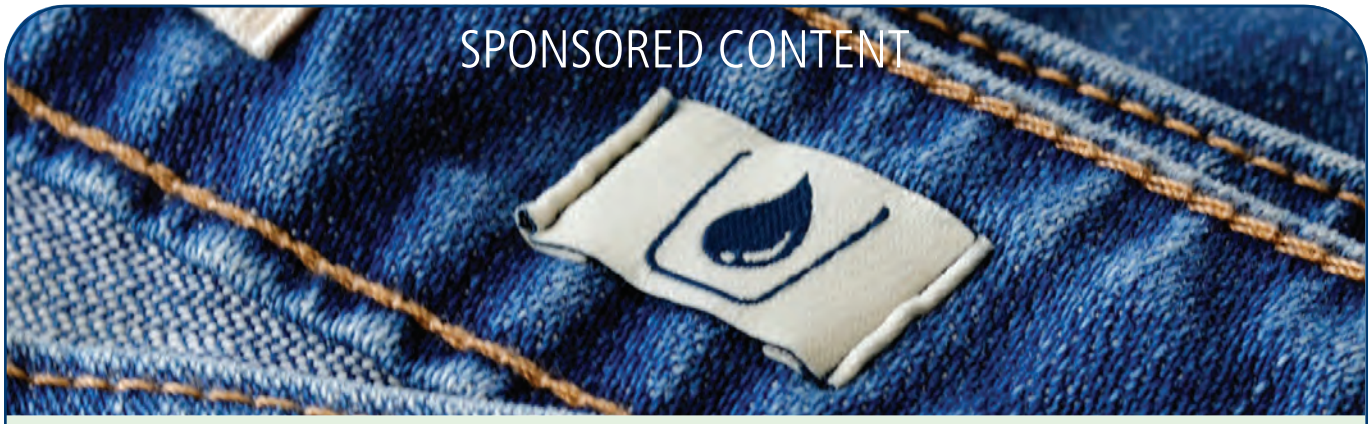
"Today, it is all the more important to work with the actors of the financial sector, because the transition to climate neutrality implies major investments," added Canfin. Despite the resistance of some countries, such as Poland and the Czech Republic, half of member states also signed a separate open letter urging the EU to maintain its commitment to its ambitious Green Deal initiative to make Europe climate neutral in 2050.

European Commission president Ursula von der Leyen has vowed to put the Green Deal at the centre of the EU's recovery plan but doubts have been raised over whether the €1 trillion cost can be afforded in a post-coronavirus world.

However, the letter signed by the environment ministers of Austria, Denmark, Finland, Italy, Portugal, Spain, Germany, and France, amongst others, urges Europe to "withstand the temptations of short-term solutions... that risk locking the EU in a fossil fuel economy for decades to come". ■

> **"There will be a future after the crisis we are facing**
>
> *H&M*

> **"We will continue to be long-term in everything we do**
>
> *Inter IKEA CEO Torbjörn Lööf*



Crystal's 4Zero Collection – Denim Goes Green

Denim is a must-have apparel item in the fashion loop. Eco-friendly denim has become the new trend and is in the global spotlight. Crystal International Group Limited spearheads the manufacturing of sustainable denim products to make denim go green by adopting greener production methods. The eco denim factory of Crystal in China, Zhongshan Yida Apparel Ltd., has long been exploring new ways to sustainable manufacturing. Recently, the factory has initiated a new sustainable denim collection named 4Zero: four "Zero" measures in the laundry process, including zero manual work, zero potassium permanganate ("PP"), zero hypochlorite and zero stone.

Blue Denim, Green Approach

As an extension of Crystal's existing sustainable Eco Blu collection, 4Zero is the innovative process created in Smart Laundry. These new processes can reduce water usage by up to 90% and chemicals up to 70% when compared to the current conventional eco wash method.

No manual work aims to minimise labour work by increasingly adopting laser technology to create various levels of fades. No PP means to utilise environmentally friendly chemicals to partially remove the denim colour and oxidise the denim fabric. During the washing process, eco chemicals were applied instead of PP spray. Similarly, hypochlorite is also traditionally used to bleach and decolourise indigo from denim. Crystal uses eco chemicals, instead of hypochlorite, as the oxidising agents to create different oxidising effects. To assure the eco-friendliness, the chemical used in the 4Zero washing processes are ZDHC MRSL conformance level 3 chemicals, the highest level of ZDHC conformity. In addition, washing stones are traditionally used to cause wear and tear of the fabric, and to generate stonewash look, where denim is required to be washed several times. Stones are abolished to eliminate the problem of environmental disposition of waste, wastewater, as well as the damage to machines resulting from stone washing process. By taking on board these four "Zero" during production, Crystal can pursue the eco-washing strategy while achieving a more sustainable denim manufacturing.

Better washing performance, Lesser environmental impacts

With the replacement of the traditional washing techniques with the greener approaches, the nice appearance of the worn-out look and the distinctive blue hue of denim could still be maintained, and a low water ratio in washing process can also be achieved. The 4Zero strategy can reduce water and chemical consumption during manufacturing process, thus minimising the environmental impacts and achieving a better rating at Environmental Impact Measuring (EIM) tool, which calculates the environmental impact of water consumption, energy consumption, chemical consumption and impact on workers' health. After applying 4Zero, the rating can be improved to green (low impact process), which falls into the best impact category.

New 4Zero collection – Just around the corner

"Our R&D team endeavours to step up efforts to innovate sustainable denim production and establish it as another sustainable choice for our customers", said Mr Miles Lam, Assistant General Manager of Product Development of Crystal Denim. Crystal is about to launch a series of products as 4Zero collection. Stay tuned for the new series.

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Recipe for success?

The ZDHC Foundation has expanded the scope of its work by issuing guidelines for the sustainable production of man-made cellulosic fibres and has launched a new 'leader programme' for textile chemical suppliers.

By John Mowbray

Tasked with leading the textile industry to the zero discharge of hazardous chemicals by 2020, the ZDHC has watched a fair amount of polluted water go under the bridge since it was first formed back in 2011.

Although it was widely predicted that the textile industry would miss the 2020 zero discharge deadline imposed by Greenpeace, there has been some measured industry progress – even if the amount of pollution that textile chemicals generate through bad practice is almost impossible to measure.

