



House of Commons
Environmental Audit Committee

FIXING FASHION:

clothing consumption
and sustainability

**Fashion:
it shouldn't
cost the earth**

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House of Commons
Environmental Audit Committee

Fixing fashion: clothing consumption and sustainability

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Environmental Audit Committee

The Environmental Audit Committee is appointed by the House of Commons to consider to what extent the policies and programmes of government departments and non-departmental public bodies contribute to environmental protection and sustainable development; to audit their performance against such targets as may be set for them by Her Majesty's Ministers; and to report thereon to the House.

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Summary

The way we make, use and throwaway our clothes is unsustainable. Textile production contributes more to climate change than international aviation and shipping combined, consumes lake-sized volumes of fresh water and creates chemical and plastic pollution. Synthetic fibres are being found in the deep sea, in Arctic sea ice, in fish and shellfish. Our biggest retailers have 'chased the cheap needle around the planet', commissioning production in countries with low pay, little trade union representation and weak environmental protection. In many countries, poverty pay and conditions are standard for garment workers, most of whom are women. We are also concerned about the use of child labour, prison labour, forced labour and bonded labour in factories and the garment supply chain. Fast fashions' overproduction and overconsumption of clothing is based on the globalisation of indifference towards these manual workers.

Forced labour is used to pick cotton in two of the world's biggest cotton producing countries, Turkmenistan and Uzbekistan. Labour exploitation is also taking place in the UK. 'Made in the UK' should mean workers are paid at least the minimum wage. But we were told it is an open secret that some garment factories in places like Leicester are not paying the minimum wage. This must stop. But if the risk of being caught is low, then the incentive to cut corners is high. The same fast fashion retailers sourcing from Leicester are also selling clothes so cheaply that they are being treated as single use items. We buy more clothes per person in the UK than any other country in Europe. A glut of second hand clothing swamping the market is depressing prices for used textiles. What can't be sold is torn up and turned into insulation and mattress stuffing. Worse still, around 300,000 tonnes of textile waste ends up in household black bins every year, sent to landfill or incinerators. Less than 1% of material used to produce clothing is recycled into new clothing at the end of its life. Meanwhile, retailers are burning new unsold stock merely to preserve their brand.

Fashion shouldn't cost the earth. But the fashion industry has marked its own homework for too long. Voluntary corporate social responsibility initiatives have failed significantly to improve pay and working conditions or reduce waste. The scientific warnings are stark on sustainability. Overconsumption and climate change are driving mass extinction. We need a new economic model for fashion. Business as usual no longer works. The Government should change the law to require companies to perform due diligence checks across their supply chains.

UK designers are already taking a lead on sustainable fashion. We heard from a range of exciting, innovative and sustainable fashion businesses and designers in the UK who are forging a new vision for fashion. These innovators are faced with competition from businesses who are focused on reducing costs and maximising profits regardless of the environmental or social costs. Government needs to provide clear economic incentives for retailers to do the right thing. We recommend that the Government reforms taxation to reward fashion companies that design products with lower environmental impacts and penalise those that do not. Moving from conventional to organic cotton and from virgin polyester to recycled PET (in garments designed to minimise shedding) would help to reduce the negative impact of the clothing industry. The Government should

investigate whether its proposed tax on virgin plastics, which comes into force in 2022, should be applied to textile products that contain less than 50% recycled PET to stimulate the market for recycled fibres in the UK.

We recognise that fast fashion has made it affordable for everyone to experience the pleasure of style, design and the latest trends. We were told however that the most sustainable garment is the one we already own and that repairing, reweaving, reusing, and renting are preferable to recycling or discarding clothes.

The Government must change the system to end the throwaway society. Often it is more expensive to repair an item than buy a new one. Many of us also lack the skills to perform more than basic clothing repairs. The Government should make fashion retailers take responsibility for the waste they create and reward companies that take positive action to reduce waste. A charge of one penny per garment on producers could raise £35 million to invest in better clothing collection and sorting in the UK. The Government's recent pledge to review and consult on extended producer responsibility for the textile industry by 2025 is too slow. We need action before the end of this parliament.

1 Introduction - fashion & sustainability

Fashion industry

1. Fashion is big business in the UK. We buy more clothes per person in the UK than any other country in Europe.¹ The fashion industry was worth £32 billion to the UK economy in 2017.² This was an increase of 5.4% on 2016; a growth rate 1.6% higher than the rest of the economy.³ The industry employs 890,000 people in the UK in retail, manufacturing, brands and fashion design businesses.⁴ According to consultants McKinsey the global apparel, fashion and luxury industry outperformed all other market indexes in profitability between 2003 - 2013 'outstripping even high-growth sectors like technology and telecommunications.'⁵ In recent years some UK high street retailers have struggled in the face of online competition, but UK manufacturing is seeing some growth and our fashion designers are going from 'strength to strength', according to the British Fashion Council.⁶

Key facts & figures on fashion and sustainability

More than \$500 billion of value is lost every year due to clothing underutilisation and the lack of recycling, according to the Ellen MacArthur Foundation.⁷

By 2030 global apparel consumption is projected to rise by 63%, from 62 million tons today to 102 million tons—equivalent to more than 500 billion additional T-shirts.⁸

The UN says that by 2050 the equivalent of almost three planets could be required to provide the natural resources needed to sustain current lifestyles given the growth in global population.⁹

In September 2015, the UK signed up to the United Nations Sustainable Development Goals including a commitment (SDG 12) to ensure sustainable consumption and production patterns.¹⁰

2. The garment industry is reportedly the world's third biggest manufacturing industry after automotive and technology industries.¹¹ Our consumption creates jobs and growth in developing nations. It also leaves them with the bulk of the environmental and social costs.¹² Eco Age warned that competition between countries for inward investment was driving a race to the bottom in terms of standards:

1 European Clothing Action Plan, [Used Textile Collection in European Cities](#) (March 2018)

2 British Fashion Council, [London Fashion Week September 2018 Facts and Figures](#)

3 British Fashion Council, [London Fashion Week September 2018 Facts and Figures](#)

4 British Fashion Council, [London Fashion Week September 2018 Facts and Figures](#)

5 McKinsey & Company, [Creating value in fashion: How to make the dream come true](#) (May 2015)

6 Evening Standard, [The UK fashion industry is worth £32 billion to the UK economy, says British Fashion Council CEO](#) (September 2018)

7 Ellen MacArthur Foundation, [a New Textiles Economy: Redesigning Fashion's Future](#) (2017)

8 Global Fashion Agenda & Boston Consulting Group, [Pulse of the Fashion Industry](#) (2017)

9 United Nations, Sustainable Development Goals, [Goal 12: Ensure sustainable consumption and production patterns](#)

10 [17 Goals](#)

11 Fashion Revolution ([SFI0056](#))

12 Dr Mark Sumner, University of Leeds ([SFI0026](#))

Countries have to compete against each other for inward investment and production in their jurisdiction. Because of this competition for lower wages and standards they are unable to raise their minimum wage to a level that provides for a decent life, that is, a living wage. There is a race to the bottom in terms of wages and environmental standards.¹³

Fast fashion

3. Concerns have been raised throughout the inquiry that the current ‘fast fashion’ business model is encouraging over-consumption and generating excessive waste.¹⁴ It demands a high throughput of garments and is based on a linear economy, according to the Clothing Sustainability Research Group at Nottingham Trent University.¹⁵ Such garments are relatively cheap, aimed at consumers who want to change their wardrobe on a regular, trend driven, basis. They are offered at pocket money prices. Short lead times means that wash tests and wearer trials are often not feasible, with implications for garment quality. Many are not made from single fibre materials and cannot be recycled.¹⁶ This trend is being copied by luxury retailers such as Louis Vuitton which offers small collections every two weeks. ‘Fast luxury’ collections are often stitched in the same factories producing cheap ‘fast fashion’.¹⁷

What is fast fashion?

‘Fast fashion’ is a term used to describe a new accelerated fashion business model that has evolved since the 1980s. It involves increased numbers of new fashion collections every year, quick turnarounds and often lower prices. Reacting rapidly to offer new products to meet consumer demand is crucial to this business model.

4. Many of our witnesses criticised the fast fashion business model for driving overconsumption, the production of clothes so cheap they are being treated disposably, and excessive waste. Stella Claxton from the Clothing Sustainability Research Group at Nottingham Trent University said that the value of much fast fashion clothing was low, not only in financial but also in emotional terms:

... if you look at where the growth in the retail market in the UK is coming from, it is very much from the low value end, particularly the success of online retailers—such as ASOS and Boohoo—who are competing on low prices and fast turnaround. I saw a dress on Boohoo that retailed at full price for £5 at the weekend. We have a market where these garments are mainly aimed at young women who are ... [gaining] pleasure from what they wear and expressing their identity through their clothing, but the actual value of the item is very low in real terms, in quality terms and in emotional terms to them. The incentive for them to then recycle or want

13 ECO AGE LTD (SFI0075)

14 Phoebe English (SFI0055); Fashion Revolution (SFI0056); TRAIID (Textile Reuse & International Development) (SFI0010); Professor Tim Cooper (SFI0049); ECO AGE LTD (SFI0075)

15 Professor Tim Cooper (SFI0049)

16 Professor Tim Cooper (SFI0049)

17 Clean Clothes Campaign (2014) [Stitched Up: Poverty wages for garment workers in Eastern Europe and Turkey](#); The Guardian (10 December 2014), [Luxury brands: higher standards or just a higher mark-up?](#)

to pass that on in some way, or even for charity shops to want that kind of product in their shops, is very low. The opportunity for that end of the market to have a second hand opportunity is quite limited.¹⁸

5. The fashion designer Phoebe English says that ‘fast fashion’ has made the sector a ‘monstrous disposable industry’:

The overproduction of ‘fast’ fashion which will never be purchased or used and the insane speed which the sector churns out new designs almost every week means that the never-ending production of cheap fashion which is poorly made and will last only a few weeks and then be thrown away, has made our sector a monstrous disposable industry. The entire way the sector is structured so that the prospective sales orders are put into production rather than only making the production which has been actually ordered means that countless levels of wasted garments are produced.¹⁹

6. Others have hailed benefits of fast fashion. Dr Sumner of Leeds University School of Design said that the phenomenon was successful because it had ‘democratised’ the benefits of fashion:

Fast fashion has allowed all segments of society, irrespective of class, income or background to engage in the hedonistic and psychogenic pleasures of fashion. At no other time in human history has fashion been so accessible to so many people across our society. This is the power of fast fashion.²⁰

7. The British Retail Consortium suggested that fast fashion resulted in less waste at the store and warehouse as it is characterised by smaller quantities of each fashion line sourced and quickly sold. It said that fashion retailers are using insights from production and consumption data to streamline their products and to minimise waste throughout the supply chain.²¹

8. We heard some concern that social media was driving faster fashion and encouraging over consumption and waste. Research by the Hubbub Foundation suggested that 17% of young people questioned said they wouldn’t wear an outfit again if it had been on Instagram.²² Online fashion companies have established relationships with online ‘influencers’ who advertise the latest fast fashion by modelling it on their Instagram and other social media feeds. Website cookies mean that retailers can target individuals with fast fashion adverts as they browse the Internet. Users now only have to tap on the photo to be told the price and get an online link to the clothes that influencers or reality TV stars are wearing.²³ Eco Age said that stricter regulation for online marketing should be considered, arguing that there are psychological issues connected with high levels of consumption, as well as detrimental environmental and social effects caused by overconsumption.²⁴

18 [Q22](#)

19 Phoebe English (SFI0055)

20 Dr Mark Sumner, University of Leeds (SFI0026)

21 British Retail Consortium (SFI0019)

22 London Waste and Recycling Board ([SFI0022](#))

23 Where Does it Come From (SFI0035)

24 ECO AGE LTD ([SFI0075](#))

Sustainability of the industry

9. In 2017, the Ellen Macarthur Foundation published a *New Textiles Economy: Redesigning Fashion's Future*. The report set out how the textiles system operates in a linear way with large amounts of non-renewable resources extracted to produce clothes 'that are often used for only a short time, after which the materials are mostly sent to landfill or incinerated.'²⁵ It calculated that more than \$500 billion of value is lost every year due to clothing underutilisation and the lack of recycling.²⁶ In the UK WRAP estimates that £140 million worth of clothing goes to landfill every year.²⁷

10. According to research carried out by Boston Consulting Group and Global Fashion Agenda for the Copenhagen Fashion Summit in 2017, the sustainability 'pulse' of the industry is weak. It developed a scoring system to measure the sustainability of the sector and gave the industry a score of 32 out of 100 saying it is 'not yet where it could and should be.'²⁸ It noted that:

The best performers on sustainability are the very big players as well as some mid-sized, family owned companies, while over half of the market, mainly small to medium-sized players, has shown little effort so far. The rest of the industry is somewhere in between. This is confirmed by the Pulse Survey, where two-thirds of polled fashion executives have not made environmental and social factors guiding principles for their companies' strategy.²⁹

Interim report - retailer engagement

11. Our [interim report](#) on the sustainability of the fashion industry, published in January 2019, found similar results. We wrote to sixteen leading UK fashion retailers to ask what steps they are taking to reduce the environmental and social impact of the clothes they sell. As that report noted, we were impressed with the level of engagement by some retailers. Others expressed openness to engaging on these issues and have made some small steps. A few retailers, unfortunately, do not seem to consider social and environmental responsibility as a priority.³⁰ We concluded that retailers have an obligation to engage with these issues and recommended that they show leadership through engagement with industry initiatives. A table of the retailers' responses is reproduced at Annex 1. This report will consider recommendations to Government for policies to encourage a more transparent, fair and sustainable fashion system.

Growth of the industry

12. As the world population exceeds 8 billion in the coming decade, the fashion industry is expected to expand further. The Pulse of Fashion report projects that by 2030 global apparel consumption could rise by 63%, from 62 million tons today to 102 million tons—equivalent to more than 500 billion additional T-shirts. 'Concurrently, soaring demand

25 Ellen Macarthur Foundation, [a New Textiles Economy: Redesigning Fashion's Future](#) (2017)

26 Ellen Macarthur Foundation, [a New Textiles Economy: Redesigning Fashion's Future](#) (2017)

27 WRAP, [Valuing Our Clothes: the cost of UK fashion](#) (July 2017)

28 Global Fashion Agenda & Boston Consulting Group, [Pulse of the Fashion Industry](#) (2017)

29 Global Fashion Agenda & Boston Consulting Group, [Pulse of the Fashion Industry](#) (2017)

30 Environmental Audit Committee, [Interim Report on the Sustainability of the Fashion Industry](#) (Jan 2018)

for apparel—much of it from developing nations—will see the annual retail value of apparel and footwear reach at least €2 trillion by 2030 (an over 30% increase of €500 billion between now and then).³¹

The sustainability challenge

13. Securing a sustainable future for the planet and people is the defining challenge of our time. In October 2018, the Intergovernmental Panel on Climate Change (IPCC) warned that the Paris Agreement target of limiting global temperature rises to 1.5C will be exceeded if we continue on our current path. Projections published in December suggest that global emissions from burning fossil fuels hit an all-time high in 2018—after remaining relatively static between 2014 to 2016.³² Current emission trends put us on course for a dramatic 3C climate shift by 2100, which will have major consequences for wildlife and communities around the world. Achieving Paris Agreement temperature goals requires climate-changing emissions to peak as soon as possible and fall rapidly thereafter.³³

14. Recent projections suggest the world is failing to meet most of the existing international targets on biodiversity - the Aichi Biodiversity Targets - to slow the rate of habitat and species loss by 2020.³⁴ The latest Living Planet Index—published by WWF and the Zoological Society of London - showed a 60% fall in wildlife populations in 40 years.³⁵ Scientists are warning that the planet is now in the midst of a sixth mass extinction of species driven by human activities.³⁶

UK commitments on sustainability

15. The UK has taken the crucial first step in its sustainability transition by shifting to cleaner sources of electricity since the Climate Change Act was passed in 2008.³⁷ To meet our future carbon budgets and reach net zero emissions by 2050 - which the IPCC tells us is needed - the UK will have to go further and ensure that all industries play their part in reducing their carbon footprint to near zero. That will require changing our consumption patterns and improving our resource productivity.

16. In September 2015, global agreement was reached at the United Nations on a set of 17 Sustainable Development Goals to guide global development until 2030.³⁸ In conducting our inquiry into the sustainability of the fashion industry we decided to focus on both environmental and social sustainability in line with the UN Sustainable Development Goals, which the UK Government signed up to in 2015. Tackling the problems highlighted in this inquiry will help to achieve a range of Sustainable Development Goals, including:

- SDG 5: Achieve gender equality and empower all women & girls
- SDG 6: Clean water and sanitation;

31 Global Fashion Agenda & Boston Consulting Group, *Pulse of the Fashion Industry* (2017), p. 8.

32 Global Carbon Project, [Strong growth in global CO2 emissions expected for 2018](#) (November 2018)

33 International Energy Agency email newsletter 'the energy mix: COP, CO2 & CCUS', (10 Dec 2018)

34 WWF and ZSL, [Living Planet Report 2018](#)

35 WWF and ZSL, [Living Planet Report 2018](#)

36 Gerardo Ceballos, Paul R. Ehrlich, and Rodolfo Dirzo, Biological annihilation via the ongoing sixth mass extinction signaled by vertebrate population losses and declines (July 2017)

37 Environmental Audit Committee, [Green Finance: Mobilising investment in clean energy and sustainable development](#) (May 2018)

38 [17 Goals](#)

- SDG 8: Decent work and economic growth;
- SDG 12: Responsible consumption and production;
- SDG 13: Climate action
- SDG 14: Life below water.
- SDG 15: Life on land.

