

FASHION ROUNDTABLE
+
DEFRA

WASTE STRATEGY

2022





Fashion Roundtable Waste Strategy

We have created a red and green strategy system. **Red** being the pain points and **Green** being the solution.

EPR

- Issues of workers already at capacity
- Cost on the brands
- Recycling not at levels needed and an analysis of the carbon footprint of these schemes has to be analysed
- How to recycle complex fibres? Blending?
- Higg Index is not fit for purpose

For textiles to be recycled, challenges around technicalities must be addressed. One of which is the degradation and then the subsequent blending of fibres. Fibre lengths are naturally reduced during wear, wash, friction etc. however mechanical recycling also intensifies this. Shorter length fibres have lower strength and longevity, which needs to be addressed in terms of closed-loop recycling.

Blending of fibres is problematic as sorting is currently impossible as this is still done by hand. Therefore mechanical recycling is problematic as synthetic fibres have differing attributes, while some can get stuck in the shredder, others are too strong to shred.

- Who pays?
- How do the clothes get back to the brands?
- What R&D is going into this from GOVT?
- Carbon footprint and LCA is key here.

SOLUTIONS

- Governments should incentivise for EPR not penalise
- Repair strategies
- Sewing back into schools - KS2 onward
- Education on value and heritage, linked in with innovation
- Education on designing products for circularity and responsible fibres/end of life
- Analytical / commercial technique required for identification of differing fibres to reduce hand sorting

- Brands making costs visible i.e. showing the hidden costs through rating systems / labelling to boost consumer awareness
- Retailers educate staff and consumers on how to take care of their products through mandated minimum requirements (like a first aid requirement in the workplace) and through online platforms - repair and care, wash less often and colder etc.
- Technical exchange with Italy: existing mills in the UK mostly use outdated machinery and technical staff are not trained to use the newest spinning equipment. The government needs to incentivise renewal and augmentation of spinning knowledge in the UK so that we transform fibres into stable, high quality recycled yarn that is blended with virgin wool fibre for example or sustainable silk or hemp to augment durability and tensile strength. Italian spinners are far more qualified and needing work; here in the UK mills are fully booked and functioning at full capacity but suffering from staff shortage.

Second hand clothes exports from global north donations / 'recyclers' to the global south and the extremely serious environmental and cultural problems they are causing for the recipient nations. The proposed EPR that would allow exporters only to send to countries who have a similar level of textile processing facility is very weak, problematic and will be rendered ineffectual if those countries in turn are not also beholden to such measures as they will simply be passing the unwanted volumes onto other countries in the region.

There must be much tougher proposals that can genuinely prevent dumping.

The preservation of heritage skills and methods for textile and clothing design and making. Practical in real life (not digital) spaces that create training opportunities and permanent spaces for textile craft preservation, development and trade, rooted in localised resources, regenerative agriculture and women's empowerment initiatives (in the global North and the Global South).

- Investment in spinning facilities that are placed close to fibre production zones.

Garment worker welfare and prevention of exploitation by the largest fast fashion retailers who are largely responsible.

FIBRES

- Synthetic and complex fibres - the issues in recycling complex materials as discussed
- Microplastics prevalent in the industry and require a reduction in production mandate to reduce the impact across the supply chain
- Toxic dyes being used
- Wool is a local and sustainable fibre, however only 1% of this fibre is utilised globally. We currently import more wool than we export (20.5 million kilograms of wool was exported from the UK and we imported 36.13 kilograms in 2021) however we have 30,000,000 sheep.
- Wool has been devalued to the extent that it is worthless at 80p per kg
- Too much cotton and water thirsty fibres are favoured

- We do not have sufficient spinning capacity in the UK and therefore cannot process local fibre. We have lost the capacity to design yarn and to scour in different ways so as to obtain different handles and levels of softness.