Nevertheless, the ZDHC and its members have been increasingly active in taking a proactive approach to improved chemical management, which over the past few months has seen it foray into textile fibre production chemistry with an initial focus on man-made viscose and modal cellulose-based fibres.

Image: © Deerphoto | Depositphotos

New guidelines published by the ZDHC aims to give brands and man-made cellulosic fibre (MMCF) manufacturing facilities an aligned approach for emissions control as well as offering advice on **the recovery of sulphur compounds**, part of the inputs, as well as by-products generated during the fibre production process.

And the guidelines provide MMCF producers with unified criteria for measuring output indicators like wastewater, sludge, air emissions and other process-related parameters.

Scott Echols, director of ZDHC's Roadmap to Zero programme, said it was crucial to reduce the environmental impacts of fibre production for the textile and fashion global chain.

"The release of the ZDHC MMCF Guidelines is an important milestone. It represents ZDHC's first guidelines focused on fibre manufacturing, addressing air emissions and for the first time, resource recovery in production. The ZDHC MMCF Guidelines are the result of a collaborative effort by our contributors," he said.

> **"MMCF Guidelines are a critical companion to Canopy's Hot Button Ranking**

Sulphur compounds from the spin bath and sodium sulphate as by products should be recovered and either returned to on-site production processes or sold as by-product.

Phil Townsend, technical lead for environmental sustainability at Marks and Spencer, commented: "This document gives fibre manufacturers essential guidance and helps to make tangible progress by providing targets to move forward and tackle emissions in a meaningful way."

While Nicole Rycroft, founder and executive director of Canopy, noted: "ZDHC's MMCF Guidelines are a critical companion to Canopy's Hot Button Ranking for all brands wanting to use MMCF, to meet their climate, biodiversity and chemical goals.

"We're excited that our partnership with ZDHC makes it much easier for brands to assess MMCF impacts, in both sourcing and production."

Supplier leader programme

As part of these continued efforts, as we went to press, the ZDHC Foundation also launched a new 'leader programme' for textile chemical suppliers to benchmark their environmental performance and in doing so, earn an 'official certificate.'

The new 'Supplier to Zero Programme' will be rolled out in three steps: 'Foundational', 'Progressive' and

'Aspirational' and provide practical implementation guidance for improvement measures based on the existing ZDHC chemical management framework.

- Foundational: based on the supplier's knowledge of the ZDHC Chemical Management Framework and their ability to strive for implementation leadership.
- Progressive: provide suppliers with a holistic, desktop-based performance review, considering the three Roadmap to Zero dimensions: input, process and output.
- Aspirational: the definition of leadership in sustainable chemical management excellence, based on best available technologies and reflecting industry best-practices.

As part of this framework, "suppliers have the potential to significantly roll back the chemical footprint at a product-level as well as in water and air emissions," says the ZDHC.

The move follows on from last year's launch of its 'Brands to Zero Programme' that was designed in order to build an overarching framework for the implementation of its guidelines with an aim to reduce duplicative efforts in supply chains.

It includes a guided facility evaluation aligned with the newly released ZDHC Chemical Management Framework.

Suppliers with access to the ZDHC Gateway will receive an exclusive invitation to experience the new programme whereas others are advised to contact its 'Implementation Hub' for training. ■

RECOMMENDED CONSUMPTION FOR VISCOSE AND MODAL (STAPLE FIBRE) PER TONNE OF FIBRE

Parameter	Unit	Recommended consumption for viscose and modal – Staple Fibre
CS_2	Kg/ per tonne of fibre	80 – 100
Caustic		0.45 – 0.6
H_2SO_4	t/ per tonne of fibre	0.65 – 1.03
Zn	Kg/ per tonne of fibre	2 – 10
Pulp	t/ per tonne of fibre	1.010 – 1.065
Spin finish	Kg/ per tonne of fibre	3 – 5.3
NaOCl		0 – 70

Source: ZDHC, May 2020

Taiwan Eco Textiles - eco.textiles.org.tw

Think Taiwan for Eco-Textiles

- Recycled PET Bottle Textiles — Reclaim, Manufacture, and Sell
- Recycled Nylon Textiles — Reserve & Recover Resources
- Cellulosic Fibers — from Nature, Back to Nature
- Solution Dyed Polyester Yarn — a Best Choice for Eco Textiles
- 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_2 Emission
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Taiwan Textile Federation

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Wastewater training programme for textile industry

ALEXANDRIA – The Water Environment Federation (WEF) is working with sportswear brand Nike and the Zero Discharge of Hazardous Chemicals (ZDHC) initiative to create a multilingual wastewater operations training programme for the textile industry.

WEF, a not-for-profit technical educational organisation, says the training programme will aim to improve water and wastewater management and treatment throughout global textile supply chains.

The organisations are collaborating to evolve the WEF training manual, trainer's kit, and exams to support ongoing training of wastewater operators. WEF will also begin translating its training materials into Mandarin and Vietnamese, in addition to Spanish.

Nike, who helped develop the curriculum and supported the translations, will use the materials as part of ongoing water conservation efforts in its supply chain.

WEF President Jackie Jarrell commented: "There are tremendous opportunities to improve water quality and quantity by enhancing industrial wastewater management programs such as those in the global textile industry.

"WEF is excited to collaborate with ZDHC Roadmap to Zero Programme and Nike, and about the potential for impact in communities in Asia and Latin America."

John Rydzewski, Nike's director of water programmes, said: "Improved wastewater treatment and 90 per cent freshwater reduction in the textile industry are limited only by commitment and capability. This collaboration is a fantastic opportunity to develop the necessary capabilities and reach a broader audience."

Web: bit.ly/3bbxxA2

PETA investigations have unearthed cases of wrongdoing in crocodile farms.

Mulberry bans exotic animal use in apparel

LONDON – Luxury fashion brand Mulberry has banned exotic animal skins from its future clothing collections, with the firm's spring/summer collection marking this departure.

As conservation experts warn that the trade of exotic skins from the likes of alligators, crocodiles, ostriches, lizards and snakes heightens the chance of spreading disease, Mulberry has made the conscious decision to banish such products, following in the footsteps of American retailer Brooks Brothers which recently reached the same conclusion.