Consumption levels

17. The clothing charity TR Aid warned that ‘the over-consumption of clothes in the UK plays its part in deepening the main environmental challenges that we face at national and global level.’³⁹ The UN Sustainable Development Goal 12 on sustainable consumption and production aims to promote resource and energy efficiency.⁴⁰ At the current time, material consumption of natural resources is increasing. The UN says that should the global population reach 9.6 billion by 2050, the equivalent of almost three planets could be required to provide the natural resources needed to sustain current lifestyles.⁴¹ At the Committee’s V&A event, the author Lucy Siegle suggested that:

A useful way of thinking about it is when we talk about the Paris agreement and carbon emissions, and we set a baseline of 1990, whatever we need to get the emissions down to, we should think about this problem in that way. If we use 2000 as baseline, we should be doing everything we can to reduce consumption to 2000 levels because that would solve a lot of problems.⁴²

18. Professor Tim Cooper from the Clothing Sustainability Research Group at Nottingham Trent University argues garments should be designed and manufactured for longevity, but that a more difficult problem is how to reduce consumer demand for cheap, short-lived garments.⁴³ He said:

Sustainable consumption demands cultural change. The throwaway culture applies to the whole economy, not merely the clothing sector. If consumers are to be encouraged to buy fewer clothes there needs to be a wider public debate on [the] future of the ‘consumer society’, including an evaluation of its benefits and costs.⁴⁴

19. Professor Dilys Williams from the London College of Fashion echoed this, arguing that technocentric efficiency improvements are not sufficient to make fashion items sustainable if we are ‘still producing more and more of them.’⁴⁵ She suggested that society would have to challenge ‘growth logic’ and develop different business models that involve less material consumption:

39 TR Aid (SFI0010)

40 United Nations, Sustainable Development Goals, [Goal 12: Ensure sustainable consumption and production patterns](#)

41 United Nations, Sustainable Development Goals, [Goal 12: Ensure sustainable consumption and production patterns](#)

42 Q108

43 Clothing Sustainability Research Group, Nottingham Trent University (SFI0049)

44 Clothing Sustainability Research Group, Nottingham Trent University (SFI0049)

45 [Q90](#)

... technocentric approaches are not sufficient. In fact, there is evidence to say that efficiencies in creating one garment better have a rebound effect and we are actually using more resources by taking that approach. [...] Do we want to sustain the fashion industry as it currently is or do we want to live within planetary boundaries and honour human equality? If we do, we do need to take a more eco-centric perspective.⁴⁶

20. The designer Phoebe English said history would look unkindly on the waste and exploitation involved in today's fashion industry:

I believe that we, and the waves of the new generation, will look back on the practices of today's fashion industry in the same way we now look back at Victorian Workhouses, with utter incredulous horror. It is up to legislators and British law to keep up with the massive swing of ethical commercial consumer desire and how it can help form a better fashion industry and help obliterate its disgustingly wasteful practices.⁴⁷

Our report

21. The way we make, use and dispose of our clothes all has an environmental impact. The structure of this report reflects these stages in the lifecycle. Chapters Two and Three will look at the social and environmental impact of how we currently make clothes. The amount of clothes we throwaway will be examined in chapter Four. New economic models that could help improve the sustainability of the fashion industry will be explored in chapter Five.

22. We want to see a thriving fashion industry in the UK that provides decent work, inspires creativity and contributes to the economic success of the UK. The fashion industry's current business model is unsustainable, especially with growing populations and rising levels of consumption across the globe. Over-consumption and climate change are driving widespread environmental damage. The exploitative and linear business model for fashion must change. The various parts of the fashion industry must come together to set out their blueprint for a net zero emissions world. This will require reducing their carbon consumption back to 1990 levels. Given scientists' stark warnings on climate change and biodiversity loss, we need to fix fashion.

46 [Q90](#)

47 Phoebe English (SFI0055)

2 The social cost of our clothes

Social impact of garment production

23. Garment production is one of the world's biggest and most labour-intensive manufacturing industries with estimates of those directly employed ranging from 25 to 60 million people.⁴⁸ Since the 1980s many leading Western fashion retailers have been 'chasing the cheap needle round the planet'⁴⁹ and sourcing their clothes from countries with low labour costs and poor environmental governance. This shift in production has been facilitated by a 90% fall in shipping costs between the late 1950s and 2015, as shipping containers revolutionised trade in goods.⁵⁰ Most of the garments sold in the UK are produced in Asian countries.⁵¹ In evidence, Dr Mark Sumner noted that this fashion model means that consumers in the UK 'are getting pleasure and enjoyment from fashion and that is coming at a cost to workers and the environment in exterritorial, overseas production routes as well as agriculture.'⁵²

24. Fashion supply chains provide a source of jobs and GDP growth for people in poorer countries with the garment industry providing a crucial source of foreign exchange (when payments and investment are made in the local currency).⁵³ However, poor pay and conditions are standard in global garment supply chains according to evidence submitted by the global trade union IndustriALL.⁵⁴ It stated that:

Workers work long hours, often far beyond legal limits, for poverty wages and in conditions that breach Occupational Health and Safety (OHS) standards. Continual downward price pressure by companies keeps wages low while their real value declines against inflationary increases. The wages of most garment workers are no higher than the level of the minimum wage in their country, which in many cases is well below the level of subsistence. Excessive working hours are a continuing and entrenched problem. Production peaks are managed by relying on excessive overtime. Workers are compelled to work extremely long hours in order to supplement their basic earnings towards a level where they can support themselves and their families. Precarious employment conditions are rife, with temporary contracts, agency work and sub-contracting the norm. Violations of the right to freedom of association are commonplace, unionization rates are extremely low and collective bargaining is rare.⁵⁵

25. A 2016 report into Corporate Leadership on Modern Slavery found that of 71 leading retailers in the UK, 77% believed there was a likelihood of modern slavery occurring at some stage in their supply chains.⁵⁶ The majority of global garment workers and artisans are women and girls, 'the bulk of which make far less than a living wage, persistently face

48 Sandy Black (editor) Sustainable Fashion Handbook (2013)

49 Sarah O'Connor, Financial Times, [Dark factories: labour exploitation in Britain's garment industry](#) (17 May 2018)

50 Edwina Ehrman (ed), *Fashioned from Nature* (2018)

51 WRAP, [Valuing Our Clothes: the cost of UK fashion](#) (July 2017)

52 [Q3](#)

53 Sandy Black (editor) Sustainable Fashion Handbook (2013)

54 IndustriALL

55 IndustriALL(SFI0073)

56 Hult Research and Ethical Trading Initiative (2016), [Corporate Leadership on Modern Slavery](#), p. 8.

poor working conditions and live in poverty.⁵⁷ Most work long hours up to six or seven days a week with reports of being burnt out and physically unable to continue beyond their 30s.⁵⁸ We were told that women and girls face the brunt of the exploitation in the fashion industry, often at the bottom of the value chain working in the fields or factories. It is notable that the majority of fashion CEOs are men.⁵⁹ All of the Chief Executives of the top ten UK fashion retailers (by market share) are men. Sarah Ditty, who was then policy director of Fashion Revolution, argued that the ‘fashion industry and all the problems that persist across the value chain is a huge feminist issue.’⁶⁰

Key facts & figures on the social cost of our clothes

Most of the garments sold in the UK are produced in Asian countries.⁶¹

Over 90% of workers in the global garment industry have no possibility to negotiate their wages and conditions, according to the global trade union IndustriALL.⁶²

Leicester has the second highest concentration of textile manufacturers in the country with 700 factories employing 10,000 textile workers.⁶³

Written evidence from HMRC shows that UK-based garment factory owners have been forced to pay out almost £90,000 to employees for non-payment of minimum wage.⁶⁴

26. Poor working conditions in fashion supply chains hit the headlines on 24 April 2013 when the Rana Plaza building in Bangladesh collapsed. The building housed five garment factories where 1,138 people died and another 2,500 were injured, making it one of the largest industrial disasters in history. The victims were mostly young women. The Fashion Revolution campaign was founded by Carry Somers and Orsola de Castro in response. Fashion Revolution argue that the Rana Plaza disaster was the ‘direct result of the opaque, complex and speedy way in which the industry functions today.’⁶⁵ The Bangladesh Accord on Fire and Building Safety was set up in the aftermath of the Rana Plaza disaster to improve factory standards through building inspections by structural engineers and safety training. Five years since, the vast majority of factories are behind schedule implementing the Accord, a cause for concern as workers continue to be put at risk.⁶⁶ Bangladesh saw widespread protests by garment workers over low wages in early January 2019.⁶⁷

27. The sustainability consultancy Eco Age argued that unrealistic pricing throughout the supply chain is a major issue ‘from fabric buyers needing to prioritise cost targets over sustainability, to manufacturers being left without profit margins.’⁶⁸ It says retailers impose ‘unrealistic requirements on suppliers that compete to offer the lowest prices and

57 Fashion Revolution (SFI0056)

58 Apparel Insider, [Why garment worker burnout is bad for business](#)

59 Mic, [Here's how many female CEOs actually run the biggest clothing companies](#) (October 2015)

60 [Q41](#)

61 WRAP, [Valuing Our Clothes: the cost of UK fashion](#) (July 2017)

62 IndustriALL (SFI0073)

63 [Letter from the Mayor of Leicester Sir Peter Soulsby to the Chair](#) (21 Dec 2018)

64 Environmental Audit Committee, [HMRC figures reveal exploitation in UK fashion industry](#) (January 2019)

65 Fashion Revolution (SFI0056)

66 Accord on Fire and Building Safety in Bangladesh, [Quarterly Aggregate Report](#) (October 2018), p. 9.

67 Al Jazeera, [Almost 5,000 Bangladeshi garment workers sacked over strikes](#) (January 2019)

68 ECO AGE LTD (SFI0075)

shortest lead times, often resulting in corner cutting, impacting both worker welfare and the environment.’⁶⁹ Apparel supply chain consultant Olivia Windham Stewart said that she feared the voice of suppliers was not being heard in the debate. She said:

While wages low and working conditions can be poor, many apparel companies continue to report profits in the millions or billions of dollars; they continue to deliver returns to shareholders; their owners continue to appear at the top of rich lists from Spain, to Sweden to Japan. Meanwhile, what do suppliers experience? In the five years since the Rana Plaza incident, the price paid by lead firms to supplier factories in Bangladesh has declined by 13%, with a resulting 13.3% decrease in profit margins from 2011 to 2016. This in a context where brands are asking more of suppliers in terms of compliance and remediation—i.e. higher costs. A number of Bangladeshi suppliers told me directly, and off the record, that UK brands were not prepared to adjust their prices in response to exchange rate fluctuations after the Brexit vote. This means suppliers were being asked to produce the same quantity and quality of work at a significantly reduced price.⁷⁰

28. This pressure on suppliers to offer unrealistically low prices was also recognised by manufacturers. UK factory owner and chairman of the Textile Manufacturer Association of Leicestershire, Saeed Khliji, has been quoted as saying:

None of the retailers are giving us an ethical price. An extra £2 or £2.50 on a garment would sort everything out. Instead they squeeze us for pennies. If they don’t sell everything, they send it back and charge us for the carriage. If we are an hour or 30 minutes late with delivery they fine us £500. I have been told of one retailer who is making £2 million a year from fines.⁷¹

Union representation Vs Corporate Social Responsibility

29. Garment workers’ access to trade union representation is low according to IndustriALL.⁷² In many garment producing countries, collective bargaining structures are weak or absent: over 90% of workers in the global garment industry have no possibility to negotiate their wages and conditions and so are not able to claim a fair share of the value that they generate.⁷³ IndustriALL argues that collective bargaining at industry level is ‘the missing mechanism’ which would enable significant progress to be made towards living wages for garment workers.⁷⁴ It argues that Corporate Social Responsibility (CSR) programmes have failed to address the problems of poor working conditions and low pay in the garment industry. It says that CSR programs rely largely on auditing and compliance to attempt to improve conditions in the factories that produce for them:

These unilateral, voluntary and nonbinding efforts have overwhelmingly failed to improve wages and working hours or to ensure respect for workers’ right to join a union. Not only have they proved to be ineffective, but, in giving reassurance that something is being done, have become obstacles

69 ECO AGE LTD (SFI0075)

70 Olivia Windham Stewart (SFI0092)

71 Sunday Mirror (2018), [Brit sweatshop workers earning as little as £3 an hour making copycat celeb outfits.](#)

72 IndustriALL (SFI0073)

73 IndustriALL (SFI0073)

74 IndustriALL (SFI0073)

to finding genuine solutions to the root causes of low pay and excessive working hours. Where freedom of association is respected, and workers are allowed to organize unions and bargain collectively, workers are able to defend themselves from exploitation and obtain decent incomes and working conditions. Where these rights are denied, the CSR model is unable to fill the gap.⁷⁵

Cheap clothing

30. We asked fast fashion retailers how they could pay workers decent wages while charging such low prices. Paul Lister of Primark said that its business model enabled it to sell T-shirts for £2 and still make a profit:

That is a question that is often put to us. I think it is because our business model is slightly different from perhaps others. We do no advertising. You will have seen no billboards, no television advertising. Primark has never done any significant advertising at all. That can save us, in any year, £100 million to £150 million compared to some of our larger rivals. That goes straight into price, so that keeps our pricing low.

With our arrangements with our factory, we often buy on longer lead times, in quiet periods for the factories, and then we pay the factories early. If you are a factory owner, you will be able to give Primark a better price to reflect that. Then from the factory through to the store, we keep our costs to the absolute minimum and in the store our margins are very tight. Our published margins are between 9% and 12%. It is our business model that takes us to the £2 T-shirts.⁷⁶

Reshoring production

31. After significant decline in recent decades, the UK garment manufacturing industry has experienced renewed growth recently as retailers have commenced or increased sourcing from UK suppliers. In some cases, this is for ethical reasons, such as Huit Denim setting up in Cardigan or Phoebe English producing her clothes where she can oversee production in the UK (both of whom gave evidence at our hearing at the V&A museum). In other cases, clothing production has been ‘reshored’ to small garment factories in the UK because of their ability to rapidly supply ‘fast fashion’ retailers like ASOS, Boohoo and Missguided. This presents opportunities for regional economies as it can offer local garment manufacturers entry points into global value chains as well as employment opportunities for communities. However, we also heard concerns about working conditions and illegally low pay in the garment manufacturing hub of Leicester.

75 IndustriALL (SFI0073)

76 Q152

Labour exploitation in UK garment factories

32. Leicester has the second highest concentration of textile manufacturers in the country with 700 factories employing 10,000 textile workers.⁷⁷ These workers produce around one million items of clothing per week for online retailers.⁷⁸ Unite the Union said that while the majority of the factories are compliant, there are a small number of factories which break the law to maximise profits. As low-end supply chains, garments have become marked by intense cost competition and unstable orders.⁷⁹

33. A study by the University of Leicester in 2015, commissioned by the Ethical Trading Initiative, examined concerns relating to both registered factories and smaller unregulated production units in Leicester. The study concluded the majority of the city's garment workers were paid below the National Minimum Wage, do not have employment contracts, and are subject to intense and arbitrary work practices.⁸⁰ Workers' rights issues included excessive working hours, night shift subcontracting and poor health and safety conditions in the workplace. We received anonymous evidence from a former employee at an online retailer who visited a factory in Leicester where the fire door was padlocked shut.⁸¹ Leicester has also been identified as a hotspot for human trafficking by the Stop the Traffick coalition's Centre for Intelligence-Led Prevention (CfILP). Stop the Traffick found abuse in the garment industry among other sectors.⁸²

National Minimum Wage

34. The National Minimum Wage (NMW) was introduced in 1999 and is currently £7.83 for workers over 25. In April 2019 this will increase to £8.21. HMRC enforces the NMW in line with the law and policy set out by the Department for Business, Energy and Industrial Strategy (BEIS). In 2018, journalist Sarah O'Connor carried out an investigation for the FT newspaper which revealed how small garment factories in Leicester supplying British online retailers were not paying the minimum wage. At our first hearing she told us:

The going rate for a garment worker in lots of places in Leicester is £3.50, £4 an hour. I was told that £5 was like a really top rate. You would walk out of a factory with your head held high if you were on £5 an hour. That shows that you are skilled. You have a lot of experience. [...] The strangest thing about all of this is that it is a totally open secret. Central government knows about it; local government knows about it. All of the retailers know about it.' [...] 'Enforcing the minimum wage is HMRC's responsibility. I have some figures. HMRC in the five years to 2016–17 identified 232,000 people who had been underpaid the minimum wage. Of those, only 83 were textile workers so, even though this is endemic in the textile sector, they are not looking there.'⁸³

77 [Letter from the Mayor of Leicester Sir Peter Soulsby to the Chair](#) (21 Dec 2018)

78 Unite (SFI0084)

79 Unite the Union (SFI0084)

80 University of Leicester, [New Industry on a Skewed Playing Field: Supply Chain Relations and Working Conditions in UK Garment Manufacturing](#) (2015)

81 Communication received by a committee member from a whistle-blower, December 2018

82 Director of Labour Market Enforcement, [United Kingdom Labour Market Enforcement Strategy 2018/19](#) (May 2018)

83 Q47-Q48

35. We heard that the buying practices of some online fashion retailers may be putting UK clothing manufacturers in the position where they can only afford to pay garment workers illegally low wages. Sarah O'Connor described how 'buyers' for the retailer play suppliers off against each other to drive down costs:

Boohoo holds weekly meetings at its Manchester head office, where suppliers bring samples to the product teams in a single room with 10 to 12 large tables. 'It's like a cattle market,' says one person from a supplier who did not want to be named. 'Say I'm the buyer, and [you've] just given me the price of this [dress] for £5. I will literally hold it up to the next table and say, 'How much for that?' and he'll tell you £4. It's ruthless.'⁸⁴

36. We wrote to the Chief Executives of Amazon, Boohoo, Missguided, and ASOS following Sarah O'Connor's testimony at our first hearing in October. We also invited Chief Executives from ASOS, Boohoo and Misguided to parliament to discuss the situation in Leicester and concerns about the low quality of some 'fast fashion' garments and the excessive waste that this business model is generating. Responding to allegations raised at our first hearing, Boohoo Group's co-founder and joint Chief Executive Carol Kane admitted that negotiations were carried out in front of other suppliers, but denied that manufacturers were played off against each other. She told us:

The comments made on the cattle market in Manchester, we have a building that is currently going through renovation in the last two years. We have private meeting rooms upstairs as well, so suppliers who are not comfortable in a negotiation process next to other suppliers we do house in other parts of the building. That space is currently our trading floor. I do not know of any instances and I do not accept there are any instances where suppliers are played off against each other. I used to be very much a part of that supply chain for many years before I became a founder of Boohoo.com, so I do understand the sensitivity of costing from one supplier to another. I took that allegation on board. I have asked if that does happen. I have sat in meetings and I have not witnessed that ever happening on our buying floor.⁸⁵

37. Boohoo denied that its buying practices and discount prices were to blame for illegally low wages in Leicester garment factories. The online retailer said that it lawfully produces affordable garments. It says that its £5 dresses are merely a 'marketing tool to attract customers to visit our website and these loss leading garments make up only 80 out of over 6,700 dress styles on the Boohoo website.'⁸⁶ It said that 'the suppliers receive the full cost of making these garments and we take the loss of any margin in relation to these promotions,'⁸⁷ that it does not allow its buyers 'to order garments from suppliers at any price'; and that it gives them training on the costing of a garment.⁸⁸