Rosie Wollacott, Mulberry Group sustainability manager, commented: "We have spent a lot of time determining and then continually reviewing our sustainability metrics and targets. At an early stage of this process, we decided not to use exotics in our collections, and this remains our position."

PETA alludes to the rumoured epicentre of the current pandemic – an illegal exotic animal market – as a key reason why brands and retailers should now, more than ever, be looking to make the switch to vegan alternatives.

The animal rights organisation has documented wide ranging cases of animal abuse in fashion supply chains, and it is sadly a similar case for exotic animals. Mulberry joins Chanel, Diane von Furstenberg, Paul Smith, Victoria Beckham, Vivienne Westwood, amongst others, in banning the use of exotic animal skins.

Web: bit.ly/3fqnUR7

Canada Goose sets Bluesign-approval target

TORONTO – Apparel brand Canada Goose has established a new commitment to ensure 90 per cent of its fabrics are Bluesign-approved by 2025. Announced via the firm's first-ever sustainability report, the commitment means that a large proportion of Canada Goose's portfolio will be subject to sustainability assessments.

Company president and CEO Dani Reiss said: "No matter how much we've done over the last 60 years, we need to do more – the world can't wait. Our aggressive commitments are the steps we're taking to transform the way we do business and ensure we are doing everything we can to create the future we want to see."

Bluesign approval is recognised in industry as an assurance stamp that a product has been manufactured with sustainability in mind, from the sourcing of the raw materials through to the end of the supply chain. Companies which subject themselves to Bluesign's vigorous assessment protocol do so recognising that all processes must comply with the organisation's guidelines for industry workers, end consumers and the environment.

"I am happy to welcome Canada Goose into the Bluesign System." said Jill Dumain, CEO of Bluesign. "Bluesign holds our partners accountable to the highest industry standard, only by doing so can we ensure we are making a real global change. We need to continue to move forward."

Web: bit.ly/2WcIIUB

ICAC: cotton supply chain in 'utter chaos'

WASHINGTON DC – The International Cotton Advisory Committee (ICAC) says the COVID-19 pandemic has brought the global cotton supply chain to a virtual standstill with billions of dollars in orders scrapped.
Spinners and other textile workers are facing financial crisis amidst "an unprecedented amount of upheaval and uncertainty", the international commodity body warned in a statement.
"We don't yet know what the ultimate impact of COVID-19 will be on the cotton industry, but the fast-moving pandemic has injected a tremendous amount of uncertainty into every link in the global supply chain," the ICAC said.
"Millions of people are self-isolating, and the cotton and textile business is at a virtual standstill."
ICAC echoed economists' predictions that initial impacts of the coronavirus pandemic on gross domestic product in many major economies was likely to be significant, at least in the short term.
US spot cotton prices averaged 47.81 cents per pound for the week ended March 26 - the lowest weekly average since April 2009.
Web: bit.ly/2Wd9iMp

EU urged to delay ending Cambodia's EBA

BRUSSELS – Fashion brands are urging the European Union (EU) to postpone the partial withdrawal of tariff preferences granted to Cambodia under the EU's Everything but Arms (EBA) trade scheme because of the impact of the COVID-19 pandemic.

The European Branded Clothing Alliance (EBCA) has asked the EU to delay the move which it agreed in February following a lengthy review into what it described as systematic human rights violations.

Cambodia is to lose 20% of the rights it enjoys under the EBA, unless something is done.

Cambodia is due to lose about 20 per cent of the rights it enjoys under the EBA scheme – the equivalent of €1 billion (US$1.1 billion) in exports – if improvements aren't made before August.

In a letter to European Commission President Ursula von der Leyen, EBCA president Ignacio Sierra Armas said the COVID-19 pandemic had "created challenges unprecedented in our globalised world".
The Garment Manufacturers Association in Cambodia says upwards of 60 per cent of its factories have been severely affected by cancelled orders because of the COVID-19 pandemic, affecting about half a million workers and their families.

Sierra Armas requested support from the EU "to enhance certainty and allow us to keep on supporting our employees in the EU, as well as the workers in the manufacturing countries".

He said sales in the EU's branded clothing sector had already dropped by about 90 per cent as a result of disruptions caused by COVID-19.

Cambodia's Ministry of Commerce has appealed to fashion brands which source from the country to honour all pending purchase agreements to mitigate damage on its supply chain infrastructure.
Web: bit.ly/2KFETkq

Allbirds to label carbon output on footwear

SAN FRANCISCO – New Zealand-American footwear brand Allbirds says its shoes will now be labelled with details of the carbon emissions from their life cycle, and says it will invest in offsetting projects to counter this environmental impact until it's able to eradicate CO_2 entirely.
With a method to measure, reduce and offset, the firm says it's developed a new life cycle assessment (LCA) tool in-house to break down the CO_2 released from raw material sourcing, through manufacture and use to its footwear's end-of-life.
"We're putting our numbers on display for the world to see, just like nutrition labels on food. Because knowing our footprint is the first step towards driving it to zero," the San Francisco business says.
In an example of an LCA carried out on its Wool Runner shoes, Allbirds says 5.7kg CO_2 is released during material sourcing, 1.1kg during manufacture, 0.1kg (for laundering etc.) during use, and 0.2kg at their end of life.
The firm's ambition is to be carbon negative and so insists it sources natural, renewable materials where possible – as opposed to synthetics – and tracks its energy use during product manufacture.
"As we work to drive emissions to zero, we believe that we – and all businesses, really – should be held accountable for our environmental impact," the company says. "So until we reach our goal of zero, we're taxing ourselves for the carbon we emit, and investing in offsets to fund projects that neutralise our footprint."
Web: bit.ly/35vBtug

SPONSORED CONTENT

Achieve a sustainable workflow with Remote Colour Assessment

Achieving colour consistency from batch to batch is very challenging. Colour matching is not only a time-consuming and costly procedure but has a huge impact on the environment. Adopting digital colour assessment can reduce carbon footprint and improve colour consistency across the supply chain.

With regulations targeting the textile industry, many companies put their attention on more effective measures to reduce carbon emissions or minimize wastage. Sustainability has gained popularity and movements for change are observed from many fashion brands and major retailers, either by reducing the use of chemical dyes that pollute the water eco system or by supporting apparel recycle and reusing materials.

However, another major culprit of carbon dioxide emission is transport and retailers should find ways to reduce their contribution. Over 24% of CO_2 emissions are coming from transport globally. Especially in the UK, transport is one of the largest emitting sector of greenhouse gas emissions.

Traditional Colour Assessment

Colour matching procedure, which relies on traditional methods, is usually required many trial-and-error steps for brands to achieve the closest perfect match. The samples will travel many times from manufacturers to design team or buyers until they approve the colour and give the thumbs up for final production.

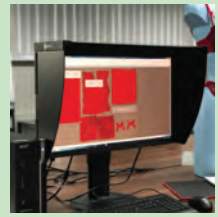
Even a small parcel with samples from the manufacturer to retailer and vice versa produces a lot of CO_2 emissions. For example, a 1kg parcel sent from Hong Kong to London would generate 4.8 kgs of CO_2 based on CO_2 calculators. In volume, 4.8 kgs Carbon Dioxide occupy nearly a 2.63 Sq Mtr (or cubic metre) box. As might be expected, larger parcels have even greater environmental impact.

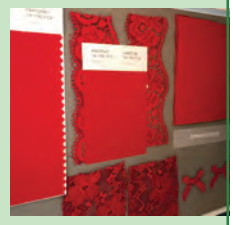
A conventional approach of approving/rejecting strike-offs, bulks or substrates is not only time consuming but also not the best environmentally friendly approach for your production workflow. Colour Accurate Digitalisation is the key to accomplish a more sustainable workflow.

Digital Colour Assessment

VeriVide's DigiView is the smart swatch tool for vision-based remote colour assessment which transforms the colour quality control procedure, providing the flexibility of assessing colour from various workstations, either from factory, office, or home.

Batches are imaged in a DigiEye cube alongside with colour standards and then transferred to viewing stations anywhere in the world in the same day, allowing the retailer's Buying Team to assess on screen the accuracy of the batch colour against the standard and send feedback to manufacturers.





Today, business priorities have shifted in textile and fashion industry, taking strategic decisions to slow down climate change. The demand for viable solutions has increased to make a more sustainable and efficient supply chain.

Sustainable Approach to Control Colour

By adopting a long-term sustainable approach to evaluate the colour of your products remotely saves you money and time too. Instead of manually sending samples by courier or post across the globe that usually takes more than 7 days to approve or reject samples, you can send samples digitally with DigiView, allowing you to make a final colour decision within 24 hours.

As Claire Brealey, Womenswear Technical Manager (Clothing) in NEXT Retail, confirms "Both Buyers and Technologists are loving this easy and accurate new way of working!".

Innovative colour management solutions can play an important role to make more sustainable your supply chain as well as reduce delays in production and minimize wastage. Simplifying the process of colour assessment through digitization provides many benefits for the business. A well-designed and managed colour system should yield cost & time savings making both the initial investment and system running costs neutral.

VeriVide is committed to innovation in colour assessment and quality control since 1964. Product quality and safety is VeriVide's primary motivator to provide innovative solutions for enhancing supply chain efficiency. In this volatile period, investing in pioneering technologies will increase company's agility. We can help you to make the supply chain better prepared against globally and national emergencies.
Contact Russell Thorpe at r.thorpe@verivide.com today.

Molshree Vaid
Correspondent,
Fashion & retail

Arise, the carbon conscious consumer

Fashion and carbon might not have always triggered an instant correlation in the mind of the average consumer – but things are beginning to change.

The fashion conversation around carbon picked up steam in the late 2000s, when Marks & Spencer made headlines with the introduction of a first-of-its-kind, carbon-neutral lingerie collection.

With the launch of Greenpeace's Detox My Fashion campaign in 2011, the sustainability focus largely shifted to the use of hazardous chemicals in clothing manufacture.

But now, with the issue of climate change centre stage - both politically and scientifically, fashion brands are seemingly falling over themselves to reduce their carbon footprints to meet the goals of the Paris Agreement.

Some are starting to engage with customers around the subject, as well as other stakeholders, including startups, while the media has also joined the discourse to catalyse carbon-consciousness into the fashion consumer.

The latter has a key role to play in the journey to net-zero emissions as the fashion ecosystem grapples with overconsumption as much as it does with overproduction.

Kickstarting a carbon-led dialogue is US footwear company Allbirds. It has become the first fashion brand to provide carbon footprint labels, urging customers to "think of this measurement like a nutrition label for your closet".

Sandeep Verma, MD, Europe, Allbirds, explains: "Consumers are used to seeing nutritional labels on food packaging and they understand how that affects their health.

"Likewise, we want to encourage people to start questioning how their fashion consumption impacts the planet's health, which is so inextricably linked to our own wellbeing."

It follows the brand's 2019 announcement about achieving 100 per cent carbon neutrality across its business after developing an LCA tool to measure carbon dioxide equivalent (CO_2e) from material to disposal stage, excluding transportation.

Carbon labelling found support in a 2020 YouGov survey, commissioned by Carbon Trust, which found that 67 per cent of European and US consumers supported the introduction of a recognisable **carbon label on products**.

This isn't a new idea. Tesco pledged to label 70,000 products in 2007, before backtracking, while meat-substitute brand Quorn introduced carbon-footprint labels earlier this year.

Allbirds hopes that other businesses from fashion, as well as other industries, will be inspired to follow its lead.

Verma explained: "This initiative isn't about us producing the lowest scores in the industry. In fact, we would be thrilled if other brands come out with carbon footprint labels that are lower than ours."

But will other fashion companies be prepared to measure and share emission data at scale?

Akhil Sivananadan, co-founder of Green Story, an environmental marketing agency, replies in the affirmative: "It has become significantly easier to collect supplier data now than it was three to four years ago.

"Big brands are likely to launch such initiatives as they are the ones who actually have the money and ability to do a supply chain analysis and measurement due to the usually high cost of LCA."

From a customer standpoint, widespread

adoption would be key to meaningful pre-purchase comparison across brands or products. However, past research suggests that even if customers know the term 'carbon footprint', they do not always fully understand it.

To do the heavy lifting around such explanations and contextual comparisons, Kiwi-British fintech startup, CoGo has released a carbon footprint tracking feature.

Launched in the UK in 2018, CoGo is a mobile app that recommends ethical businesses aligned to a user's values, across 13 categories.