84 Sarah O'Connor, Financial Times, [Dark factories: labour exploitation in Britain's garment industry](#) (17 May 2018)

85 [Q289](#)

86 Boohoo response (SFI0082)

87 Boohoo response (SFI0082)

88 Boohoo response (SFI0082)

38. Missguided said that since signing up to the Ethical Trading Initiative (ETI) it had ‘consolidated’ the number of factories producing its goods in Leicester from 80 to 11.⁸⁹ The budget retailer’s Head of Product Quality & Supply, Paul Smith, said that two members of the Missguided team had been threatened and physically assaulted by factory owners in Leicester in the past 18 months. We asked why they had been assaulted:

Because they did not want us to enter their premises. These I must add were people that we were not currently manufacturing with but were scoping out, and they did not like the questions that we were asking. On one occasion a former director of Missguided was chased out of the building and one of my employees was gripped by the throat and pushed out the door.⁹⁰

39. When asked what he thought they were hiding, he said:

Underpayments of workers is usual.⁹¹

The **Ethical Trading Initiative (ETI)** is an alliance of companies, trade unions and NGOs that promotes respect for workers’ rights around the globe.⁹² All corporate members of ETI agree to adopt the ETI Base Code of labour practice, which is based on the standards of the International Labour Organisation (ILO). ETI works out the most effective steps companies can take to implement the Base Code in their supply chains.⁹³ ETI’s website says that member companies report annually on their efforts and the results they are achieving at factory level. ETI says that it expects companies to improve their ethical trade performance over time, and that it has ‘a robust disciplinary procedure for companies that fail to make sufficient progress or to honour their membership obligations.’⁹⁴ ETI has established a collaborative company-led programme to improve legal and ethical labour standards in suppliers’ factories called Fast Forward, which combines auditing techniques and a worker helpline.⁹⁵

40. Missguided said it recognised the importance of the issues raised by our inquiry and told us it had ‘made the commitment to join, and be an active member, of the Ethical Trading Initiative (ETI) in 2017’.⁹⁶ It said it was disappointed that many of its ‘direct competitors’ had not signed up ‘because we know some of the challenges you outline need co-ordinated action from all retailers to be impactful.’⁹⁷ Carol Kane said that Boohoo Group was still considering joining the ETI, but:

... we have been struggling to see where the benefits would be to some of our suppliers. We are not closed to the idea. We are still considering it at the moment. There are a few areas where I would say within Leicester for sure we probably use the most factories and we probably use the most CMT

89 Missguided (SFI0076)

90 [Q313](#)

91 [Q314](#)

92 [Ethical Trading Initiative](#)

93 [Ethical Trading Initiative](#)

94 [Ethical Trading Initiative](#)

95 Anti-Slavery and Ethical Trading Initiative, [Base Code Guidance: Modern Slavery](#)

96 Missguided (SFI0076)

97 Missguided (SFI0076)

[cut, make and trim] units, all of which we have in the last couple of years successfully managed to get through our audit process without being a member of the ETI.⁹⁸

41. When we pressed Carol Kane on why Boohoo Group would not sign up to the ETI, Ms Kane replied:

... we are using all of the same standards. We are not doing anything differently from the ETI. All our audits and all our standards are based upon their code and their conduct, so we are utilising all of that. The only difference today is one of a commercial decision. Being members we will be required to publish our whole supply chain, which is currently our engine room.⁹⁹

42. The ETI wrote to us following the hearing to contest Boohoo's evidence. ETI said that Carol Kane's claim that 'we are not doing anything differently from the ETI' appears to be 'based on a limited understanding of what ETI does and what we expect from our members.'¹⁰⁰ ETI said that adoption of its labour standards (the ETI Basecode) is just one of the basic requirements for company membership. 'We also expect our members to show active engagement around the core principles of ethical trade and to demonstrate continuous improvement in their supply chain practices.'¹⁰¹ ETI said it expects its members 'to take a proactive approach to identifying and resolving issues, and to demonstrate clear improvement over time. As well as adopting the Base Code, they sign up to a set of principles outlining our approach to ethical trade. These require companies to:

- Demonstrate a clear commitment to ethical trade;
- Integrate ethical trade into their core business practices;
- Drive year-on-year improvements in working conditions;
- Support suppliers to improve working conditions e.g. through advice and training;
- Provide remedy if they have caused or contributed to a breach in workers' rights;
- Report openly and accurately about their activities.¹⁰²

43. We also asked Ms Kane whether Boohoo recognised trade unions. She told us that Boohoo would recognise a union 'if the workers would like it' but that 'there does not currently appear to be a demand for our workers in our Burnley warehouse to require a union.'¹⁰³ Following the evidence session this was contradicted by written evidence from the union of Shop, Distributive and Allied Workers (Usdaw), contesting Boohoo's statements. This included evidence of 23 recruitment and awareness activities, dating back to January 2017, for Boohoo's Burnley staff and written communications from Usdaw to Carol Kane and Boohoo's HR Director asking to secure union recognition for Boohoo workers:

98 [Q328](#)

99 [Q330](#)

100 Ethical Trading Initiative (SFI0089)

101 Ethical Trading Initiative (SFI0089)

102 Ethical Trading Initiative (SFI0089)

103 [Qq336-339](#)

Overall, it is clear that despite Carol Kane's assertion to the committee that Boohoo is open to recognising a trade union to represent their workers, the company has, over a prolonged period of time refused even the most basic level of engagement with Usdaw and appears hostile to the very idea of recognising a trade union.¹⁰⁴

44. Unite the Union provided further evidence to us on the situation in Leicester.¹⁰⁵ It said 'it is not enough to simply blame unethical factory owners. Retailers purchasing practices create a race to the bottom culture in the industry through their demand for cheap prices, rapid deliveries and a punitive financial culture which imposes huge fines on producers [for late production].'¹⁰⁶ This creates an environment for precarious employment shifting the trend from permanent workers to temporary workers through the 'availability' of a transient, disposable mainly migrant workforce.¹⁰⁷ Unite says that:

Whenever competition has pushed down garment prices, labour costs have always been the first to be put under pressure. The very nature of the garment industry requires higher labour productivity due to the limitations to technology-led productivity in an industry which requires manual labour. Accordingly, manufacturer's wages are the highest single cost, thus in 'high-wage countries' clothing producers continually attempt to drive down wages for profit.¹⁰⁸

Labour Market Enforcement

45. The British Retail Consortium argued that there should be more proactive labour law enforcement from Government agencies in the UK garment manufacturing sector in order to give retailers the confidence to source more products from UK factories. It suggested that licensing could be used to tackle poor working conditions in UK factories.¹⁰⁹

46. In May 2018, the Director of Labour Market Enforcement, Sir David Metcalf, published his office's first annual strategy on labour market enforcement calling for a shift to more proactive enforcement methods.¹¹⁰ The report recommended a 'significant increase' in fines for non-compliance and greater use of prosecution. He argued that the current level of fines for non-payment of the minimum wage do not provide a strong enough incentive to comply - especially given the low probability of inspection and detection. For example, the report noted that HMRC's National Minimum Wage team completed nearly 2,700 investigations in 2016/17. It said that with 1.3 million employers in the UK this suggests that the average employer can expect an inspection around once every 500 years. The report points out that for non-compliance with NMW employers only face a penalty of up to 200 per cent of the wage arrears—in addition to repayment of the arrears. In 2016/17, the average wage arrears were £110 per worker, implying a fine of only £220. Written evidence we received from HMRC shows that UK-based garment factory owners have been forced

104 USDAW (SFI0096)

105 Unite the Union ([SFI0084](#))

106 Unite (SFI0084)

107 Unite (SFI0084)

108 Unite (SFI0084)

109 British Retail Consortium (SFI0019)

110 Director of Labour Market Enforcement, [United Kingdom Labour Market Enforcement Strategy 2018/19](#) (May 2018)

to pay out almost £90,000 to employees for non-payment of minimum wage. Since 2012 an average of £900 has been paid out to 126 factory workers, far exceeding the national average.¹¹¹

47. Sir David Metcalf suggested that there may be a case for using fines linked to turnover. His report argued that there has been insufficient use of prosecutions with only 14 minimum wage prosecutions since 1999.¹¹² He also noted that more can be done to ensure compliance with labour rights throughout supply chains. He recommended that joint responsibility measures, where retailers take on a share of responsibility for any non-compliance with labour rights in their supply chains, should be introduced. This would allow for enforcement agencies to work with major retailers if non-compliance was identified in their supply chain, harnessing the leverage of retailers to ensure labour rights are upheld.¹¹³ In December 2018 the Government published its response to Sir David's report. It accepted his recommendation that state enforcement should shift to more proactive enforcement methods, but it rejected his call for increased penalties for non-compliance.¹¹⁴ The Government said that:

... where non-compliance is identified in a supply chain, the Government envisages an approach whereby the enforcement body could privately notify both the supplier and the head of the chain. This could enable the head of the chain to work with the supplier to take corrective action. The Government will consult on this and how to address non-compliance in supply chains, working with business, trade unions and the enforcement bodies before responding to this recommendation.¹¹⁵

48. At our hearing with Ministers, it was revealed that a 'week of action' had taken place in September 2018 where the Gangmasters and Labour Abuse Authority (GLAA), alongside Leicester Police, HMRC and the Health and Safety Executive, visited 28 textile factories in Leicester. Kelly Tolhurst, Parliamentary Under Secretary of State at the Department for Business, Energy and Industrial Strategy, refused to give the details of the enforcement action that had been taken. However, Janet Alexander from HMRC confirmed that 14 premises are under further investigation and that it is taking forward some national minimum wage cases. Two cases have been referred to the GLAA.¹¹⁶

Enforcing labour market law in UK garment factories

49. **We were shocked by the treatment of Missguided's auditors. If this is how factory owners treat potential customers, we dread to think of the conditions endured by their workers.**

50. **'Made in the UK' should mean workers are paid at least the minimum wage in a safe workspace. It is unacceptable that some workers in the UK making clothes for fast**

111 [Letter from HM Revenue & Customs to the Chair](#) (14 January 2019)

112 Director of Labour Market Enforcement, [United Kingdom Labour Market Enforcement Strategy 2018/19](#) (May 2018)

113 Director of Labour Market Enforcement, [United Kingdom Labour Market Enforcement Strategy 2018/19](#) (May 2018)

114 BEIS & Home Office, [United Kingdom Labour Market Enforcement Strategy 2018/19: Government response](#) (December 2018)

115 BEIS & Home Office, [United Kingdom Labour Market Enforcement Strategy 2018/19: Government response](#) (December 2018)

116 [Q470-478](#)

fashion retailers are not paid the minimum wage and are suffering serious breaches of health and safety law in their workplaces. We support calls from the Director of Labour Market Enforcement for a more proactive approach to the enforcement of the national minimum wage. HMRC’s National Minimum Wage team needs greater resourcing in order to increase their inspection and detection work. We also recommend that Boohoo engage with Usdaw as a priority and recognise unions for its workers. We recommend that textile retailers operating internationally follow the example of Asos, H&M, Esprit and Inditex in signing up to Global Framework Agreements. These put in place the highest standards of trade union rights, health, safety and environmental practices, across the retailers’ global operations, regardless of local country standards.

Forced labour in fashion supply chains

51. We heard disturbing evidence that forced labour is still present in fashion supply chains. In a practice dating from Soviet times, the repressive governments of Uzbekistan and Turkmenistan continue to force their own citizens to pick cotton under harsh conditions each harvest season.¹¹⁷ Both Turkmenistan and Uzbekistan are in the top ten cotton producers in the world.¹¹⁸ There are reports that prison labour in China has been used to produce garments for well-known Western brands.¹¹⁹

52. Anti-Slavery International campaigner Kate Elsayed-Ali also highlighted the Sumangali system practiced in India to illustrate the often ‘gendered’ nature of forced and child labour in fashion supply chains:

What I see globally is that women and girls really do comprise the majority of people in forced labour and slavery situations. There are particular vulnerabilities. There are also gendered forms of forced labour and child labour. If I take the example of India, a massive cotton yarn producer after China, there is a very specific form of forced labour within the cotton mills that only affects women and girls. It is called the sumangali system. It is pretty widespread in Tamil Nadu where most of those spinning mills operate. Girls are bonded to a particular mill for a period of up to three years. Their parents take an advance payment. The intention behind that is that at the end of the three-year period that would be used to arrange their marriage, essentially, but the girls go to the mills with an agent, will have signed contracts that they don’t have a copy of and, in most cases, they will not have been able to read. We are talking about quite young, 13 to 18 year-olds working 12-hour days. They will be living in camps associated with that mill. They will not be able to go home and visit their parents, in the hope that at the end of those three years they will have this advance payment. It very much is bonded child labour.¹²⁰

117 Anti-Slavery, [Cotton Crimes: Uzbekistan and Turkmenistan](#)

118 The Daily Records, [Top 10 Largest Cotton Producing Countries In The World](#) (January 2019)

119 Financial Times, [‘I was locked inside a steel cage’: Peter Humphrey on his life inside a Chinese prison](#) (Feb 2018)

120 Q45

53. In written evidence Burberry said that it refuses to source from countries if it considers labour and environmental rights to fall below Burberry's standards, particularly if there are concerns around modern slavery. These countries include: Bangladesh, Pakistan, Cambodia and Myanmar. Burberry stated that the list is reviewed in collaboration with its supply chain team.¹²¹

Transparency

54. Most brands source materials and products from long, disjointed supply chains in the global south. The fashion industry depends on unequal power relationships and the 'invisibilisation' of mostly female manual workers. We do not see the faces of the people who make our clothes.¹²² According to lecturer in Sustainability, Retail & Fashion at the University of Leeds, Dr Mark Sumner, 'these brands and suppliers have little awareness of or understanding of each other.'¹²³ This has led to concerns that retailers can simply pass the responsibility for labour exploitation down the supply chain, with no accountability.¹²⁴ Eco Age described this low cost, high volume, zero consequence production method. They said that:

Because the major brands do not employ the workers directly, or own the factories they produce in, they are able to profit hugely, all while remaining free of responsibility for the effects of poverty wages, factory disasters, and the ongoing violent treatment of workers.¹²⁵

55. Dr Sumner argued that legislation requiring greater transparency would have a major impact in driving positive change. He says:

A very simple requirement for brands to declare the source of raw material used in their garments would lead to a paradigm shift in attitudes. This type approach would be ground breaking for the industry, setting an aspirational, but achievable standard that would be the envy of the rest of the developed world.¹²⁶

Modern Slavery Act

56. In 2014 the Home Office introduced the Modern Slavery Strategy to tackle slavery, servitude, forced labour and human trafficking, and in 2015 Parliament passed the Modern Slavery Act. The Transparency in Supply Chains clause in the Act requires companies with a turnover of more than £36 million to produce a statement on slavery and human trafficking each year setting out the steps the organisation has taken to ensure that modern slavery is not taking place in their business or supply chain, including if the organisation has taken no steps.¹²⁷

121 Burberry (SFI0083)

122 [Q86](#)

123 Dr Mark Sumner, University of Leeds (SFI0026)

124 London Textile Forum ([SFI0044](#)); Fashion Revolution ([SFI0056](#)); ECO AGE LTD ([SFI0075](#))

125 ECO AGE LTD ([SFI0075](#))

126 Dr Mark Sumner, University of Leeds (SFI0026)

127 Public Accounts Committee, [Reducing modern slavery](#) (May 2018)

57. The Government says that the Act has increased transparency in supply chains. However, concerns have been raised by the Public Accounts Committee (PAC) that the Government does not monitor whether statements made under the Modern Slavery Act comply with the legislation and has never used its powers to penalise companies that do not comply.¹²⁸ PAC reported that as of October 2017, the Modern Slavery Registry (produced by the Business and Human Rights Resource Centre) held around 3,000 statements out of an estimated 9,000–11,000 businesses that the Department estimates the legislation applies to.

58. The Home Office Minister Victoria Atkins MP was unable to tell us how many of the UK's major fashion retailers have already completed modern slavery statements:

In terms of companies that have reported: we know that around 60% of businesses that we believe to be within scope have put up statements; 60% of companies in total. I do not have the breakdown for fashion companies because one of the difficulties, and not just in this exercise—it applies to the exercise that required companies to issue their gender pay gap—is that people assume that there is some giant Government database of companies that fall within these scopes and there isn't. There has been a great deal of work in the modern slavery sphere, but also in the gender pay gap sphere, to try to find the companies that are in scope for this legislation and from there make it clear that they should comply.

We were concerned that only 60%—although it is more than half; frankly, it should be 100%—have complied with their requirements under section 54. Last month my Department wrote to around 17,000 businesses to ask them, first, to confirm that they are in scope under section 54 and secondly, if they have not already put up statements that they should do so by 31 March next year, and then also inviting them to sign up to a database whereby we can share information and guidance as to good practice. I am pleased to say, around 2,500 businesses that we have written to have signed up to that database.¹²⁹

The Companies Act 2006 requires that a statement be made on human rights issues in a company's Annual Report only 'where necessary for an understanding of the development, performance or position of the company's business.'¹³⁰ The Companies Act 2006 does not mention supply chains or modern slavery. This means it is the choice of the business what policies are relevant and what detail necessary when reporting on human rights issues within its operations. This system lacks accountability and places too much reliance on companies to self-disclose.

59. Ongoing research at Leeds University by Dr Mark Sumner has identified 24 leading retailers, including Foot Locker and Valentino, who are non-compliant with the Modern Slavery Act by not making available their modern slavery statements as of December 2018 (see Appendix 1). Such wide non-compliance with the de minimis reporting requirements shows that many household names have failed utterly to engage with this legislation.

128 Public Accounts Committee, [Reducing modern slavery](#) (May 2018)

129 [Q466](#)

130 [Home Office](#) (2017), p.25.

Due diligence law

60. We heard a number of calls for the Modern Slavery Act to be strengthened to introduce mandatory due diligence for companies.¹³¹ Anti-Slavery International campaigner Kate Elsayed-Ali told us that the Modern Slavery Act was an ‘important step forwards’ but that it had limitations that needed to be addressed. She said that:

Businesses are required to publish a statement saying what they are doing to address slavery in their supply chains, but technically a business could publish a slavery statement saying, “We are not doing anything” and they would still be compliant with the transparency in supply chains clause of that Act. I think we need to look beyond compliance. What my organisation is calling for is mandatory supply chains transparency but also mandatory due diligence. That is businesses looking proactively at the entirety of their supply chains to establish what are their forced labour risks, what are their child labour risks, how can we address those?¹³²

61. In the absence of supply chain traceability standards, concerns have been raised by Fashion Revolution and the London Textile Forum that brands can simply pass the responsibility down the supply chain, with no accountability.¹³³ A Behind the Barcode report in 2015 found that of 219 retailers surveyed, 91% did not have full knowledge of where their cotton comes from, 75% did not know the source of all their fabrics, and only half could trace where their products are cut and sewn.¹³⁴ Fashion Revolution also called for the Government to pass mandatory ‘due diligence’ laws, and pointed to recent regulatory examples in France and Switzerland. It said that introducing such a law would require companies to identify, prevent, mitigate and account for how they address their actual and potential adverse social and environmental impacts.¹³⁵ Fashion Revolution recommended that the Modern Slavery Act be strengthened with further transparency requirements:

- Extending the legislation to cover public procurement;
- Establishing, maintaining and monitoring an easily searchable public database of companies that are required to comply, including a copy of their annual MSA statements;
- Require common, robust and comparable standards for reporting transparency information;
- Establish and enforce penalties for companies that do not comply.¹³⁶

131 Anti-Slavery International ([SFI0071](#)); Fashion Revolution ([SFI0056](#)); Labour Behind the Label ([SFI0067](#))

132 Q43

133 London Textile Forum ([SFI0044](#))

134 Baptist World Aid Australia (2015), [The Truth Behind the Barcode: Australian Fashion Report 2015](#).

135 Fashion Revolution ([SFI0056](#))

136 Fashion Revolution ([SFI0056](#))

The **French Corporate Duty of Vigilance Law passed in 2017** requires all French companies that have more than 5,000 employees domestically, or employ 10,000 employees or more worldwide, to implement an effective ‘vigilance’ plan to address environmental, health and safety and human rights both in their own operations and at their suppliers and sub-contractors.¹³⁷ This is stronger than the UK’s Modern Slavery Act and California’s Transparency in Supply Chains Act, which only require firms to report on any efforts they have taken to identify human rights’ risks.¹³⁸

62. In August the Government announced a review of the operation and effectiveness the Modern Slavery Act 2015 to identify potential improvements. The review will consider how to ensure compliance and drive up the quality of statements produced by eligible companies.¹³⁹ The review aims to report to the Home Secretary before the end of March 2019.

63. **There must be more transparency in supply chains and there is a strong case for the Modern Slavery Act to be strengthened. The current requirement to produce a statement does not ensure that action is taken by big retailers and even this is not adequately monitored. *The Government should publish a publicly accessible list of all those retailers required to release a modern slavery statement. This should be supported by an appropriate penalty for those companies who fail to report and comply with the Modern Slavery Act. This will increase transparency and require the establishment of formal monitoring of whether statements comply with legislation.***

64. **The Companies Act 2006 requires that a statement be made on human rights issues in a company’s Annual Report only ‘where necessary’. This system lacks accountability and places too much reliance on companies to self-disclose. *We recommend that the Companies Act 2006 be updated to include explicit reference to ‘modern slavery’ and ‘supply chains’. Statements on a business’ approach to human rights in its supply chain should be mandatory as part of the Annual Report. The Financial Reporting Council’s (FRC) Corporate Governance Code and UK Stewardship Code, and the Financial Conduct Authority’s (FCA) listing rules should likewise be amended to require modern slavery disclosures on a comply or explain basis by 2022. If this is not possible then a Corporate Duty of Vigilance Law, as in France, should be considered.* Fashion retailers must not be allowed to turn a blind eye to labour and environmental abuses in their supply chains. Retailers should be investing in technology that allows them - and their customers - to track where their materials and products are sourced and made. *We recommend that the Government strengthen the Modern Slavery Act to require large companies to perform due diligence checks across their supply chains to ensure their materials and products are being produced without forced or child labour. We also recommend that Government procurement should be covered by the Modern Slavery Act.***

65. ***We recommend that the Government works with industry to trace the source of raw material in garments to tackle social and environmental abuses in their supply chains. Digital technology is widely used in other supply chains. We do not understand why a modern high-tech industry like fashion does not have these systems already in place.***

137 Fashion Revolution (SFI0056)

138 Corporate Social Responsibility and the law, [The French Duty of Vigilance Law: What You Need to Know](#) (August 2017)

139 Home Office, [Review of the Modern Slavery Act 2015: terms of reference](#) (August 2018)

Some companies told us they can trace their materials down to Tier 4 suppliers. This begs the question - if one can do it, why can't all? This first step is essential if fashion is to tackle its waste, water, chemical and carbon footprint. This also reduces the opportunities for sub-contractors to take their cut along the supply chain.

3 Fashion's environmental price tag

Environmental impact

66. Everything we wear has an embedded environmental cost in terms of energy, water, land and chemicals used. This depends on multiple factors. The fibres that are used and whether they were grown or made, the production methods used, how they are processed into yarn, transported, dyed, printed and made into clothes. We heard that the environmental price tag for our clothes is largely determined during the design and production phase:

- Production of fibres by polymer extrusion or agriculture makes the largest contribution to the carbon footprint of clothing;¹⁴⁰
- The greatest quantity of water is used during the growing and production of fibres;¹⁴¹
- Choice of synthetic fibre and design of garments can result in significant differences in the emission of plastic microfibres to the environment;¹⁴²
- The best opportunity within the clothing lifecycle to increase longevity is at the design stage, as changes to design practices can have a significant impact on how long items remain wearable.¹⁴³

Key facts & figures on the carbon, water and land-use footprint of textiles

A polyester shirt has more than double the carbon footprint of a cotton shirt (5.5 kg CO₂e vs. 2.1 kg CO₂e).¹⁴⁴

One kilogram of cotton - equivalent to the weight of a shirt and pair of jeans - can take as much as 10,000–20,000 litres of water to produce.¹⁴⁵

The fashion industry is projected to use 35% more land for fibre production by 2030— an extra 115 million hectares that could be left for biodiversity or used to grow crops to feed an expanding population.¹⁴⁶

Energy and climate

67. Textile production is a major contributor to climate change. It produces an estimated 1.2 billion tonnes of CO₂ equivalent (CO₂e) per year - more than international flights and maritime shipping combined.¹⁴⁷ It is estimated that across the full lifecycle of clothing globally, the industry has an annual carbon footprint of 3.3 billion tonnes CO₂e.¹⁴⁸ That figure is close to the combined carbon footprint of all 28 current members of the EU (3.5

140 WRAP, [Valuing Our Clothes: the cost of UK fashion](#) (July 2017)

141 WRAP (the Waste & Resources Action Programme) ([SFI0050](#))

142 Professor Richard Thompson ([SFI0007](#))

143 Clothing Sustainability Research Group, Nottingham Trent University ([SFI0049](#))

144 Kirchain, R., Olivetti, E., Reed Miller, T. & Greene, S. Sustainable Apparel Materials (Materials Systems Laboratory, Massachusetts Institute of Technology, 2015).

145 WRAP, [Valuing Our Clothes: the cost of UK fashion](#) (July 2017)

146 Global Fashion Agenda & Boston Consulting Group, [Pulse of the Fashion Industry](#) (2017)

147 Ellen Macarthur Foundation, [a New Textiles Economy: Redesigning Fashion's Future](#) (2017)

148 School of Design, University of Leeds ([SFI0026](#))

billion tonnes).¹⁴⁹ The total carbon footprint of clothing in the UK is growing - rising from 24 million tonnes to 26.2 million tonnes per year in 2016, according to WRAP.¹⁵⁰ If fashion continues on its current path, it could use more than 26% of the global carbon budget associated with a 2°C pathway by 2050, according to the Ellen MacArthur Foundation.¹⁵¹

Water consumption

68. Large quantities of water are also used. In 2016, WRAP estimated that the water footprint of clothes used in the UK was 8 billion cubic metres.¹⁵² Globally, the fashion industry consumes an estimated 79 billion cubic metres of fresh water annually. The growing and production of fibres consumes the greatest quantity of water. Water is also used when dyeing, finishing and washing clothes.¹⁵³ Adding rips and tears to jeans by the application of chemicals is harmful to workers and the environment.¹⁵⁴ Textile production is responsible for high volumes of water containing hazardous chemicals being discharged into rivers and water courses.¹⁵⁵ Twenty per cent of industrial water pollution globally is attributable to the dyeing and treatment of textiles, according to the Ellen MacArthur Foundation.¹⁵⁶ Reliance on chemicals in the cotton production process is linked to high rates of water use - with up to one fifth of water use related to diluting chemicals according to the Soil Association.¹⁵⁷

69. Cotton is one of the thirstiest fibres in fashion. According to WRAP, cotton production accounts for 69% of the water footprint of fibre production for textiles.¹⁵⁸ One kilogram of cotton - equivalent to the weight of a shirt and pair of jeans - can take as much as 10,000–20,000 litres to produce, depending on where in the world it is grown.¹⁵⁹ The Aral Sea, formerly one of the four largest lakes in the world, has almost entirely dried up, in large part due to intensive industrial cotton farming in Central Asia.¹⁶⁰ It is now called the Aralkum Desert.¹⁶¹ This is an ecological, economic and social disaster.

70. The water scarcity exacerbated by cotton production in arid regions has an impact on local communities - especially in low income countries.¹⁶² Major cotton producing countries such as China and India are already suffering from medium to high levels of water stress in certain areas.¹⁶³ The Pulse of Fashion report warns that as water scarcity worsens in the future some cotton growing nations 'may face the dilemma of choosing between cotton production and securing clean drinking water'.¹⁶⁴

149 [Global Carbon Atlas - CO2 Emissions](#)

150 WRAP, [Valuing Our Clothes: the cost of UK fashion](#) (July 2017)

151 Ellen Macarthur Foundation, [a New Textiles Economy: Redesigning Fashion's Future](#) (2017)

152 WRAP, [Valuing Our Clothes: the cost of UK fashion](#) (July 2017)

153 WRAP, [Valuing Our Clothes: the cost of UK fashion](#) (July 2017)

154 Heddels, [The environmental benefits of raw denim](#) (June 2014)

155 Ellen Macarthur Foundation, [a New Textiles Economy: Redesigning Fashion's Future](#) (2017)

156 Ellen Macarthur Foundation, [a New Textiles Economy: Redesigning Fashion's Future](#) (2017)

157 Soil Association (SFI0011)

158 WRAP, [Valuing Our Clothes: the cost of UK fashion](#) (July 2017)

159 WRAP, [Valuing Our Clothes: the cost of UK fashion](#) (July 2017)

160 Fashion Revolution (SFI0056)

161 Euronews, [Facing up to the challenges of the fast disappearing Aral Sea](#) (August 2018)

162 WRAP, [Valuing Our Clothes: the cost of UK fashion](#) (July 2017)

163 Global Fashion Agenda & Boston Consulting Group, [Pulse of the Fashion Industry](#) (2017)

164 Global Fashion Agenda & Boston Consulting Group, [Pulse of the Fashion Industry](#) (2017)

Land use

71. The use of land for the production of natural fibres can also be a cause of deforestation and biodiversity loss.¹⁶⁵ The fashion industry is projected to use 35% more land for fibre production by 2030—an extra 115 million hectares that could be used to grow crops for an increasing population or preserve forest to store carbon.¹⁶⁶

72. We are unwittingly wearing the fresh water supply of central Asia and destroying fragile ecosystems. Consumers can play their part by avoiding products with pre-made rips and tears and seeking sustainable or organic cotton wherever possible. Governments should oblige retailers to ensure full traceability in their supply chains to prove decent livelihoods and sustainably sourced materials.

Natural Vs Synthetic Fibres

73. There are ethical and environmental problems associated with both natural and synthetic fibres used in clothing production. To produce natural fibres like cotton, wool, leather, cashmere and silk, it requires the use of land, water, animals, feed and chemicals. Synthetic fibres like polyester, are made from petroleum, a non-renewable resource, and require an energy intensive production process.

Natural fibres

74. Cotton is the most widely used natural fibre in the world. It is a global commodity and hard to trace. It uses land, large quantities of water and is often grown using insecticides. Nitrogen rich fertilisers are used in cotton agriculture which increase soil acidity.¹⁶⁷ The Soil Association argued that increasing organic cotton production could make a significant contribution to minimising the environmental impact of the fashion industry.¹⁶⁸ It would reduce the use of chemical fertilisers, pesticides, and associated water use. At our hearing with fashion retailers, Primark's Paul Lister cited a project that Primark had been involved in, where better irrigation and organic pest control methods had reduced water use, increased yield by 6% and doubled farmers' income.¹⁶⁹

75. There are also ethical concerns around the use of some natural fibres. Animal welfare is of increasing concern to consumers and a number of companies have recently announced that they are abandoning the use of fur. Stella McCartney's Sustainability and Innovation Director Claire Bergkamp told us:

More and more people are recognising that we do not have to kill animals for the sake of fashion, that it is not necessary and you can have beautiful products that do not involve slaughter. The movement towards companies going fur free has been very exciting to see. We do not need fur anymore. It is really an archaic fabric and is not something that is necessary. The UK banned the manufacturing of fur and there is a possibility for the UK to ban the sale of fur, which is of course something we support at Stella.¹⁷⁰

165 Carbon Trust, [Three sustainability trends shaping the future of the fashion industry](#) (March 2018)

166 Global Fashion Agenda & Boston Consulting Group, [Pulse of the Fashion Industry](#) (2017)

167 London Textile Forum (SFI0044)

168 Soil Association (SFI0011)

169 Q222

170 Q91

76. The International Fur Federation (IFF) contends, however, that fur should be considered as a more sustainable fibre than fake fur, as it is biodegradable and does not contribute to microplastic pollution. The IFF claims that ‘animal welfare is the uppermost priority for the fur industry and across the globe a number of programs are in place to ensure that fur derived from farms or from Government authorised conservation programs are subject to rigorous inspection and certification’. It says that from 2020 the sector will be launching FURMARK, ‘a global certification and traceability system that brings these various programs together under an umbrella system’.¹⁷¹ Animal welfare campaigners question whether these standards go far enough. Our colleagues on the Environment Food and Rural Affairs Committee recently recommended that the Government holds a public consultation to consider whether to ban fur altogether.¹⁷²

Synthetic fibres

77. Synthetic textiles can either be made from plastics, such as polyester, polyamide and acrylic, or from plant materials that are chemically dissolved and then spun into fibres, such as rayon, viscose, lyocell, modal and cupro. The plastic most commonly used in textiles is polyethylene terephthalate (PET) or polyester.¹⁷³ Most synthetic fibres (approximately 70%) are made from polyester and it is now used in around 60% of our garments.¹⁷⁴ This quantity has doubled since 2000, according to the London Textile Forum.¹⁷⁵ The vast majority of synthetic fibres come from virgin plastics. One problem preventing greater uptake of recycled polyester is that low oil prices make new virgin plastics cheaper than recycled PET.¹⁷⁶

78. Petroleum based synthetic fibres like polyester have less impact on water and land than cotton, but they emit more greenhouse gasses per kilogram. According to one academic analysis, a polyester shirt has more than double the carbon footprint of a cotton shirt (5.5 kg CO₂e vs. 2.1 kg CO₂e).¹⁷⁷ The London Textile Forum says that bio-based synthetic polymers made from renewable crops such as corn and sugar cane require less energy. It claims that these release ‘up to 60% less carbon emissions, partly due to the crops creating carbon sinks’.¹⁷⁸

Recycled fibres

79. Developing the technology and market for recycled fibres is a key challenge in the move to a more circular fashion system. The Director of the Textile Recycling Association Alan Wheeler told us that there is interesting R&D work going on to develop ‘new techniques to recycle post-consumer polyester and cotton waste, and it is already possible to produce a wool yarn from recycled fibres that performs as well as one made from virgin fibres’.¹⁷⁹ However, he noted that:

171 International Fur Federation (SFI0045)

172 Environment Food and Rural Affairs, [Fur Trade in the UK](#) (July 2018)

173 O ECOTEXTILES, [Why is recycled polyester considered a sustainable textile?](#)

174 London Textile Forum (SFI0044)

175 London Textile Forum (SFI0044)

176 Environmental Audit Committee, [Plastic Bottles: Turning Back the Plastic Tide](#) (Dec 2017)

177 Kirchain, R., Olivetti, E., Reed Miller, T. & Greene, S. [Sustainable Apparel Materials](#) (Materials Systems Laboratory, Massachusetts Institute of Technology, 2015).

178 London Textile Forum (SFI0044)

179 Recycling & Waste World, [A stitch in time](#) (May 2017)

... ability for our sector to recycle fibres is the Achilles heel of our industry and is perhaps the biggest stumbling block that the fashion industry will need to overcome if it is to achieve actual circularity and not merely an improvement of the current linear industry.¹⁸⁰

80. The ability to recycle textiles into high value new products is limited. Current mechanical recycling processes damage the original fibre and shorten the fibre length.¹⁸¹ This limits the options and range of markets for recycled fibres and in most cases they can only be recycled once. Demand from existing markets is low and hence the value that can be achieved for recycled textiles are low.¹⁸²

81. There are some moves within industry to use more recycled fibres. The Textile Exchange has brought together fifty nine major textile, apparel and retailers - including adidas, Dibella, Eileen Fisher, Gap Inc., H&M, IKEA, Lindex, MetaWear, Target and Timberland—to aim to increase their use of Recycled Polyester (rPET) by at least 25% by 2020.¹⁸³ At the moment most plastic recycling infrastructure is set up for PET bottles and the technology for recycling old synthetic fabrics into new ones is in its infancy.¹⁸⁴ The fashion label Christopher Raeburn suggested that the Government reduce VAT based ‘on proven recycled content garments; this could be on a sliding scale, to encourage migration to entirely circular materials.’¹⁸⁵

Microfibre shedding

82. In 2016, our predecessor Committee highlighted how trillions of tiny pieces of plastic are accumulating in the world’s oceans, harming marine life and entering the food chain.¹⁸⁶ Research has shown that marine habitats worldwide including shorelines, sea surface, deep sea and arctic sea ice are polluted with small plastic pieces less than five millimetres long. Synthetic fibres are common in most samples and have also been detected in commercially important fish and shellfish.¹⁸⁷ Laboratory studies have demonstrated the potential for microplastics to have harmful effects on marine life when ingested, although most of this research has focused on spherical microplastics.¹⁸⁸

180 Textile Recycling Association ([SFI0013](#))

181 Textile Recycling Association ([SFI0013](#))

182 Textile Recycling Association ([SFI0013](#))

183 Textile Exchange, [Recycled Polyester Commitment](#)

184 Time to Sew, [Recycled polyester – a sustainable solution?](#) (December 2017)

185 Christopher Raeburn ([SFI0095](#))

186 Environmental Audit Committee, [Environmental impact of microplastics](#) (August 2016)

187 Professor Richard Thompson ([SFI0007](#))

188 Professor Richard Thompson ([SFI0007](#))

Key facts & figures on microplastic shedding

As much as 20% to 35% of all primary source microplastics in the marine environment are from synthetic clothing, according to academic estimates.¹⁸⁹

A single 6kg domestic wash has the potential to release as many as 700,000 fibres.¹⁹⁰

Over nine trillion fibres could be released per week in the UK, according to figures cited in the National Federation of Women's Institutes (NFWI) In a Spin report.¹⁹¹

83. Textiles are estimated to be the largest source of synthetic fibres in the oceans with microplastics shedding into the water system every time garments are washed. A single 6kg domestic wash has the potential to release as many as 700,000 fibres.¹⁹² Evidence suggests that when synthetic textiles are landfilled or incinerated they can also leach microfibrils into the environment.¹⁹³ Synthetic cellulosic fibres - made from plant matter rather than plastic - are sometimes said to be biodegradable, but Friends of the Earth warned that there is also evidence that they persist in the environment.¹⁹⁴ It said rayon has also been found in the digestive tracts of commercial fish species.