It uses open banking to link user's bank accounts with the platform. This allows the app to translate the user's 12-month banking statement into a personalised carbon footprint dashboard.

The CoGo team worked with the researcher and author Mike Berners-Lee and academics at Leeds University to collate emissions factors (EF) – the amount of CO_2e produced by £1 of spend, for a particular type of business.

Fashion is a key category for CoGo and UK-based brands have been mapped out, says CoGo MD Emma Kisby: "We don't currently distinguish between fast and slow fashion. The emissions are reduced for certain companies e.g. classified as vintage fashion and second hand fashion."

As the tool evolves, CoGo intends to show spend at a product level but the execution would need more businesses tracking their emissions.

Praising Allbirds, Kisby adds: "They are effectively driving change from the bottom up starting in their sector. They brought in sustainable footwear to a sector where sustainable resource was virtually absent.

"We want to drive change from the top down to make consumers aware of the impact of their spend, so they start seeking out these types of businesses and initiatives."

Another fintech startup in Sweden, Doconomy, issues a credit card that doesn't allow spending beyond a fixed carbon limit.

Brands aren't there yet and changing deeply-rooted consuming behaviour is a tall order. But, even though it might be a while before a customer can decide between two pairs of jeans based on their relative footprint, such tools offer nudges to make day-to-day lifestyle choices against climate change.

Environmental entrepreneur, and director of Greenpeace UK, Ed Gillespie welcomes such measures but remains sceptical about their effectiveness.

"They can be helpful but will mainly appeal to those already converted," he argued. "We like to believe that calorie counts will make us lean and thin but they're often only acted upon by fitness freaks.

"If you want the trifle, you eat the trifle. In the same way, the must-have fashion item will unlikely be rejected because its carbon footprint is problematic."

Still, measures to build carbon awareness are on the rise. In January, US resale platform Thredup presented a playful and fashion-centric take on carbon impact through a wardrobe footprint calculator, layered with an 11-part quiz.

> **"We want to encourage people to start questioning how their fashion consumption impacts the planet's health**
>
> *Sandeep Verma, Allbirds*

Readers of Italian Vogue were served an unconventional January issue with artist illustrations replacing models to put the carbon-footprint of a fashion campaign shoot under the spotlight.

Vogue publisher, Conde Nast, is a supporting member of UN's Fashion Charter. As signatories, more than 100 brands share carbon pledges and commitments on their websites.

But, perhaps to avoid the greenwashing rhetoric around carbon offsets, they tend to maintain a low-profile in their customer-facing pages. However, many new and smaller brands seem more willing to run with carbon-led messaging.

US brand Everlane, for instance, references carbon footprint reduction via recycled materials or offsets, UK-based Sheep Inc proudly proclaims itself a carbon-negative sweater brand, while Reformation sells 'climate credits', supporting renewable energy and forestry projects', alongside its collections.

Gillespie warns that well-intentioned green marketing, focusing on carbon data, could run the risk of ignoring the wider picture containing a myriad of other social and environmental issues.

"The numerical stuff can override deeper complex narrative truths which are always about making and consuming less," he said. "Carbon is a convenient shorthand which may (conveniently?) hide other inconvenient truths." ■

US factories still discharging 'forever chemicals'

WASHINGTON DC – At least 2,500 industrial facilities across the USA could be discharging toxic PFAS (per- and polyfluoroalkyl substances) into the air and water, according to the Environmental Working Group (EWG) non-profit.

A new EWG report, based on the analysis of two online databases from the Environmental Protection Agency (EPA), as well as a survey by the state of New York, identified 2,501 unique industrial sites known to produce or use PFAS, or that were suspected of using PFAS.

PFAS, which are by-products of the production of chemicals used to make water repellent coatings in textiles, can build up in the human body over time and have been linked to various cancers, kidney and thyroid disease, reduced birth weights and damaged immune systems.

The EWG says some of the factories identified in its analysis have already been confirmed as sources of drinking water contamination, while water near other listed facilities may not have been tested.

The data comes from sources including the EPA's Chemical Data Reporting Rule, which lists 28 industrial facilities that have disclosed the production and use of large quantities of PFAS chemicals. These include well-known companies such as DuPont spinoff Chemours, 3M and Dow Corning.

"There are no restrictions currently on industrial PFAS discharges under the federal Clean Water Act," said an EWG report on the findings. "In many communities, industrial discharges of PFAS are the most significant source of PFAS pollution entering drinking water supplies."

Web: bit.ly/2YiumU3

ZDHC 'dummies' manual breaks down textile chemistry

AMSTERDAM – The ZDHC Foundation has launched its *Detoxing the Fashion Industry for Dummies* manual, with the ambition of educating the broader industry and consumers on the topic of chemicals in apparel production.

Written by the foundation's executive director, Frank Michel, the manual provides people with any level of understanding the opportunity to read up on the role chemistry plays in garment manufacture and learn how proven innovations enable a transition to a more sustainable future.

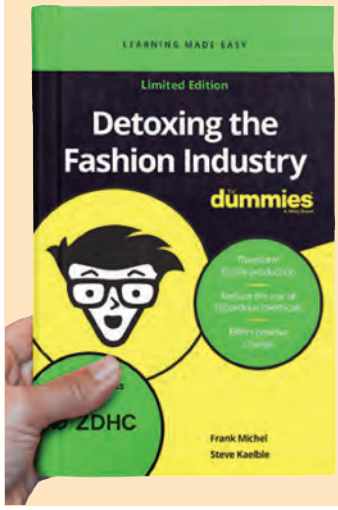
"We want to raise broad awareness to accelerate change and drive impact in production regions for cleaner water and less air pollution in textile and leather manufacturing," Michel says.

With the launch of this guide, the ZDHC – which counts brands, manufacturers and chemical suppliers amongst its 160 contributors – is looking to recruit the entire industry and fashion lovers alike in a movement to clean up textile chemistry.

"This book opens the door to a safe future for humanity and for our planet," says Michel. "Written for fashion lovers as well as industry professionals, it is intended to expose the harmful impact of clothing production on people and the environment, and share best practices to turn everyone into true believers and activists of this fashion revolution."

Web: bit.ly/2KFMCPk

The ZDHC has launched its free 'dummies guide' on textile chemistry



Migrant workers in Japan face exploitation

TOKYO – Migrant garment workers on Japan's state-supported Technical Internship Training Programme (TITP) face widespread labour violations including poverty pay, debt bondage and enforced overtime, according to a new report.