84. Fashion's microplastic pollution probably begins during the manufacturing phase. When synthetic fibres are produced, combined into yarn and woven into fabrics, it is possible that fibres are released into the air and environment.¹⁹⁵ There is emerging evidence that this may pose a health and safety risk for textile factory workers. According to a recent academic study: 'interstitial lung disease is a work-related condition that induces coughing, dyspnoea (breathlessness), and reduced lung capacity in workers processing either para-aramid, polyester, and/or nylon fibers. [...] Whilst these effects are distinct from those seen after asbestos exposure, the legacy of asbestos toxicology can in-part help predict health effects of fibrous microplastics.'¹⁹⁶ The blog and shop Amberoot said that synthetic plastic fibres should be classified as a health hazard because they are ending up in our 'soil, food and the air we breathe'.¹⁹⁷ Natural fibres have also been linked to occupational health hazards. Byssinosis, also called brown lung disease, is caused by exposure to cotton dust in poorly ventilated workspaces.¹⁹⁸

189 Kirsi Laitala, Ingun Grimstad Klepp and Beverley Henry, [Does Use Matter? Comparison of Environmental Impacts of Clothing Based on Fiber Type](#) (July 2018)

190 Professor Richard Thompson (SFI0007)

191 National Federation of Women's Institutes, [In a Spin: How our laundry is contributing to plastic pollution](#) (October 2018)

192 Professor Richard Thompson (SFI0007)

193 Fashion Revolution (SFI0056)

194 Friends of the Earth (SFI)

195 Friends of the Earth (SFI0069)

196 Gasperi et al in Current Opinion in Environmental Science & Health, [Microplastics in air: Are we breathing it in?](#) (Volume 1, February 2018)

197 Amberoot (SFI0023)

198 American Lung Association, [Lung Health & Diseases: Byssinosis](#)

85. There are three points where interventions could be made to reduce the number of synthetic fibres finding their way into our waters:

- Changes in the type of yarn and garment design / construction;
- Modification of laundering processes, for example capture via filters in washing machines;
- Better filters to capture fibres in wastewater treatment.¹⁹⁹

86. Significant numbers of synthetic micro-fibres are already intercepted in wastewater treatment, according to evidence we received from Plymouth University. Given the considerable volumes of textiles in use, however, even relatively high capture rates in wastewater treatment may still result in substantial emissions.²⁰⁰ When fibres are captured in wastewater treatment they may still be returned to the environment when sewage sludge is spread on the land as fertiliser.²⁰¹

87. The National Federation of Women's Institutes (NFWI) carried out consumer research on day-to-day washing habits and the types of fibres people are washing on a regular basis. Its *In a Spin* report estimated that:

- Nearly half of respondents' most washed items contained more than 30% synthetic fibres
- Respondents were doing 2.5 loads of washing per week per household on average, equating to 68 million loads of laundry per week in the UK
- At least 9.4 trillion fibres could be released per week in the UK (based on 2016 Napper and Thompson results of a 6kg polyester-cotton wash)²⁰²

Reducing microfibre shedding

88. Research by the marine biologist Professor Richard Thompson suggests that there are considerable variations (over 70–80% in some cases) in the quantity of fibres released from different types of synthetic garment. For example, preliminary trials suggest that acrylic garments release more fibres than polyester. This suggests that interventions by brands at the design stage may be the most effective way to reduce synthetic microfibre pollution.²⁰³ The length of the yarn, type of weave, and method for finishing seams may all be factors that could affect shedding rates.²⁰⁴

89. Professor Thompson argued that changes at the design stage were the most effective way to tackle the problem:

‘I think it is important to look at how easy is it to fix. If I take some of the work that we have done in our own labs—I am a marine biologist, I am not a textile designer—with a range of products that I have bought in a local high street supermarket and I wash them, I find that some are shedding

199 Professor Richard C Thompson, University of Plymouth (SFI0007)

200 Professor Thompson, University of Plymouth (SFI0007)

201 Professor Richard Thompson (SFI0007)

202 National Federation of Women's Institutes (SFI0068)

203 Professor Richard C Thompson, University of Plymouth (SFI0007)

204 Friends of the Earth (SFI0069)

fibres four or five times more quickly than others and these are identical looking, fleece-like garments. It is saying to me that there are things that we have not needed to think about historically at the design stage about life in service and fibres that are shed. It is not about not using clothing, it is not about eliminating fibres, but if we have identical looking garments and some of them are shedding fibres four times faster than others, it is suggesting to me that it has not been in the design brief to consider that. Some of those fibres will be intercepted by waste water treatment but a good number of them will escape and because of the volumes of fibres and clothing that are used, even a relatively efficient waste water treatment plant can end up with a fairly substantial emission. My plea would be, as you are starting to consider sustainability right from the material source to the end of life recycling, is also to factor in at the design stage what is the wear, what is the life in service going to be like and is there a way we can design clothing to minimise those emissions.²⁰⁵

90. Multiple stakeholders have a role to play in solving the problem of microplastic fibre pollution from fashion brands to washing machine manufacturers and water companies. The NFWI said that it would like to see a collaborative cross-sector group of retailers, washing machine manufacturers, water industry, and Defra assembled to discuss how best to tackle the issue.²⁰⁶

91. The British Retail Consortium called for ‘comprehensive research’ to establish all the sources of marine microplastics to inform a multi industry approach. It argued that ‘research into microfibres is still in its early stages and there are a number of other potential sources of microplastics in ocean ecosystems, including vehicle tyre dust, fishing net debris, and plastic pellet spillages.’²⁰⁷

92. ***The Government should facilitate collaboration between fashion retailers, water companies and washing machine manufacturers and take a lead on solving the problem of microfibre pollution. Ultimate responsibility for stopping this pollution, however, must lie with the companies making the products that are shedding the fibres. Further research needs to be carried out into how design can be used to limit emissions of synthetic fibres and the lessons applied quickly. The need for more research should not be used as an excuse for inaction by retailers. Fashion retailers should be testing new synthetic garments for fibre release and publishing figures.***

93. ***More research also needs to be carried out urgently into the occupational health risks of working with synthetic fibres. The Government should ask the Health and Safety Executive to review the evidence and take action accordingly. Manufacturers must be mindful of potential risks now and should seek to reduce the exposure of garment workers to airborne synthetic fibres.***

205 Q5

206 National Federation of Women’s Institutes (SFI0068)

207 British Retail Consortium (SFI0019)

Measuring impact

94. In our first hearing we heard how important full life cycle analysis is to avoid unintended consequences in policy decisions about clothes. For example, we were told that some durable garments made with synthetic fibres may be less environmentally harmful across their whole life cycle than some clothes produced with natural fibres—even though synthetic fibres are polluting marine habitats worldwide. Dr Mark Sumner from Leeds University argued that:

The life cycle analysis data tell us that the fibres that have the biggest environmental impact, because of the way they are grown, are cotton fibres, cellulosic fibres. There are significant challenges in the use of highly toxic pesticides and overuse of fertilisers. There are issues of health and safety for workers, water consumption, carbon footprints. [...] A direct switch across to natural fibres has all sorts of unintended consequences. We don't know about the microfibre impacts because we don't fully understand the biodegradability of cotton in the system. We also don't know what happens to the chemicals that we apply to the cotton. All of us are wearing cotton now, it is by far the most common fibre, but all of the cotton we are wearing now has some sort of chemical applied to it. It might be a cross link resin, a colour, a performance chemical. That will be carried down through to the ocean on the fibre and we don't know what happens to that. [When we talk about microplastic pollution] we are talking about very miniscule amounts of release per garment. In some of the work that we have looked at we are talking about 0.04% of the weight of garment may be flushed out in a washing machine. I am not saying that we have to ignore it; we have to bear in mind how many garments are in the world and being washed. It is trying to understand the unintended consequences of taking a kneejerk reaction.²⁰⁸

95. A number of tools have been developed to compare the environmental costs of different textiles, such as the Higg Materials Sustainability Index (MSI) and MADE-BY Fiber Benchmark.²⁰⁹ Textile Exchange has developed a number of global standards 'to assure and verify sustainability claims.'²¹⁰ For example, the Higg MSI, developed by the Sustainable Apparel Coalition, is a suite of self-assessment tools that enable brands, retailers and suppliers compare and understand environmental and social trade-offs between different materials and identify areas for improvement.²¹¹

96. In the Higg MSI, silk, cotton and wool are given high environmental impact scores of 128, 98 and 82 respectively, while fossil fuel based fibres like nylon, acrylic and polyester are rated as lower impact at 60, 52 and 44.²¹² Some academics and industry bodies have raised concerns about what the metrics do and do not include.²¹³ The International Wool Textile Organisation complained that the Higg MSI costed nature's carbon cycle 'for

208 Q8

209 Kirsi Laitala, Ingun Grimstad Klepp and Beverley Henry, [Does Use Matter? Comparison of Environmental Impacts of Clothing Based on Fiber Type](#) (July 2018)

210 Textile Exchange (SFI0046)

211 [Higg MSI Materials Sustainability Index](#); Global Fashion Agenda & Boston Consulting Group, [Pulse of the Fashion Industry](#) (2017)

212 [Higg MSI Materials Sustainability Index](#)

213 Kirsi Laitala, Ingun Grimstad Klepp and Beverley Henry, [Does Use Matter? Comparison of Environmental Impacts of Clothing Based on Fiber Type](#) (July 2018)

natural fibres, but not for fossil fuel-based fibres.²¹⁴ It also argued that the index does not 'adequately assess end-of-life impacts.'²¹⁵ Others have argued that the tools often neglect to include the use phase, where washing can increase the carbon and water footprint depending on the fibres.²¹⁶

Sustainable Clothing Action Plan life cycle waste targets

97. The Sustainable Clothing Action Plan (SCAP) was launched by WRAP in 2012 to provide a collaborative voluntary framework for fashion companies to reduce their carbon, water, and waste impacts. Arcadia Group, ASOS, Primark, and M&S are all signatories and have agreed voluntary targets to reduce the carbon and water footprints of clothing by 15% and reduce waste by 3.5% by 2020 compared with 2012.²¹⁷

98. Dr Mark Sumner noted that the use of Best Available Technologies (BAT) offers a wide range of measures to help minimise the water and carbon footprints in the textile industry. The use of such BAT by retailers signed up to SCAP has supported significant progress against their carbon and water targets. SCAP signatories report an 11.9% reduction in the carbon footprint per tonne of garments and a 17.7% reduction in the water footprint per tonne of garments (exceeding target).²¹⁸ However, they are failing to make significant reductions to the waste produced across the product life cycle of their products with a reduction of just 1.1% per tonne of clothing since 2012.²¹⁹ Dr Sumner warned that many retailers not signed up to SCAP are not making use of BAT suggesting 'there is a lack of policy pressure to incentivise best practice'.²²⁰ Furthermore the impact of the increased volumes of clothing being sold in the UK outweigh the efficiency savings that have been made on carbon and water.²²¹

99. The Soil Association said that SCAP is too focused on end of life issues rather than on production and supply chains. It says that it 'would like to see the SCAP do more on fibre selection, as even though this is taken into account in the tool that retailers use, it is not a major focus.'²²² Some of the retailers we heard from who are signed up to SCAP are setting targets in this area. ASOS told us that:

We've committed to 60% of raw materials for ASOS brands to be sustainably sourced by 2020 and our goal is to work towards 100% by 2025. 100% of our ASOS Design cotton-based jeans will be made from sustainable cotton from Jan 2019.²²³

214 International Wool Textile Organisation (IWTO) (SFI0054)

215 International Wool Textile Organisation (IWTO) (SFI0054)

216 Kirsi Laitala, Ingun Grimstad Klepp and Beverley Henry, [Does Use Matter? Comparison of Environmental Impacts of Clothing Based on Fiber Type](#) (July 2018)

217 WRAP, [Sustainable Clothing Action Plan \(SCAP\) Signatories](#); WRAP, [Valuing Our Clothes: the cost of UK fashion](#) (July 2017)

218 WRAP [SCAP 2020 progress 2012–2017](#) (December 2018)

219 WRAP, [Sustainable Clothing Action Plan 2020 Commitment: progress against footprint reduction targets 2012–2017](#), (18 Dec 2018)

220 School of Design, University of Leeds (SF10026)

221 WRAP (SFI0050)

222 Soil Association ([SFI0011](#))

223 ASOS (SFI0080)

100. The British Retail Consortium called for Government funding to support the Sustainable Clothing Action Plan. It said that companies used to be able to participate in the SCAP without a fee, but that WRAP had introduced a charge for business participation when the high street faces a challenging economic climate.²²⁴ It argued that ‘public funding for SCAP could make the initiative much more accessible for a wider range of fashion businesses, and therefore more impactful in addressing the environmental and social issues of the industry.’²²⁵

EU Ecodesign Directive

To date the EU Ecodesign Directive and accompanying Energy Labelling Regulation have focused on ensuring more energy-efficient products are placed on the EU market and consumers are sufficiently informed to purchase the most efficient products.²²⁶ Proposals in the Ecodesign Working Plan 2016–2019 aim to use ecodesign to contribute to the circular economy by ‘more systematically tackling material efficiency issues such as durability and recyclability’.²²⁷ This includes considering the repair, remanufacture and recyclability of a product in the initial design and exploring specific requirements in areas such as durability, reparability, upgradeability and design for disassembly.²²⁸

101. **Gaining a full picture of the impact of different fibres is important so that businesses, consumers and policymakers can decide on the most effective solutions. The work that WRAP has done to document the impact of fashion consumption and bring businesses together to share best practice and facilitate change is commendable. However, WRAP has faced significant funding cuts, with budget allocation reducing from £56 million in 2009/10 to less than £10 million for 2017/18.²²⁹ The Government must ensure that WRAP’s Sustainable Clothing Action Plan (SCAP) is adequately funded to provide its services to any retailer that wants to improve its sustainability performance - regardless of its size. Post 2020, SCAP target ambitions must increase. To ensure the scheme continues we recommend that retailers pay for the funding of SCAP. This should ideally be included in the Extended Producer Responsibility Scheme. This should happen whether or not an EPR scheme is introduced. This could be set relative to revenue with discounts available for SMEs. SCAP does not currently include any commitments to reduce microplastic pollution from synthetic garments. *Post 2020 SCAP should include new targets following the Ecodesign Directive, including reducing microplastic shedding.***

102. **Members of SCAP have made some progress in reducing their carbon and water consumption, but action has not been swift enough on reducing waste. We are disappointed that just 11 fashion retailers are signatories.²³⁰ These improvements have been outweighed by the increased volumes of clothing being sold. A voluntary approach has failed. A retailers’ commitment to SCAP targets should be seen as a ‘licence to practice’. We recommend that compliance with SCAP targets should be made mandatory for all retailers with a turnover of more than £36 million—a threshold in**

224 British Retail Consortium (SFI0019)

225 British Retail Consortium (SFI0019)

226 European Commission (2016), Ecodesign Working Plan 2016–2019, p.2.

227 European Commission (2016), Ecodesign Working Plan 2016–2019, p.3.

228 European Commission (2016), Ecodesign Working Plan 2016–2019, pp 8–9.

229 Resource (January 2018), [WRAP funding issues to lead to the loss of 25 jobs.](#)

230 WRAP, [Sustainable Clothing Action Plan \(SCAP\) Signatories.](#)

line with the Modern Slavery Act. This should be done under a new Extended Producer Responsibility Scheme. The Government needs to provide clear economic incentives for retailers to minimise their environmental footprint. It should implement the EU's Ecodesign Directive in the Circular Economy Package into UK law in its Resources and Waste Strategy and upcoming Environment Act.

103. A kneejerk switch from synthetic to natural fibres in response to the problem of ocean microfibre pollution would result in greater pressures on land and water use - given current consumption rates. Encouraging a move from conventional to organic cotton and from virgin polyester to recycled PET (in garments designed to minimise shedding) could help to reduce the impact of the clothing industry. *We recommend that the Government reforms taxation to reward fashion companies that design products with lower environmental impacts and penalise those that do not. The Government should investigate whether its proposed tax on virgin plastics, which comes into force in 2022, should be applied to textile products that contain less than 50% recycled PET to stimulate the market for recycled fibres in the UK. As part of the new EPR scheme, Government and industry should accelerate research into the relative environmental performance of different materials, particularly with respect to measures to reduce microfibre pollution.*

4 Textile waste and collection

104. Our fashion consumption is causing a waste problem in the UK and other countries. The sector is becoming more resource efficient, as we discussed in Chapter two, but it still operates on a linear model of ‘make, use, dispose’.²³¹ We buy more clothes per person in the UK than any other country in Europe,²³² five times what we bought in the 1980s, according to some estimates.²³³ UK citizens discard around a million tonnes of textiles per year.²³⁴ Charity shop donation rates are high, but around three hundred thousand tonnes of clothing still ends up in household bins every year with around 20% of this going to landfill and 80% incinerated.²³⁵ Clothing that enters the municipal waste stream generally becomes contaminated or damaged, losing its reuse or recycling value.²³⁶

Key facts & figures on textile consumption and waste

Consumption of new clothing is estimated to be higher in the UK than any other European country—26.7kg per capita. This compares to 16.7kg in Germany, 16kg in Denmark, 14.5kg in Italy, 14kg in the Netherlands and 12.6kg in Sweden.²³⁷

Using HMRC figures, it has been estimated that 1,130,000 tonnes of clothing was purchased in the UK in 2016, an increase of almost 200,000 tonnes since 2012.²³⁸

A one pence levy on garments produced for sale in the UK could raise around £35 million for investment in clothing collection points, sorting and recycling.²³⁹

Repairing

105. Increasing garment lifetimes is one of the most effective means of reducing their environmental footprint. Extending the life of clothing by an extra nine months could reduce carbon, waste and water footprints by around 20–30% each.²⁴⁰ Academics at the Centre for Sustainable Fashion at the London College of Fashion argue that carbon emissions and demand for water can be reduced through developing clothing maintenance skills, enhancing an appreciation of material qualities, and a ‘habit of mind’ that prefers existing items to new ones which then acts to slow cycles and volumes of consumption (Craft of Use).²⁴¹ Professor Dilys Williams says that the practical skills associated with repair, including of clothes, should be mandated as part of the national curriculum at Key Stage 1, 2 and 3.²⁴² The Centre also recommends increasing opportunities for apprenticeships and training in technical and craft skills for textile and garment production.²⁴³

231 WRAP (SFI0050)

232 European Clothing Action Plan, [Used Textile Collection in European Cities](#) (March 2018)

233 Textile Recycling Association (SFI0013)

234 WRAP, [Time to unlock the value of household textile waste, says WRAP](#) (September 2012)

235 WRAP, [Valuing Our Clothes: the cost of UK fashion](#) (July 2017); Defra, [Statistics on waste managed by local authorities in England in 2017/18](#), (Dec 2018)

236 Dr Mark Sumner, University of Leeds (SFI0026)

237 European Clothing Action Plan, [Used Textile Collection in European Cities](#) (March 2018)

238 WRAP, [Valuing Our Clothes: the cost of UK fashion](#) (July 2017)

239 WRAP, [Valuing Our Clothes: the cost of UK fashion](#) (July 2017)

240 WRAP, [Valuing Our Clothes: the cost of UK fashion](#) (July 2017)

241 Centre for Sustainable Fashion, London College of Fashion (SFI0034)

242 Centre for Sustainable Fashion, London College of Fashion (SFI0034)

243 Centre for Sustainable Fashion, London College of Fashion (SFI0034)

Craft education

106. The role that schools and colleges could play, both raising sustainability awareness and fostering the skills and habits necessary to create, mend and care for clothes was highlighted by many of the contributors to the inquiry.²⁴⁴ Many people currently lack the skills, ability or confidence to create, repair or alter clothing and want to gain them, according to Professor Tim Cooper.²⁴⁵ We heard anecdotal evidence about the prevailing throwaway culture. Dr Sumner recalled a conversation he had overhead amongst his fashion students:

They are designers who spend all of their time working in the design studio with a sewing machine and a needle and thread and everything. One of the students said to her friend, 'I have to go down to Trinity Shopping Centre to buy a new coat. A button has fallen off my coat'. That is one example, and it is a very bad example but there are real challenges around that whole thing about repair. There is definitely a niche where repair and making your own garment is important. I suggest it is quite a small niche in relation to mainstream, and what we are seeing is more and more people just thinking, 'You know what, I am going to buy a new outfit because I can't be bothered to fix it' or, 'It is so cheap to buy the outfit I am going to do that'.

107. The Clothing Sustainability Research Group at Nottingham Trent University argued that policy measures were needed to encourage routine clothing maintenance and fabric reuse. It recommended that:

- Fiscal reform should be used to encourage the repair and maintenance of clothing by phasing out employers' national insurance contributions and zero-rating VAT.
- There should be government support for community initiatives such as Repair Cafés,
- The Government should support the provision of relevant courses in local colleges and take action to reverse the declining number of design and technology courses in schools.²⁴⁶

108. TRAIID argues that social responsibility should be encouraged through sustainable education initiatives which give the public the information and skills to understand the real social and environmental cost of consumption of cheap clothes. TRAIID has been helping local authorities deliver educational activities to thousands of residents, as well as teaching practical repair skills.²⁴⁷ The up-cyclers collective Waste Not Want Not warned that textile education was being neglected in schools:

244 ECO AGE LTD ([SFI0075](#)); TRAIID (Textile Reuse & International Development) ([SFI0010](#)); WASTE NOT WANT NOT - Artisans and Crafters Facebook group ([SFI0014](#)); Professor Tim Cooper ([SFI0049](#)); Centre for Sustainable Fashion, London College of Fashion ([SFI0058](#))

245 Professor Tim Cooper ([SFI0049](#))

246 Clothing Sustainability Research Group, Nottingham Trent University (SFI0049)

247 TRAIID (SFI0010)

UK undergraduate and postgraduate fashion and textile education is recognised as being the best in the world, yet these subjects are not really valued in schools. This needs to change and alongside that sustainability and waste issues need to be covered at all levels to raise awareness.²⁴⁸

Reusing second hand clothes and upcycling

109. An increase of 10% in second-hand sales could deliver environmental benefits, cutting carbon emissions per tonne of clothing by 3% and water use by 4% water, WRAP estimates, if it extends garment life by 50%.²⁴⁹ The charity suggests that providing opportunities for resale in places where new sales take place can make it easier for customers to extend the life of their unwanted garments. However, it warns that the scope to increase second hand sales is limited. Although more take back schemes and availability of second hand clothes in mainstream stores could increase second hand sales, WRAP warns that the ‘number of new garments that they are expected to displace is limited and so the savings potential is low’.²⁵⁰

110. The UK has a growing community of artisans, crafters and micro-businesses who ‘up-cycle’ old, damaged and discarded textiles. Jane Grice created the Waste Not Want Not Facebook group as a networking platform for upcyclers. It now has around 7,500 members of whom 3,270 are resident in the UK. She surveyed its members in August 2018 and submitted their views to our inquiry. Their submission describes the barriers that upcyclers face when trying to access waste clothing from charity shops:

Many [up-cyclers] source materials from charity shops and a few have succeeded in persuading charity shops to set aside damaged or lightly soiled items for them rather than automatically sending them to the ‘ragman’. However often such items are never made available to the up-cycling community. Instead they are bagged up and reserved for textile reprocessing (the ‘ragman’), which usually means wearable clothing is sent abroad to be sold in developing countries and the rest is shredded or incinerated.²⁵¹

111. Members of the group said there should be a new approach to dealing with post-consumer fashion. They argued for ‘regular kerbside collection of clothing waste (nationwide, co-ordinated with councils), which could be operated by local charities or textile recyclers’²⁵² and called for the creation of Regional Textile Sorting Centres. At these centres items would be graded according to their resale potential. They wanted more tip shops and scrap stores to allow upcyclers more access to used fabrics.

112. Oxfam said that some Local Authorities have encouraged the establishment of recycling centres, for example at supermarket car parks and operate kerbside collection schemes to make disposal of clothing easier. It said that the availability of kerbside collection of clothing doubled since 2002 to over 30% of households, but is still less than half of that for other recyclables such as glass and plastics.²⁵³ In London only 11 of the 33

248 Waste Not Want Not (SFI0014)

249 WRAP, [Valuing Our Clothes: the cost of UK fashion](#) (July 2017)

250 WRAP, [Valuing Our Clothes: the cost of UK fashion](#) (July 2017)

251 WASTE NOT WANT NOT ([SFI0014](#))

252 Waste Not Want Not (SFI0014)

253 Oxfam (SFI0087)

boroughs offer kerbside textile collection for recycling and reuse.²⁵⁴ The Textile Recycling Association estimate that there are approximately 15,000 kerbside clothing banks for the whole of the UK.²⁵⁵

Pre-consumer waste

113. Hundreds of thousands of tonnes of fabric are wasted at the design and production stage before clothing reaches the customer. When garments are cut out as patterns, for instance, as much as 15% of the fabric can end up on the cutting room floor.²⁵⁶ The designer Phoebe English explained:

For those of you who are not familiar with the production process of a garment, you have your flat fabric laid out on the table, you have your pattern pieces—your sleeve piece, your front piece and your back piece—you lay them on the fabric, you cut around your pattern piece, you get your garment pieces and you put them together, but you are left with waste fabric. If you imagine every shop on Oxford Street and every garment that is hanging on a hanger in those shops ... then imagine that the space around that garment, every single garment, is waste.²⁵⁷

114. In 2016, this supply chain waste for clothing in active use in the UK was estimated at over 800,000 tonnes compared to just under 700,000 tonnes in 2012.²⁵⁸ This increase is driven primarily by the increase in clothing consumption. Around 440,000 tonnes of supply chain waste arises during preparation of fibres to make yarn and during garment production, most notably in China and India. The amount of waste varies by fabric and fibre type.²⁵⁹ Some designers, such as Mark Liu and Phoebe English, are experimenting with zero waste pattern cutting techniques in which the garment pieces are designed to fit together like a jigsaw so that nothing is wasted when they are cut.²⁶⁰

115. Phoebe English highlighted legislation in New York State as an example of how to deal with pre-consumer waste.²⁶¹ Businesses there are required by law to separate and recycle or repurpose all textile waste including fabric scraps, clothing, belts, bags, and shoes if textiles make up more than 10% of their waste during any month.²⁶² This has led to the creation of organisations like FABSCRAP and HELPSY which collects bags of excess fabrics and scrap fabrics directly from fashion studios on a weekly basis around New York.

Textile collection

116. Charity shops are currently the UK's main clothing collection infrastructure. The UK has one of the highest collection rates of used clothes in the world (per head of population) according to the Textile Recycling Association.²⁶³ Around 650,000 tonnes of unwanted clothing is collected annually from charity shop donations, door-to-door

254 London Waste and Recycling Board (SFI0022)

255 Email from the Director of the Textile Recycling Association to committee staff (10 Jan 2019)

256 TED Research, [TED's Ten: 1 - Design to Minimise Waste](#)

257 Q87

258 Defra (SFI0047)

259 Defra (SFI0047)

260 Black, Sandy (editor) Sustainable Fashion Handbook (2013)

261 Phoebe English, (SFI0055)

262 New York City Department of Sanitation, [Recycling for Businesses: Special Cases](#)

263 Textile Recycling Association ([SFI0013](#))

charity collections, car park clothing banks, school collections, high street take-back schemes and kerbside collection. TRAIID said that the UK's 11,000 charity shops diverted over 330,000 tonnes of textiles from landfill in 2017 and helped reduce carbon emissions by millions of tonnes a year by reusing and recycling second-hand clothes.²⁶⁴

117. The supply of clothing entering the used market has increased in recent years, according to Dr Sumner. However, this is not being matched by an increase in demand. Of the volume collected, about 30% is sold in the UK (e.g. through charity shops, online sales, vintage shops, etc).²⁶⁵ The majority of the remainder is exported for re-use either in Africa or Eastern Europe.²⁶⁶

118. A handful of countries currently account for the majority of all used textiles collected. The USA is the biggest exporter, accounting for approximately 15% of all exports, followed by the UK and Germany, which both export around 10% of all used clothing.²⁶⁷ Existing markets would not be able to cope with the increase in supply of used clothing that would result from countries like China matching the consumption, disposal and collection rates seen in the UK. The Director of the Textiles Recycling Association Alan Wheeler told us that:

We are seeing China move really rapidly into this market. In 2010 it accounted for something like 0.88% of all global exports of used clothing. It now accounts for 6% and is the fourth largest exporter in the world. There is only one thing that is going to happen to the Chinese market and that is it is going to become the dominant factor. [...] My estimate is that if China in, say, 20 years down the line were to be collecting half as much as the average British person does, the entire size of that market from China would be the same size as the current global market. We have to start seriously planning what to do with the stuff that is coming on to the market.²⁶⁸

119. The oversupply of used textiles has already devalued the used garment market, helping to push some textile recyclers into bankruptcy.²⁶⁹ It has also led to an increase in clothing waste exports to developing nations. There may be negative long-term impacts of this on the cultures and textile industries of these nations.²⁷⁰

Stock burning

120. In 2018, the British luxury brand Burberry faced a storm of criticism when it revealed in its Annual Report for 2017/2018 that:

The cost of finished goods physically destroyed in the year was £28.6m (2017: £26.9m), including £10.4m of destruction for Beauty inventory.²⁷¹

264 TRAIID (SFI0010)

265 Textile Recycling Association (SFI0013)

266 BBC News, [Where do your old clothes go?](#) (February 2015)

267 Textile Recycling Association ([SFI0013](#))

268 [Q4](#)

269 Lets Recycle, [Six textile recyclers close with more to come](#) (June 2013)

270 Clothing Sustainability Research Group, Nottingham Trent University (SFI0049)

271 Burberry, [Annual Report 2017/18](#), p. 165.

This led to it being reported in July that the retailer had incinerated unsold clothes, accessories and perfume to protect its brand and prevent unwanted stock from being sold cheaply. The BBC reported that the total value of goods it had destroyed over the past five years was more than £90m.²⁷² Burberry initially defended the practice saying that the energy generated from burning its products was captured, making it environmentally friendly. However, in September, Burberry pledged to end the practice and said it will reuse, repair, donate or recycle all excess stock.²⁷³

121. The journalist and author Lucy Siegle wrote at the time the story broke:

... there are 101 processes that go into making a garment, from harvesting plants for raw fibre, to the processing and finishing of textile yarns involving thousands of litres of water. There are hundreds of hours of human labour too. Similarly, high-end cosmetics are a drain on resources in terms of both raw ingredients from the natural world and processing. To input all of these resources and then to squander them by burning (recovering only a tiny proportion of that energy) is pure madness given the backdrop of ecological emergency that we face.²⁷⁴

122. While incineration of unsold stock ‘recovers’ some energy from the products, it multiplies the climate impact of the product by generating further emissions and air pollutants that can harm human health. Incineration of clothes made from synthetic fibres may release plastic microfibres into the atmosphere. Climate changing emissions will have been generated when the products were created and more CO₂ will be produced when they are burnt. The waste hierarchy suggests that reuse and recycling comes first. This should be a priority means of dealing with unsold stock. Incineration should only be used as a last resort where there is a health and safety case for destroying the stock. *The Government should ban incinerating or landfilling unsold stock that can be reused or recycled.*

Take-back schemes

123. Clothing companies are not yet required by legislation to take responsibility for end of life recovery of the products they put on the market place, unlike electrical and electronic goods.²⁷⁵ There have been a number of voluntary garment recovery initiatives. Some brands have used passive approaches to encourage recycling by providing garment recycling bins in their car parks and stores. Others have employed proactive clothing take-back schemes. These schemes encourage consumers to deposit old clothing in the brand's stores, which is then donated to a charity or sold to recyclers. For example, Marks and Spencer and Oxfam launched a ‘shwopping’ take back scheme which has collected some 20 million items since 2008. Other companies, including H&M, Zara and John Lewis, have started or are planning garment recovery schemes. Financial incentives have been used to encourage donations, through cashback vouchers, and these have been relatively successful.²⁷⁶

272 BBC News, [Burberry burns bags, clothes and perfume worth millions](#) (19 July 2018)

273 The Guardian, [Burberry to stop burning unsold items after green criticism](#) (September 2018)

274 The Guardian, [Burberry's bonfire of the vanities is brazen and ecologically reckless](#) (July 2018)

275 Clothing Sustainability Research Group, Nottingham Trent University (SFI0049)

276 Dr Mark Sumner, University of Leeds (SFI0026)

Extended Producer Responsibility for textiles

124. During the inquiry we heard a number of calls for clothing producers to take responsibility for fabric waste.²⁷⁷ WRAP says there needs to be more leadership from the UK Government to achieve a step change in the sustainability of the clothing sector. It says the Government should consider an Extended Producer Responsibility (EPR) scheme for clothing in the published Resources and Waste Strategy.²⁷⁸

Extended Producer Responsibility (EPR) is a policy approach where producers are given responsibility—be it financial and/or physical—for the treatment or disposal of products they put on the market. Assigning such responsibility provide incentives to prevent waste at source, promote eco-design and support the achievement of public recycling and materials management goals.²⁷⁹ In the case of clothing, a levy on clothing sales as part of an EPR could be used to support UK collection, sorting and processing of clothing, R&D into new recycling processes.²⁸⁰

125. France introduced an EPR scheme for clothing in 2007 making clothing, linen and footwear companies responsible for the management of their end of life products.²⁸¹ The scheme has nearly trebled clothing collection points from 15,621 in 2011 to nearly 42,000 by 2016 and collection rates have increased by more than 50%.²⁸² In 2009, France was collecting 1.9 kg of discarded clothing, linen and footwear per person per year. By 2016 this had climbed to 3.2kg.²⁸³ Over 90% of the items collected are reused (59.4%) or recycled (31.8%) and 97% of retailers in France are legally compliant.²⁸⁴ The new sorting centres created by the scheme have provided 1,400 full time jobs, with 49% going to people facing employment difficulties.²⁸⁵

126. Dr Sumner expressed scepticism about the French EPR, saying:

... it is a tax on the retail and brand environment, and I think before EPR is considered we need to be thinking about the consequences of it. It does bring in income, but one of the things that the Government should be thinking about is more municipal waste and kerbside collections. Should there be more work done in terms of providing the systems and the infrastructure for recycling of textiles and other materials?