The study, entitled *Made in Japan,* by the Clean Clothes Campaign (CCC), says they are also subject to crowded and inadequate living and working conditions, raising fears for their safety during the current coronavirus pandemic.

"The Japanese government must tighten its inspections and regulations regarding TITP to avoid it becoming state-sanctioned exploitation," the CCC says.

Japan's domestic garment production relies heavily upon migrant workers on TITP which was established by the Japanese government in 1993. However, the Labour Inspection Office in Japan found almost 70 per cent of the businesses that had hired TITP workers were in violation of labour laws.

Workers report being forced to work 18 hours a day, seven days per week in times of peak production, earning poverty pay of 200–300 Japanese yen (US$2-3) per hour, far below the statutory minimum wage of 754 yen (US$7.13). CCC is calling on the Japanese government to take immediate steps to protect migrant workers. It says drastic government reforms are urgently needed.

Web: bit.ly/2Wc8iI3

Backlash for Boohoo over "scandalous" facemasks

MANCHESTER – UK brand Boohoo faced a backlash after selling 'fashion' face masks bearing slogans such as "eat, sleep, isolate, repeat" which it admits aren't designed for protection.

The Union of Shop, Distributive and Allied Workers (USDAW) described the masks as "scandalous", while healthcare workers accuse the fast fashion firm of looking to cash in on the crisis. Boohoo has since removed the product from its sales channels.

Paddy Lillis, USDAW general secretary, said: "Selling fashion clothing is not essential in a period of national emergency, but selling items that look like essential equipment is downright scandalous.

"We share the disgust that healthcare staff have expressed in the media. At a time when they are desperate for PPE, along with many public facing staff delivering essential services, Boohoo should hang their heads in shame for this despicable stunt," Lillis continued.

At a Boohoo manufacturing facility in Burnley, it's reported that workers have expressed "serious concerns" about their health and safety whilst operating amidst the pandemic.

Boohoo has rejected the notion that its workers are at risk in the facility in question, but admits an error of judgement in retailing the masks.

Web: bit.ly/2Sz7vQP

Wrangler, Banana Republic join Jeans Redesign project

NEW YORK – A further 17 fashion brands, garment manufacturers, fabric mills and laundries have joined the Ellen MacArthur Foundation's Jeans Redesign project, an initiative established just last year with the mission statement of prolonging the lifecycle of denim.

Amongst the latest cohort are Wrangler, Banana Republic and Icicle, which will now abide by the Jeans Redesign guidelines on material durability, recyclability and traceability to ensure textiles are used effectively before being disposed of.

The Jeans Redesign guidelines address garment durability, recyclability and traceability.

Bolstering its member base – which also includes H&M, Tommy Hilfiger, Gap, C&A and Lee Jeans – the foundation now includes 17 businesses. Fashion brands Banana Republic, Wrangler, Icicle, Balzac Paris, Organic Basics, Seventy + Mochi, Triarchy and Unspun have joined the initiative alongside a number of garment manufacturers and fabric mills/laundries – the latter being included late last year when the project was extended.

Of the garment manufacturers, Remi Holdings and Tarasima Apparels have joined up, whilst Artistic Fabric Mills, Crescent Bahuman, Green Lab, KG Fabriks, Naveena Denim Mills Karachi, Panther Denim and Tat Fung represent an influx of fabric mills and laundries that have joined the cause.

"Despite enormous disruption across the fashion industry caused by the COVID-19 pandemic, it is encouraging to see companies are still committed to keeping the circular economy as a core part of their business models," commented Francois Souchet, lead of the Make Fashion Circular initiative

"We look forward to seeing the first pairs of redesigned jeans on the market in the coming months."

Web: bit.ly/3cY1Hrx

Arc'teryx gets approval for Science-Based Targets

VANCOUVER – Canadian activewear brand Arc'teryx has set two Science-Based Targets (SBT), approved by the namesake initiative.

The brand's targets address scope one to three greenhouse gas (GHG) emissions, and look to reduce all of them by 65 per cent by 2030 through a four-pronged approach which hones in on material usage, renewable energy projects, energy efficiency and circular business models.

"Now more than ever, we see the importance and value of community and we hope to inspire others to join us in this urgent issue," said Katie Wilson, senior manager, social and environmental sustainability at Arc'teryx.

The firm's SBTs focus on emissions reduction and greater utilisation of renewable energy across its supply chain. The first tackles its scope one and two GHGs, relating to activities and the subsequent emissions at its headquarters, production facilities and global retail stores. For these, the company will look to register reductions of 65 per cent by the end of the decade.

Its second target will address the more challenging scope three emissions, and will work to ensure its more far reaching network of factories, mills and distribution centres which it doesn't directly own, commits to reducing GHG emissions, as well as from its raw material sourcing and shipping.

"These ambitious goals will ensure our company is taking the transformational action needed to fight climate change and progress toward a low-carbon economy," Wilson notes.

Web: bit.ly/3cZzsJi


TEXWORLD
PARIS
The International Fair For Fashion: Fabrics, Trims, Accessories
14 - 17 September 2020
the fairyland for fashion
Paris le Bourget, France
www.texworld-paris.com
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YKK partners with Oceanworks

TOKYO – Apparel fastener supplier YKK has partnered with Oceanworks, the recycled ocean plastic platform, to support its mission of broadening the applications of this otherwise polluting material.

The partnership has been forged after successful collaborations, in which Oceanworks assisted YKK when establishing a supply chain for its new Natulon zippers, made from ocean plastics sourced along the coast of Sri Lanka.

YKK is looking to repay the support of Oceanworks by announcing its collaboration with the organisation to support its marketplace for recycled ocean plastics.

"Oceanworks was instrumental in helping us source the yarn that goes into Natulon ocean-sourced zippers," said Mike Maekawa, category manager for YKK. "Without their help, our development would have taken far longer, delaying the introduction of Natulon ocean-sourced zippers to the market."

It's reported that 80 per cent of ocean plastics originate from land-based sources, and that an estimated eight million tonnes of waste plastic pollutes the oceans each year.

Web: bit.ly/35houMq

Sports sector hit hard by pandemic, survey highlights

BRUSSELS – The Federation of the European Sporting Goods Industry (FESI), which represents more than 1,800 companies including Nike, Adidas, Puma and New Balance, has revealed the findings of what it says is a flagship member survey, highlighting how hard brands of all sizes have been hit by the coronavirus pandemic.

The results show that 45 per cent of companies have lost turnovers ranging from 50 to 90 per cent since the start of the crisis, and are in urgent need of liquidity and cash flow support.

"The closure of brick and mortar stores all over Europe and internationally, as well as changes in consumers' behaviour, led to a serious drop of sales," said Neil Narriman, FESI president and general counsel of intellectual property at Puma. "Most of our companies are currently struggling to cope with fixed costs [such as rent and employment costs], which create significant liquidity shortages."

Respondents to the survey were varied, with 40 per cent of them large enterprises of more than 250 employees, 30 per cent were SMEs with 10 to 249 staff and 20 per cent micro-businesses of less than 10 employees.

"Not surprisingly the results show most clearly that the entire sporting goods industry is severely impacted," FESI reports.

Factors such as geography, social distancing measures, how the virus has developed and order cancellations have scuppered businesses' performance to varying degrees.

Jérôme Pero, secretary general of FESI, said: "It is crucial to start preparing gradual longer-term strategies now, in order to re-launch the economy sustainably in a safe and coordinated manner once the crisis is over."

Web: bit.ly/2Yi3gfQ

Pop star Cardi B fronted the Fashion Nova cash giveaway.

Fashion Nova questioned over consumer cash giveaway

LOS ANGELES – Workers' rights organisation Remake has questioned the sentiment behind apparel brand Fashion Nova's US$1 million giveaway, as it's revealed that garment workers in its supply chain are comparatively paid poverty-line wages.

As part of its Fashion Nova Cares campaign, the brand partnered with popstar Cardi B to give away US$1,000 every hour of the day until May 20, stating that it wants to provide some financial relief for members of the public amidst the pandemic.

Remake believes the brand's decision to reward consumer loyalty over those in its supply chain is a crucial oversight, and says: "If Fashion Nova and Cardi B truly want to represent all that they are aiming to emulate with their US$1,000 an hour campaign, they need to first look at the makers whose labour they have built their empire on."

Remake has spoken with the Garment Workers Center about the impact of the virus outbreak on garment workers in Los Angeles, where upwards of 50,000 people are employed, some of them in Fashion Nova's supply chain.

"We don't get paid [well]. We have a really low income. There are a lot of people who need food," said one worker, whose average weekly wage is US$350.

It led Remake to ask: "How can it be that this fashion behemoth is promising one million dollars to fans of the brand while neglecting to demonstrate any kind of public or private support for the women making its clothing?"

Web: bit.ly/3c3adpr

Burberry outlines latest sustainability efforts

LONDON – Luxury fashion brand Burberry has announced new developments at the firm which reaffirm its commitment to progress on the sustainability front, aligning with its Responsibility Agenda to 2022.

Burberry says all of its products will have a 'positive attribute' by 2022.

The company has launched a ReBurberry Edit, comprising 26 styles from its spring/summer 2020 collection, crafted with 'sustainable' materials; and has also introduced a new labelling scheme for select product categories in a bid to highlight to consumers the work it's undertaking to reduce its environmental impact and improve social standards for those in its supply chain.

"At the half-way point of our Responsibility Strategy to 2022, we remain dedicated to delivering tangible progress against our social and environmental targets," commented Pam Batty, vice president of corporate responsibility at Burberry.

In-line with the launch of its new product labelling scheme, Burberry points out that, thus far, two thirds of its apparel range has a 'positive attribute' – whether this be a social benefit for those in its supply chain or a reduced environmental impact due to production techniques deployed.

By 2022, as per its agenda, the company hopes to ensure all products boast such a trait, and the introduction of new pistachio-coloured product labels will reaffirm this commitment by resonating it with consumers more widely.

Web: bit.ly/3bXnHTC

European Commission handed 'shadow strategy'

BRUSSELS – In anticipation of a new 'comprehensive strategy for textiles' from the European Commission, a collective of 65 civil society organisations have proposed their own non-official 'shadow strategy' which they hope can serve as a guide for members of the European Parliament when implementing environmental and social protection measures.

The group is calling on the commission, as well as EU governments to back its bold strategy which it believes will "kickstart a global re-design of the textile industry's broken business model for the post-coronavirus world".

The civil societies' recommendations address discrepancies in supply chain payments for workers who've either entirely or partially fulfilled orders. It states that companies would under its guidelines be legally obliged to honour contracts and "end the culture of unfair purchasing practices that give them impunity to cancel orders".

They go further to say that companies should be obligated to take responsibility not just for their own activities but for their whole supply chain, by applying an EU due diligence law with specific requirements for the TGLF sector.

Overseeing this, the shadow strategy suggests government reform and better law enforcement in producing countries could be part of the solution, serving as gatekeepers on sustainability issues within respective supply chains.

On the grounds of environmental protection, the coalition calls for stricter rules to cover how textiles are designed, produced and disposed of, and says in the latter stage responsibility should return to the associated brand or manufacturer – as is already the case under French legislation.

Web: bit.ly/3aQApIt

Sorting centres to support circular ambition

DENVER – US start-up ReCircled has announced that it will open two new sorting facilities as it looks to aid brands in their shift to a circular economy.

The sites, located in Nebraska and Prato, Italy, have been configured to support both American and European businesses and will manage both reusable and non-reusable garments to provide efficient streams for either product resale or recycling.

"After several decades in the fashion industry this project is one that allows the brands I have worked with over the years to become responsible to the environment and allows them to reach a customer they have not reached in the past," said Tom Ott, of ReCircled.

At these locations, ReCircled says it will leverage proprietary processes for sorting, cleaning and repairing garments and accessories, before these textiles are either deemed reusable or not, fates with which they'll either be resold or recycled.

For apparel deemed reusable, ReCircled will host an accompanying platform through which each brand will be inducted and can resultantly tie the website with its existing sales channels.

The value of the resale market is currently US$24 billion, and is set to double in just five years due to ever increasing consumer engagement.