127. The textile recycling company Parker Lane Group argued that an EPR would have a number of benefits:

- Encouraging sustainable production and consumption of products within an industry

277 Fashion Revolution ([SFI0056](#)); Parker Lane Group ([SFI0094](#)); Textile Recycling Association ([SFI0013](#)); WRAP (the Waste & Resources Action Programme) ([SFI0050](#))

278 WRAP ([SFI0050](#))

279 OECD, [Extended producer responsibility](#)

280 Textile Recycling Association ([SFI0013](#))

281 Eco-TLC, 2016 at a Glance: Half-way results from the 2014–2019 accreditation agreement (2017)

282 Textile Recycling Association ([SFI0013](#))

283 Eco-TLC, 2016 at a Glance: Half-way results from the 2014–2019 accreditation agreement (2017)

284 Eco-TLC, 2016 at a Glance: Half-way results from the 2014–2019 accreditation agreement (2017); Textile Recycling Association ([SFI0013](#))

285 Eco-TLC, 2016 at a Glance: Half-way results from the 2014–2019 accreditation agreement (2017)

- Aligning incentives to allow intelligent design of products to make the easy to recycle at end-of-life
- To reduce landfill and encourage recycling of products, and to help create a revenue framework to help investment into recycling²⁸⁶

It estimates than an ERP levy of 1p per garment could raise over £35 million in a year to improve textile reuse and recycling in the UK:

Levy on goods produced:

Clothing created for UK sale per year	Tonnes	Kgs	Pieces	1p per garment	5p per garment
Amount of clothing sold	1130000	1130000000	390000000	£33,900,000.00	£169,500,000.00
amount made but not retailed 5%*	56500	56500000	169500000	£1,695,000.00	£8,475,000.00
			Total Revenue	£35,595,000.00	£177,975,000.00

*Doesn't include shoes²⁸⁷

New Resources and Waste strategy

128. The Government published *Our Waste, Our Resources: A Strategy for England*, on 18 December 2018, its 'blueprint for eliminating avoidable plastic waste over the lifetime of the 25 Year Plan, doubling resource productivity, and eliminating avoidable waste of all kinds by 2050'.²⁸⁸ The Government says that packaging reform is its immediate priority and the key measure announced in the strategy is a proposal to make manufacturers and businesses pay the full cost of recycling or disposing of their packaging waste through an Extended Producer Responsibility (EPR) scheme. The new resources and waste strategy also promises to review and consult on measures, such as EPR and product standards, for five other waste streams - including textiles - by the end of 2025:

- Textiles (clothing + other household and commercial textiles)
- Bulky waste—including mattresses, furniture and carpets
- Certain construction and demolition materials
- Vehicle tyres
- Fishing gear

286 The Parker Lane Group ([SFI0070](#))

287 Parker Lane Group ([SFI0094](#))

288 Defra, *Our Waste Our Resources: A Strategy for England* (18 Dec 2018)

Defra says that it plans to complete two of these by 2022 but it does not specify which two.²⁸⁹ The strategy also promises to review whether Local Authority run Household Waste Recycling Centres could have their role extended to support textile collection by 2025. However, the strategy also notes that Local Authorities are ‘under pressure to make savings to their waste management budget, and many are looking to achieve this by reducing opening times of Household Waste Recycling Centres or by introducing charges for non-household waste items’.²⁹⁰

129. The Government’s previous waste and resources review published in 2011, *Government Review of Waste Policy*, stated that ‘we will review the case for restrictions on sending other materials to landfill over the course of the Parliament, including looking specifically at textiles and biodegradable waste.’²⁹¹ This review does not appear to have ever been completed and no restrictions are in place to prevent textiles ending up in landfill. When we asked the Minister about it she had no awareness of the previous strategy regarding textiles and was not sure whether the review had been carried out. She said:

Q483: Kerry McCarthy: ...can I ask about the 2011 Waste Strategy? That promised that a review would be carried out into whether restrictions should be placed on textiles going to landfill. Did that review ever happen?

Dr Thérèse Coffey: Not to my knowledge. I am not aware that it has been brought to my attention.

Q.484: Kerry McCarthy: Isn’t it normal practice, when you come up with the latest strategy, to look at the last one and see what was done and what was not done as part of that?

Dr Thérèse Coffey: I am aware that the amount going to residual house waste is falling in terms of tonnage and the amount that is collected for reuse or recycling is increasing. We do have set aside, as part of one of the areas we are going to investigate, extending the extended producer responsibility regime.²⁹²

130. Our desire for fast fashion, fuelled by advertising, social media and a supply of cheap garments, means we are disposing of over a million tonnes of clothes every year in the UK. Under the UN Sustainable Development Goals, the UK is committed to ‘to ensure sustainable consumption and production’. We need to reduce the environmental footprint of the UK’s textile production and consumption. To do that, we need to reduce textile waste, improve resource efficiency and reduce the carbon emissions and water footprint of the clothes we buy. We need to simply buy less, mend, rent and share more. *To support this we recommend that lessons on designing, creating, mending and repairing clothes be included in schools at Key stage 2 and 3.* The creative satisfaction of designing and repairing clothing can offer an antidote to the growing anxiety and mental health issues amongst teenagers. As well as providing a space to promote creative expression, the skills learnt can also provide a potential pathway towards job opportunities.

289 Defra, *Our Waste Our Resources: A Strategy for England* (18 Dec 2018)

290 Defra, *Our Waste Our Resources: A Strategy for England* (18 Dec 2018), p.74

291 Defra [Government Review of Waste Policy in England](#) (2011), p.9

292 Q483-Q484

131. **The Government must end the era of throwaway fashion. *It should make fashion retailers take responsibility for the waste they create by introducing an Extended Producer Responsibility scheme for textiles and reward companies that take positive action to reduce waste.* A charge of one penny per garment on producers could raise £35 million for investment in better clothing collection and sorting in the UK. This could create new 'green' jobs in the sorting sector, particularly in areas where textile recycling is already a specialist industry such as Huddersfield, Batley, Dewsbury and Wakefield in West Yorkshire. The Government's recent pledge to review and consult on how to deal with textile waste by 2025 is too little too late. We need action before the end of this parliament (2022).**

132. ***The Resources and Waste strategy should incorporate eco-design principles and offer incentives for design for recycling, design for disassembly and design for durability. It should also set up a new investment fund to stimulate markets for recycled fibres.***

5 New economic models for the fashion industry

133. Given the stark scientific warnings we face on climate change and biodiversity loss, we must reinvent fashion. Fashion that saves resources and energy, minimises plastic pollution, reduces waste and thrives uses a more circular business model. New economic models that rely on sharing or renting rather than ownership are emerging. From clothing libraries to baby clothes subscription services, upcycling and repair cafes and peer-to-peer vintage sales on sites like Depop and peer-to-peer clothes sharing on apps like MyWardrobe HQ, there are many new circular business models. Retailers could look to implement these, boosting the second hand market and helping increase the opportunities for extending the useful life of clothing. Action could include:

- Recovering and reselling items customers no longer want
- Hiring or renting clothing to customers so they can be used by multiple people
- Developing ‘subscription’ models, which enable customers to swap clothes but also incentivise retailers to use garments many times before disposing of them.²⁹³

134. The UK has an exciting ecosystem of sustainable fashion businesses, researchers and designers who are already forging a new vision for fashion. The value of the ethical clothing market increased by 19.9% in 2018, according to Ethical Consumer magazine.²⁹⁴ In Autumn 2018 we teamed up with the Victoria and Albert (V&A) Museum to hold a hearing at the museum highlighting innovators and leaders in the field. At its Fashioned From Nature exhibition we saw a range of textile technologies that could reduce environmental impacts - such as apparel made from mycelium (mushroom roots), beautiful gowns made out of old plastic bottles, dresses made from reused army surplus, low-impact disposable paper dresses, and leather like materials made from pineapple leaves.

Levelling the playing field

135. We heard concerns about the extra costs and barriers that the UK’s sustainable fashion businesses face. Innovators are faced with competition from businesses who are focused on reducing costs and maximising profits regardless of the environmental or social costs. Christopher Raeburn said that the ‘current system favours brands that are located offshore, utilise unsustainable or environmentally unsound fabrics, and are unaccountable for the product at end of life.’²⁹⁵ Our inquiry heard calls for policy and incentives to level the playing field. Eco Age said that:

One of the greatest difficulties for companies is that the ones that aspire to respect human rights and environmental standards, are faced with competition from those that do not.²⁹⁶

293 QSA Partners LLP ([SFI0039](#))

294 Ethical Consumer, [The UK Ethical Market](#) (December 2018)

295 Christopher Raeburn (SFI0095)

296 ECO AGE LTD ([SFI0075](#))

136. Similarly, Kate Osborne, from shoe brand Po-Zu commented:

Sustainable fashion is competing on a completely unlevel playing field and this is especially apparent during the Black Friday /Cyber Monday holiday season. The reason fast fashion businesses can afford to discount so heavily is that somewhere along the supply chain, someone has paid the price—be it environmentally or through sweatshop labour.²⁹⁷

137. The fashion designer Katherine Hamnett called for radical changes to trade policy to level the playing field between outsourcers and domestic producers:

For the clothing industry to survive in the UK and EU, we need new legislation that only allows goods into our Economic Blocks that are made to the same Labour, Human Rights, Health and Safety and Environmental standards, outside as inside. This would raise the cost of outsourced goods and make domestic manufacturing (i.e. manufactured within our Economic Blocks) more competitive and viable. It levels the playing field between outsourced and domestically produced goods, as it costs more if you actually have pay and treat the people who make your clothes properly and respect the environment. It would improve the lives of all garment workers in the outsourced sector due to better pay, better and safer working conditions (a true living wage) and a safer and better environment.²⁹⁸

138. The designer Christopher Raeburn started his eponymous label in 2008 and became famous for remaking army surplus fabrics into imaginative new clothing. All of their products embody the ethos of the brand: remade, reduced, recycled - utilising surplus, recycled or renewable fabrics. Christopher Raeburn has recently been appointed as global creative director for major US brand Timberland. Christopher's brother Graeme who is the performance director for Raeburn joined us at the V&A to discuss their vision for a sustainable fashion system. He suggested that the Government should tax materials with high CO2 emissions and reward the utilisation and upcycling of waste and deadstock.²⁹⁹ He said 'there is opportunity here to stimulate industry and growth, and place the UK at the forefront of responsible, innovative and - most importantly - desirable and stylish fashion.'³⁰⁰

139. Leading sustainable fashion brands like Hiut Denim and Christopher Raeburn and heritage brands like John Smedley and Churches Shoes offer lifetime repair services for their products, but these services are not offered widely. Some smaller companies produce garments entirely made in England. Phoebe English says her pieces are made 'from initial sketch to final stitch [in England] in order to limit carbon and how much our product travels.'³⁰¹ The clothing charity TRAIID called on the Government to address 'the structural causes of a throwaway society by promoting the repair and second-hand industry.'³⁰² Professor Dilys Williams argued that we had to make it 'viable economically for people, for businesses and customers' to repair and reuse textiles. She said that

297 Fantha Tracks, [Ethical footwear brand Po-Zu calls for consumers to 'Champion an Alternative Black Friday'](#) (November 2018)

298 Katherine Hamnett (SF10093)

299 Christopher Raeburn ([SF10095](#))

300 Christopher Raeburn (SF10095)

301 Phoebe English (SF10055)

302 TRAIID (SF10010)

repairing an item can often be more expensive than buying a new one, because we do not fully cost the environmental and social impacts of clothing production.³⁰³ Graeme Raeburn suggested the UK should follow Sweden's lead, where the government is reducing VAT rates on repairs to bicycles, clothes and shoes from 25% to 12% to encourage repair rather than disposal.³⁰⁴ He also called on the Government to incentivise retailers to offer free repairs as part of the initial product purchase. The extra resources and wages it would cost to perform these repairs should be compensated with a tax break.³⁰⁵

Encouraging change

140. Dr Sumner from Leeds University School of Design warned that for policy interventions to be successful, we first have to understand the many positive benefits that fashion brings for society and individuals. Fashion allows people to identify and express themselves within their group and in society. It also provides excitement, fun and hedonistic pleasure:

Importantly, fashion satisfies consumers' psychogenic needs; what we wear communicates who we are and our status. The non-verbal communication about ourselves through the clothes we wear is a vital part of society. This has been the basis for fashion for thousands of years, and our modern culture is no different. But fast fashion is so successful because it has democratised fashion and the benefits of fashion, especially through the omnipresence impact of social media. Fast fashion has allowed all segments of society, irrespective of class, income or background to engage in the hedonistic and psychogenic pleasures of fashion. At no other time in human history has fashion been so accessible to so many people across our society. This is the power of fast fashion.³⁰⁶

141. Any solutions have to recognise and maintain these benefits.³⁰⁷ Dr Sumner says more circular models need to be developed for the industry that 'incorporate the need for business growth, that recognise the desires of consumers and that retain the value of the industry to workers in the supply chain.'³⁰⁸ He cautioned us that incentives will be more effective if they do not compromise the 'powerful hedonistic and psychogenic pleasures derived from fashion'.³⁰⁹

142. Researchers from Exeter University and the University of Wolverhampton contend that 'the interests of the fast fashion industry, and the environmental need to reduce clothing consumption are not mutually exclusive, but contain marketable opportunities for the fashion industry to shift attitudes toward a more sustainable approach to clothing.'³¹⁰ Their qualitative research findings suggest that 'embedding pro-environmental behavioural change into clothing practices' requires availability of long-term spaces in the community, where individuals can share knowledge and skills about making and modifying clothing. 'This enables new 'meanings' to be generated about personal relationships with, and

303 [Q96](#)

304 [Traid \(SFI0010\); Q96](#); The Guardian [Waste not want not: Sweden to give tax breaks for repairs](#) (September 2016)

305 Christopher Raeburn (SFI0095)

306 School of Design, University of Leeds ([SFI0026](#))

307 School of Design, University of Leeds ([SFI0026](#))

308 School of Design, University of Leeds ([SFI0026](#))

309 School of Design, University of Leeds ([SFI0026](#))

310 School of Design, University of Leeds ([SFI0026](#))

attitudes towards clothing.³¹¹ They recommend incentivising high street clothing retailers to provide creative making spaces for customers to mend and modify clothing to provide a long-term, sustained service.³¹²

Sharing economy

143. Many of the evidence submissions we received suggested that new ‘sharing economy’ business models for the fashion industry that involve hiring, swapping or subscribing to clothes services could be part of the solution.³¹³ At our V&A event Graeme Raeburn said that ‘we have too much stuff already’ and that new loaning and sharing economic models could replicate the buzz of a purchase without the material costs.³¹⁴ Phoebe English told us that the sharing economy would not only ‘make a huge difference to how we are consuming clothes but is also a really exciting business model.’³¹⁵ She said that:

Trying to sell someone a hessian sack is not going to work. People want to wear exciting clothes; they want to be inspired. If you are not doing that then you are not serving the industry and you are certainly not serving sustainability. It is a case of really exploring ways where you can perpetuate the excitement of purchasing. If you look at psychological charts, the endorphin high that you get from purchasing something begins to wane considerably by the third day. [...] With hiring you get that endorphin high constantly because you can have a new thing within your purchasing power, which can help transform you as a person and make you feel better and make you look stronger and more positive, and you can do it more regularly. If you look at it within that construct, it is a really exciting business plan that could absolutely be implicated within the high street and it definitely should be.³¹⁶

144. Clothing rental services that offer one time or subscription-based rentals are usually internet based, offer womenswear, and focus on renting high-end pieces for a fraction of the cost.³¹⁷ They offer consumers novelty without the need to purchase.³¹⁸ In the US, the hiring service Rent the Runway was launched in 2009, offering designer clothes to hire for weddings, graduations or other occasions and now has six million members.³¹⁹ On this side of the Atlantic, Bundlee was launched in 2017 as the UK’s first baby clothing rental subscription. Its founder Eve Kekeh said that she had researched the environmental and social effects of the baby clothing industry and saw the rental model as a way to extend the lifespan of baby clothes.³²⁰ She said:

Recently a shift towards the ‘access economy’ has begun. The relationship between physical products and individual ownership has been undergoing a profound evolution, as sections of society do not want the physical items,

311 Sensibility 4 Sustainability (University of Exeter and Wolverhampton) ([SFI0018](#))

312 Sensibility 4 Sustainability (University of Exeter and Wolverhampton) ([SFI0018](#))

313 Phoebe English (SFI0055), QSA Partners (SFI0039), Clothing Sustainability Research Group (SFI0049); Professor Tim Cooper ([SFI0049](#)); mywardrobeHQ ([SFI0020](#))

314 [Q93](#)

315 [Q93](#)

316 [Q93](#)

317 London Waste and Recycling Board ([SFI0022](#))

318 Bundlee (SFI0021)

319 Financial Times, [Retailers respond to rise in renting clothes and goods](#) (December 2017)

320 Bundlee Ltd ([SFI0021](#))

but instead want the needs or experiences they fulfil. [...] The potential to combine clothing products with a rental service holds much promise as both a commercially viable business model and a route to achieving sustainable clothing consumption.³²¹

145. We need new economic models for fashion which are based on reducing the material consumption associated with growth. The Government should explore how it can support the sharing economy. *The Chancellor should use the tax system to shift the balance of incentives in favour of reuse, repair and recycling to support responsible companies. The Government should follow Sweden's lead and reduce VAT on repair services.*

146. Retailers must take responsibility for the social and environmental cost of clothes. They should use their market power to demand higher environmental and labour standards from suppliers. Offering rental schemes, lifetime repair and providing the consumer with more information about the sourcing and true cost of clothing are all measures that can be more widely adopted. Shifting business practice in this way can not only improve a business's environmental and social impact but also offer market advantage as they respond to the growing consumer demand for responsible, sustainable clothing.

6 Background & acknowledgements

147. The Environmental Audit Committee (EAC) is a cross-party committee of backbench MPs that is formed by the House of Commons after each general election to scrutinise the environmental performance and policies of the Government and its public bodies. We launched our inquiry in June 2018 to examine concerns about the waste and environmental impact of the fashion industry. There has been a phenomenal response to the inquiry. Over the course of the inquiry we received over 90 submissions of written evidence. We held four days of hearings in the inquiry, one at the Victoria and Albert Museum.

148. Of the UK's major fashion retailers only Primark initially provided evidence. We then wrote to the top ten fashion retailers request information about their efforts to reduce their environmental and social impact.³²² We are grateful to all of the retailers for responding. The British Fashion Council did not submit any evidence to the inquiry. Among the questions fashion retailers were asked to respond to where:

- whether they pay the living wage to garment workers and how they ensure child labour is not used in their supply chains;
- whether they use recycled materials;
- how long their clothes last and how they encourage recycling;
- whether they incinerate unsold or returned stock;
- what steps they are taking to reduce the risk of microplastics contaminating the ocean; and
- what other steps they are taking to reduce the environmental impact of their clothing ranges and how they audit success.³²³

We analysed the retailers' responses and published an interim report on this on 31 January.³²⁴

Acknowledgements

149. We would like to thank Catie Poust from the V&A who worked tirelessly to make our event a success and Edwina Ehrman for her expert tour of the *Fashioned From Nature* exhibition which she curated.