Web: bit.ly/2zakn8N

Direct worker reporting programme launched

LONDON – Ethical trade service provider Sedex has linked up with workplace communications expert &Wider to launch a new direct reporting programme to help businesses listen to the concerns of workers.
The new programme uses survey tools and mobile voice technology to enable feedback directly from workers in a company's own operations and throughout its global supply chain.
Sedex and &Wider say it will make direct feedback on workplace conditions simpler, and enable businesses to respond and improve working conditions in their business and supply chain during the current COVID-19 disruption.
Sedex chief executive Simon McCalla said gaining regular insights directly and anonymously from workers was crucial yet communicating directly with workers at scale could be challenging.
He said: "Sedex is very excited to be launching our partnership with &Wider to support businesses to respond quickly to the needs of workers in their business and supply chain.
"The disruption caused by COVID-19 and the impact this is having on front-line workers who are now under new pressures, demonstrates the crucial need for businesses to ensure their workers' health, safety and wellbeing is a business priority."
Web: bit.ly/3d3G4q0

Capri Holdings announces social responsibility goals

NEW YORK – Michael Kors' Capri Holdings has announced its global corporate social responsibility strategy including commitments to be carbon neutral in its own operations and to use 100 per cent renewable energy by 2025.

The company, which owns luxury brands Versace, Jimmy Choo and Michael Kors, says the strategy outlines the company's aim to achieve significant, measurable goals across a range of important environmental and social sustainability issues, including material sourcing, greenhouse gas emissions, water use and waste reduction.

The strategy is divided into three areas: 'our world' which focuses on the company's operations and supply chain; 'our community' which focuses on its employees; and 'our philanthropy' which covers projects for those in need around the world.

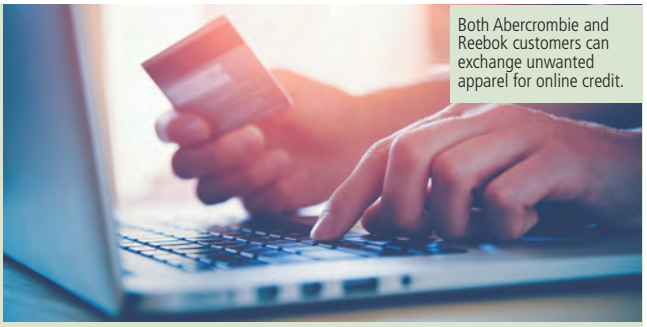
Capri Holidings says all of the goals and objectives in its corporate social responsibility report support the United Nations' 17 Sustainable Development Goals.

The company has set targets to be 100 per cent carbon neutral in its direct operations and to source 100 per cent of energy for its owned and operated facilities from renewable sources by 2025.

It has also committed to setting emissions reduction targets across its operations and supply chain with the Science Based Targets initiative (SBTi) by 2021.

"We are proud of the actions our company is taking to drive positive environmental and social change within our organisation and our world," said John D Idol, chairman and CEO of Capri Holdings.
Web: bit.ly/2Sq3Gxc

Abercrombie & Fitch, Reebok partner with ThredUp


Both Abercrombie and Reebok customers can exchange unwanted apparel for online credit.

NEW ALBANY – Apparel companies Abercrombie & Fitch and Reebok are the latest to partner with resale platform ThredUp, as they vie to capitalise on growing consumer interest in second-hand garments.
Customers of Abercrombie & Fitch can now turn in unwanted clothing online, similarly at Hollister's website, and are incentivised to do so with shopping credit that is boosted by an additional 15 per cent payout bonus.
Shoppers at Reebok can alternatively exchange apparel for points that are redeemed under the sportswear firm's loyalty programme.
According to research by ThredUp, the market for second-hand clothing is currently valued at US$24 billion and is projected to double in the next five years.
As such, we've seen an increasing number of brands and retailers forge partnerships with the online resale platform in order to both cash-in on growing consumer appetite and play their part in prolonging the lifespan of clothing otherwise disposed of.
Only recently, Gap started collaborating with the consignment company to introduce its Resale-as-a-service option, with which shoppers are encouraged to return unwanted garments in exchange for credit at Gap, Banana Republic, Athleta or Janie and Jack stores.
ThredUp says it's now partnered with Reformation to develop a programme through which 1,000 unique pieces will be made available to shoppers with 30 per cent of proceeds going to the non-profit Feed America, amidst the pandemic which has brought on economic struggles for many.
Web: bit.ly/2yTiNID

GLOBAL TRADE EVENTS IMPACTED BY COVID-19 OUTBREAK – UPDATE

Outdoor Retailer Summer Market
Colorado, USA
https://www.outdoorretailer.com/
23-25 June
MONITORING SITUATION

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

CINTE Techtextil
Shanghai, China
2-4 September
https://cinte-techtextil-china.hk.messefrankfurt.com/shanghai/en.html
SET TO GO AHEAD

Première Vision
Paris, France
15-17 September
www.premierevision.com
SET TO GO AHEAD

Dornbirn Global Fiber Congress
Dornbirn, Austria
https://www.dornbirn-gfc.com/
16-18 September
NO UPDATE AS YET

FESPA
Madrid, Spain
https://www.fespa.com/en
POSTPONED UNTIL 6-8 OCTOBER

Techtextil | Texprocess North America
Georgia, USA
https://techtextil-north-america.us.messefrankfurt.com/us/en.html
POSTPONED UNTIL 1-3 OCTOBER

Copenhagen Fashion Summit
Copenhagen, Denmark
https://www.copenhagenfashionsummit.com/
POSTPONED UNTIL 12-13 OCTOBER

INDEX 2020
Geneva, Switzerland
https://www.indexnonwovens.com/en/
POSTPONED UNTIL 7-10 SEPTEMBER 2021

Sustainable Apparel Coalition's General Members' Meeting
Bangkok, Thailand
https://apparelcoalition.org/
POSTPONED until SEPTEMBER 2020 - MONITORING

Neonyt
Berlin, Germany
https://neonyt.messefrankfurt.com/berlin/en.html
CANCELLED

Kingpins Amsterdam
Amsterdam, Netherlands
http://www.kingpinsshow.com/amsterdam
CANCELLED UNTIL 2021

Kingpins Hong Kong
Hong Kong
www.kingpinsshow.com
CANCELLED UNTIL 2021

Outdoor by ISPO
Munich, Germany
www.ispo.com
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.