322 Environmental Audit Committee, [Fashion bosses asked to reveal environmental record](#) (October 2018)

323 Environmental Audit Committee, [Fashion bosses asked to reveal environmental record](#) (October 2018)

324 Environmental Audit Committee, [Interim Report on the Sustainability of the Fashion Industry](#) (January 2019)

Conclusions and recommendations

Introduction - fashion & sustainability

1. We want to see a thriving fashion industry in the UK that provides decent work, inspires creativity and contributes to the economic success of the UK. The fashion industry's current business model is unsustainable, especially with growing populations and rising levels of consumption across the globe. Over-consumption and climate change are driving widespread environmental damage. The exploitative and linear business model for fashion must change. The various parts of the fashion industry must come together to set out their blueprint for a net zero emissions world. This will require reducing their carbon consumption back to 1990 levels. Given scientists' stark warnings on climate change and biodiversity loss, we need to fix fashion. (Paragraph 22)

The social cost of our clothes

2. We were shocked by the treatment of Missguided's auditors. If this is how factory owners treat potential customers, we dread to think of the conditions endured by their workers. (Paragraph 49)
3. 'Made in the UK' should mean workers are paid at least the minimum wage in a safe workspace. It is unacceptable that some workers in the UK making clothes for fast fashion retailers are not paid the minimum wage and are suffering serious breaches of health and safety law in their workplaces. We support calls from the Director of Labour Market Enforcement for a more proactive approach to the enforcement of the national minimum wage. HMRC's National Minimum Wage team needs greater resourcing in order to increase their inspection and detection work. We also recommend that Boohoo engage with Usdaw as a priority and recognise unions for its workers. We recommend that textile retailers operating internationally follow the example of Asos, H&M, Esprit and Inditex in signing up to Global Framework Agreements. These put in place the highest standards of trade union rights, health, safety and environmental practices, across the retailers' global operations, regardless of local country standards. (Paragraph 50)
4. There must be more transparency in supply chains and there is a strong case for the Modern Slavery Act to be strengthened. The current requirement to produce a statement does not ensure that action is taken by big retailers and even this is not adequately monitored. *The Government should publish a publicly accessible list of all those retailers required to release a modern slavery statement. This should be supported by an appropriate penalty for those companies who fail to report and comply with the Modern Slavery Act.* This will increase transparency and require the establishment of formal monitoring of whether statements comply with legislation. (Paragraph 63)
5. The Companies Act 2006 requires that a statement be made on human rights issues in a company's Annual Report only 'where necessary'. This system lacks accountability and places too much reliance on companies to self-disclose. *We recommend that the Companies Act 2006 be updated to include explicit reference to 'modern slavery' and*

'supply chains'. Statements on a business' approach to human rights in its supply chain should be mandatory as part of the Annual Report. The Financial Reporting Council's (FRC) Corporate Governance Code and UK Stewardship Code, and the Financial Conduct Authority's (FCA) listing rules should likewise be amended to require modern slavery disclosures on a comply or explain basis by 2022. If this is not possible then a Corporate Duty of Vigilance Law, as in France, should be considered. Fashion retailers must not be allowed to turn a blind eye to labour and environmental abuses in their supply chains. Retailers should be investing in technology that allows them - and their customers - to track where their materials and products are sourced and made. We recommend that the Government strengthen the Modern Slavery Act to require large companies to perform due diligence checks across their supply chains to ensure their materials and products are being produced without forced or child labour. We also recommend that Government procurement should be covered by the Modern Slavery Act. (Paragraph 64)

6. *We recommend that the Government works with industry to trace the source of raw material in garments to tackle social and environmental abuses in their supply chains. Digital technology is widely used in other supply chains. We do not understand why a modern high-tech industry like fashion does not have these systems already in place. Some companies told us they can trace their materials down to Tier 4 suppliers. This begs the question - if one can do it, why can't all? This first step is essential if fashion is to tackle its waste, water, chemical and carbon footprint. This also reduces the opportunities for sub-contractors to take their cut along the supply chain. (Paragraph 65)*

Fashion's environmental price tag

7. *We are unwittingly wearing the fresh water supply of central Asia and destroying fragile ecosystems. Consumers can play their part by avoiding products with pre-made rips and tears and seeking sustainable or organic cotton wherever possible. Governments should oblige retailers to ensure full traceability in their supply chains to prove decent livelihoods and sustainably sourced materials. (Paragraph 72)*
8. *The Government should facilitate collaboration between fashion retailers, water companies and washing machine manufacturers and take a lead on solving the problem of microfibre pollution. Ultimate responsibility for stopping this pollution, however, must lie with the companies making the products that are shedding the fibres. Further research needs to be carried out into how design can be used to limit emissions of synthetic fibres and the lessons applied quickly. The need for more research should not be used as an excuse for inaction by retailers. Fashion retailers should be testing new synthetic garments for fibre release and publishing figures. (Paragraph 92)*
9. *More research also needs to be carried out urgently into the occupational health risks of working with synthetic fibres. The Government should ask the Health and Safety Executive to review the evidence and take action accordingly. Manufacturers must be mindful of potential risks now and should seek to reduce the exposure of garment workers to airborne synthetic fibres. (Paragraph 93)*

10. Gaining a full picture of the impact of different fibres is important so that businesses, consumers and policymakers can decide on the most effective solutions. The work that WRAP has done to document the impact of fashion consumption and bring businesses together to share best practice and facilitate change is commendable. However, WRAP has faced significant funding cuts, with budget allocation reducing from £56 million in 2009/10 to less than £10 million for 2017/18. The Government must ensure that WRAP's Sustainable Clothing Action Plan (SCAP) is adequately funded to provide its services to any retailer that wants to improve its sustainability performance - regardless of its size. Post 2020, SCAP target ambitions must increase. To ensure the scheme continues we recommend that retailers pay for the funding of SCAP. This should ideally be included in the Extended Producer Responsibility Scheme. This should happen whether or not an EPR scheme is introduced. This could be set relative to revenue with discounts available for SMEs. SCAP does not currently include any commitments to reduce microplastic pollution from synthetic garments. *Post 2020 SCAP should include new targets following the Ecodesign Directive, including reducing microplastic shedding.* (Paragraph 101)
11. Members of SCAP have made some progress in reducing their carbon and water consumption, but action has not been swift enough on reducing waste. We are disappointed that just 11 fashion retailers are signatories. These improvements have been outweighed by the increased volumes of clothing being sold. A voluntary approach has failed. A retailers' commitment to SCAP targets should be seen as a 'licence to practice'. We recommend that compliance with SCAP targets should be made mandatory for all retailers with a turnover of more than £36 million—a threshold in line with the Modern Slavery Act. This should be done under a new Extended Producer Responsibility Scheme. The Government needs to provide clear economic incentives for retailers to minimise their environmental footprint. It should implement the EU's Ecodesign Directive in the Circular Economy Package into UK law in its Resources and Waste Strategy and upcoming Environment Act. (Paragraph 102)
12. A kneejerk switch from synthetic to natural fibres in response to the problem of ocean microfibre pollution would result in greater pressures on land and water use - given current consumption rates. Encouraging a move from conventional to organic cotton and from virgin polyester to recycled PET (in garments designed to minimise shedding) could help to reduce the impact of the clothing industry. *We recommend that the Government reforms taxation to reward fashion companies that design products with lower environmental impacts and penalise those that do not. The Government should investigate whether its proposed tax on virgin plastics, which comes into force in 2022, should be applied to textile products that contain less than 50% recycled PET to stimulate the market for recycled fibres in the UK. As part of the new EPR scheme, Government and industry should accelerate research into the relative environmental performance of different materials, particularly with respect to measures to reduce microfibre pollution.* (Paragraph 103)

Textile waste and collection

13. While incineration of unsold stock 'recovers' some energy from the products, it multiplies the climate impact of the product by generating further emissions and

air pollutants that can harm human health. Incineration of clothes made from synthetic fibres may release plastic microfibres into the atmosphere. Climate changing emissions will have been generated when the products were created and more CO₂ will be produced when they are burnt. The waste hierarchy suggests that reuse and recycling comes first. This should be a priority means of dealing with unsold stock. Incineration should only be used as a last resort where there is a health and safety case for destroying the stock. *The Government should ban incinerating or landfilling unsold stock that can be reused or recycled.* (Paragraph 122)

14. Our desire for fast fashion, fuelled by advertising, social media and a supply of cheap garments, means we are disposing of over a million tonnes of clothes every year in the UK. Under the UN Sustainable Development Goals, the UK is committed to 'to ensure sustainable consumption and production'. We need to reduce the environmental footprint of the UK's textile production and consumption. To do that, we need to reduce textile waste, improve resource efficiency and reduce the carbon emissions and water footprint of the clothes we buy. We need to simply buy less, mend, rent and share more. *To support this we recommend that lessons on designing, creating, mending and repairing clothes be included in schools at Key stage 2 and 3.* The creative satisfaction of designing and repairing clothing can offer an antidote to the growing anxiety and mental health issues amongst teenagers. As well as providing a space to promote creative expression, the skills learnt can also provide a potential pathway towards job opportunities. (Paragraph 130)
15. The Government must end the era of throwaway fashion. *It should make fashion retailers take responsibility for the waste they create by introducing an Extended Producer Responsibility scheme for textiles and reward companies that take positive action to reduce waste.* A charge of one penny per garment on producers could raise £35 million for investment in better clothing collection and sorting in the UK. This could create new 'green' jobs in the sorting sector, particularly in areas where textile recycling is already a specialist industry such as Huddersfield, Batley, Dewsbury and Wakefield in West Yorkshire. The Government's recent pledge to review and consult on how to deal with textile waste by 2025 is too little too late. We need action before the end of this parliament (2022). (Paragraph 131)
16. *The Resources and Waste strategy should incorporate eco-design principles and offer incentives for design for recycling, design for disassembly and design for durability. It should also set up a new investment fund to stimulate markets for recycled fibres.* (Paragraph 132)

New economic models for the fashion industry

17. We need new economic models for fashion which are based on reducing the material consumption associated with growth. The Government should explore how it can support the sharing economy. *The Chancellor should use the tax system to shift the balance of incentives in favour of reuse, repair and recycling to support responsible companies. The Government should follow Sweden's lead and reduce VAT on repair services.* (Paragraph 145)
18. Retailers must take responsibility for the social and environmental cost of clothes. They should use their market power to demand higher environmental and labour

standards from suppliers. Offering rental schemes, lifetime repair and providing the consumer with more information about the sourcing and true cost of clothing are all measures that can be more widely adopted. Shifting business practice in this way can not only improve a business's environmental and social impact but also offer market advantage as they respond to the growing consumer demand for responsible, sustainable clothing. (Paragraph 146)

Annex: Table of retailers' responses

Retailer	Market position		Sustainability actions						Sustainability initiatives				Labour Market Initiatives			
	Total Revenue	Profit before tax	UK clothing market share by value (2018)	SCAP - Sustainable Clothing Action Plan	Use of organic or sustainable cotton (e.g. BCI Cotton2040)	Use of recycled material in products	ZDHC - Zero Discharge of Hazardous Chemicals	In store take back scheme or textile banks	Commitment to Climate Change Risk Reporting (TCFD)	SAC - Sustainable Apparel Coalition	Microfibre Initiative	Make Fashion Circular	Reuse or recycling of unsold stock	ACT - Action Collaboration Transformation	ETI - Ethical Trading Initiative	SEDEX - Supplier Ethical Data Exchange
Engaged																
ASOS	£2.4bn	£102.0m	N/A	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	No	No
Burberry	£2.7bn	£41.3m	N/A	No	Yes	Yes	Yes	Yes	Paused	Yes	Yes	Yes	No	Yes	No	No
Marks and Spencer Group PLC	£10.7bn	£66.8m	7.30%	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes
Tesco PLC	(Tesco Group) £51.0bn	(Tesco Group) £1.3bn	(F&F Clothing) 2.9%	Yes	Yes	Yes	Yes	Yes	In discussions	Yes	No	Yes	Yes	Yes	Yes	Yes
Primark Stores Ltd.	£7.4bn	(Adjusted Operating Profit) £34.5m	7.00%	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Moderately engaged																
Arcadia Group	(2017) £1.9 bn	£82.5m	3.80%	Yes	Yes	No	No	Yes	No	Yes	No	Yes	Yes	No	No	No
Asda Stores Ltd.	(Asda Group) £22.2bn	(Asda Group) £712.6m	(George) 3.5%	No	No	No	No	Yes	No	Yes	No	Yes	No	Yes	Yes	Yes
Debenhams	£2.9bn	£33.2m	2.70%	No	Yes	Yes	No	Yes	No	Yes	No	Yes	Yes	Yes	No	No
Next PLC	£4.1bn	£726m	6.60%	Yes	Yes	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes	No	No
Less engaged																
Amazon UK	(2017) \$11.3bn	N/A	N/A	No	No	No	No	No	No	No	No	Yes	No	No	No	Yes
Boohoo Group	£579.8m	£43.3m	N/A	In discussions	Yes	Yes	No	No	No	No	No	Yes	No	No	No	Yes
JD Sports Fashion PLC	£3.1bn	£294.5m	2.80%	No	No	No	No	No	No	No	No	Yes	No	No	No	No
Misguided Ltd.	£215.9m	Loss (£45.9m)	N/A	No	No	No	No	No	No	No	No	Yes	No	Yes	Yes	Yes
Sports Direct International PLC (See Annex 1, Note 4)	£3.3bn	£77.6m	2.40%	No	Yes	Yes	No	Yes	No	Yes	No	Yes	No	No	No	Yes
TJX Europe (TK Maxx and HomeSense)	£2.9bn	£87.1m	3.20%	No	No	No	No	No	No	No	No	Yes	No	No	No	No
Kurt Geiger ¹	£324.6m	£26.2m	N/A	X	X	X	X	X	X	X	X	X	X	X	X	X

1. Kurt Geiger provided a response to the Environmental Audit Committee after the publication of the Interim Report on the Sustainability of the Fashion Industry.

Appendix: Research by Dr Mark Sumner, School of Design, University of Leeds

Not compliant with the requirements of the Modern Slavery Act		
		Turnover (million, £)*
1	Foot locker	£ 4,916.00
2	Vente-privee.com	£ 2,673.00
3	Guess	£ 1,802.41
4	Calzedonia Group	£ 1,721.70
5	Valentino	£ 980.00
6	Benetton Group	£ 943.00
7	SMCP	£ 813.00
8	GEOX	£ 789.89
9	Gerry Weber	£ 786.59
10	Tory Burch	£ 610.00
11	Salvatore Ferragamo	£ 600.00
12	Versace	£ 596.00
13	Brunello Cucinelli	£ 503.57
14	Longchamp	£ 493.00
15	Furla	£ 470.00
16	Groupe Zannier	£ 384.48
17	DvF (Diane von Furstenberg)	£ 381.00
18	Grendene	£ 222.00
19	VISAGE LIMITED	£ 221.70
20	Van de Velde	£ 209.00
21	DECKERS EUROPE LIMITED	£ 200.90
22	CRYSTAL MARTIN INTERNATIONAL LIMITED	£ 123.61
23	True Religion	N/A
24	Canali	N/A
	<i>*Data correct as of December 2018</i>	

Formal minutes

Tuesday 5 Feb 2019

Members present:

Mary Creagh, in the Chair

Philip Dunne Kerry McCarthy
Zac Goldsmith Alex Sobel
Robert Goodwill John McNally
Caroline Lucas

Draft Report (*Fixing Fashion: clothing consumption and sustainability*), proposed by the Chair, brought up and read.

Paragraphs 1 to 149 read and agreed to.

Annex agreed to.

Appendix agreed to.

Summary agreed to.

Resolved, That the Report be the Sixteenth Report of the Committee to the House. *Ordered*, That the Chair make the Report to the House.

Ordered, That embargoed copies of the Report be made available, in accordance with the provisions of Standing Order No. 134.

[*The Committee adjourned*]

Witnesses

The following witnesses gave evidence. Transcripts can be viewed on the [inquiry publications page](#) of the Committee's website.

Tuesday 30 October 2018

Dr Mark Sumner, University of Leeds, **Stella Claxton**, Senior Lecturer, Clothing Sustainability Research Group, Nottingham Trent University, **Professor Richard Thompson**, University of Plymouth, **Alan Wheeler**, Textiles Recycling Association [Q1–39](#)

Sarah O'Connor, Financial Times investigative reporter, **Kate Elsayed-Ali**, Anti Slavery International, **Sarah Ditty**, Fashion Revolution [Q40–84](#)

Tuesday 13 November 2018

Claire Bergkamp, Sustainability & Innovation Director, Stella McCartney Ltd, **Clare Hieatt**, Howies and Hiut Denim, **Graeme Raeburn**, Designer, Phoebe English, Designer, **Professor Dilys Williams**, Director and Professor of Fashion Design for Sustainability [Q85–102](#)

Livia Firth, Eco-Age, **Jane Grice**, Waste Not, Want Not, **Jenny Holdcroft**, Assistant General Secretary, IndustriALL union, **Andrea Speranza**, TRAIID, **Lucy Siegle**, freelance journalist and writer [Q103–123](#)

Tuesday 27 November 2018

Mike Barry, Director of Sustainable Business, Marks and Spencer, **Paul Lister**, Head of Ethical Trade & Environmental Sustainability Team, Primark, **Jamie Beck**, Head of Supplier Management, Arcadia Group, **Leanne Wood**, Chief People, Strategy and Corporate Affairs Officer at Burberry [Q124–249](#)

Carol Kane, Joint Chief Executive Officer, Boohoo, **Nick Beighton**, Chief Executive Officer, ASOS, **Paul Smith**, Head of Product Quality & Supply, Missguided [Q250–390](#)

Tuesday 18 December 2018

Victoria Atkins MP, Parliamentary Under Secretary of State for Crime, Safeguarding and Vulnerability and Parliamentary Under Secretary of State (Minister for Women), Home Office, **Dr Thérèse Coffey MP**, Parliamentary Under Secretary of State for the Environment, Defra, **Kelly Tolhurst MP**, Parliamentary Under Secretary of State, Minister for Small Business, Consumers and Corporate Responsibility, BEIS, **Janet Alexander**, Director of Individuals and Small Business Compliance, HMRC [Q391–555](#)

Published written evidence

The following written evidence was received and can be viewed on the [inquiry publications page](#) of the Committee's website.

SFI numbers are generated by the evidence processing system and so may not be complete.

- 1 Amazon ([SFI0078](#))
- 2 Amberoot ([SFI0023](#))
- 3 Anglia Ruskin University ([SFI0028](#))
- 4 Anglian Water Services ([SFI0017](#))
- 5 Anti-Slavery International ([SFI0071](#))
- 6 Arcadia Group Ltd. ([SFI0065](#))
- 7 Armstrong-Gibbs, Fiona ([SFI0027](#))
- 8 ASDA ([SFI0066](#))
- 9 ASOS ([SFI0080](#))
- 10 ASOS ([SFI0100](#))
- 11 Boohoo ([SFI0101](#))
- 12 boohoo group plc ([SFI0082](#))
- 13 British Retail Consortium ([SFI0019](#))
- 14 Bundlee Ltd ([SFI0021](#))
- 15 Burberry Limited ([SFI0083](#))
- 16 The Carbon Mark project ([SFI0006](#))
- 17 Centre for Sustainable Fashion, London College of Fashion ([SFI0058](#))
- 18 Centre for Sustainable Fashion, University of the Arts London ([SFI0034](#))
- 19 Christopher Raeburn ([SFI0095](#))
- 20 Commun des Mortels ([SFI0088](#))
- 21 Cooper, Professor Tim ([SFI0049](#))
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