SOLUTIONS

- Investment in fibre production at a local level (localising the supply chain - less of a carbon footprint) - scouring, spinning etc.
- Fibre labelling is being developed in the EU, where there will be implications for non biodegradable material usage.
- To protect UK endangered textiles knowledge and skills and maintain an industry which could be a key-player in slowing fashion and reducing waste, it is important that fashion products are not able to damage heritage artisans through appropriation practices. At present IP law, and geographical indications are not fit for purpose to protect heritage textile communities and their cultural products. IP law is designed for brands and individuals not communities, and GI is acceptable for food and agriculture or but not for crafts and designs that have the right to evolve and exist outside of a set method, or aesthetic. Custodians of textile knowledge need a fit-for-purpose protection to avoid fashion co-opting the aesthetic without investing in the artisans and communities.
- Wool has been long misinterpreted as a heavy fabric but spun and handled differently wool is also a lightweight, breathable fabric but lacks this exposure and would benefit from investment in textiles research and weaving skills. Many mills struggle to find local and nearby spinning and dyeing suppliers as the local supply chains have disintegrated.
- Scale fibre to fibre recycling operations through subsidisation, skills & tech investment
- Follow Norway's lead ensuring that retailers disclose microplastics data - which would could lead to increase in natural fibre uptake - see <https://www.ecotextile.com/2022060929451/fashion-retail-news/norwegian-retailers-disclose-microplastics-data.html>
- Working with farmers at the start of fibre production to ensure that quality is met through breeding programmes and incentives - particularly around wool - a circular and biodegradable fibre.
- Design level should focus on circularity and biodegradability.
- We need to work with Italy on a Knowledge exchange basis to update our skills and our machinery. Most UK mills are about 20 years behind their Italian counterparts in terms of equipment. Our mills are working round the clock, theirs are struggling to find work: can't our embassies find a formal Knowledge Exchange agreement for textiles?
- Looking at food agricultural processes to influence localism and fibre production
- Linen/Flax is being favoured as a solution as like wool, the british climate suits this as opposed to cotton, which has the added issue of exploitation of Uighurs in the global cotton supply chain
- The UK is one of the largest cannabis producers for CBD products, can we not use this for hemp fibre?
- Natural dyes - for instance the work Phoebe English has done with Fibershed and the Dyers Circle to experiment and expand tinctorial plant growing and extracting. Pangaia has done this at scale.
- Skills reboot and campaign, eg sewing classes in KS2 and 3 and support for craft initiatives, such as Charles iii's workshops at Dumfries Houses and the initiative Fashion Roundtable are piloting with Mentor Mon and the Heritage Craft Association

in rural Wales teaching craft skills and supporting local communities and supply chains

We have spoken inhouse at length and Meg Pirie has shared details about the missing middle in fibre processing for protein fibres especially wool and the lack of commercial bast fibres grown in the UK. We need to be growing plant fibres and processing protein and bast fibres.

In addition we are looking to address the need for:

- Dye plant growing at farm level at commercial scale
- Localised community collaboration incentivisation to support circular initiatives
- Infrastructure for plant and food waste processing into dyestuffs
- Infrastructure for food and waste textile dyeing

RETURNS AND RECYCLING

- Leading to overproduction
- Dumping
- Consumers buying multiple items in the varying colours

SOLUTIONS

- Work with the industry/NGOs etc. to investigate the infrastructure requirements / behaviour changes to actually gather in post consumer waste at scale - how and when
- BNPL schemes like clearpay and Klarna offer an opportunity for consumers to buy sustainable/investment pieces which are often expensive in comparison with fast-fashion – preferable partnerships should be supported
- Open Source carbon impact and pathways to net zero assessment of circular strategies/ calls for assessments on all types of recycling and reverse supply chains
- Sizing - Avatars which the consumer “owns” and can be used when they shop to ensure they buy the right sizes for their body shape, given the vast differences in sizing between different brands
- Mandatory for brands to include measurements when selling online
- Tax benefits for items bought purely for rental purposes
- Tax incentives for B Corp businesses (please see Fashion Roundtable’s work on this for HMRC)
- Investment in the sharing economy
- AI and digital innovations - for example the advances into this space by Gucci and Prada and also NFTS, if these can become more carbon-neutral in the future (currently they aren’t)
- Upskill workforce in digital technologies such as digital sampling - collaborate with businesses in this area to offer taster courses for those in the industry who have years of experience but not in the digital world as much]

Context and background for Fashion Roundtable / DEFRA discussions on EPR

EPR regulations in other countries

(<https://www.sustainalize.com/news/extended-producer-responsibility-sustainability-laws-legislation-in-fashion-part-1/>)

EPR in France

France's EPR policy was introduced in 2007 and passed into law to cover end-of-use clothing, linen, and shoes in January 2020. The policy is governed by Refashion (formerly Eco TLC), an accredited non-profit organisation, which represents 95% of the French textile industry and is responsible for the collection, recycling, and recovery of used textiles. The destruction of unsold textile products is forbidden under law.

France's target for 2022 is to collect 50% of all the textiles put on the market, and from this collection, reach 95% of reuse or recycling of textiles, and a maximum of 2% waste. Policymakers have also implemented an extension of circularity on transparency of the production, as well as the bonuses and penalties paid by the manufacturers and information on potentially dangerous substances.

EPR in The Netherlands

The Netherlands has a draft regulation that focuses on garments and home textiles. All producers in the Netherlands, as well as external producers who market within the country (including ecommerce), need to appoint a legal entity to carry out the EPR. By 2025, municipalities will have to collect textiles separately.

The Dutch government has a target for 2025 that 50% of textile products should be recycled or reused. Producers are obligated to report their figures annually. By 2030, this target will increase to 75%. The estimated cost of waste management for producers is €0.09 to €0.28 per kilogram of textile.

EPR in Sweden

Sweden introduced an EPR for textiles from 1 January 2022. It will be phased in over several years with licensed textile collections starting on 1st January 2024. It's hoped that from 2028 onwards, at least 90% of the textile waste collected by the new system will be reused or sent for material recovery. Sweden's target by 2028 is to reduce the average amount of textile sent to landfill by 70%.

Factors to consider for UK EPR

Industry

- Lack of textile collection, sorting and recycling infrastructure in UK
 - Learning can be made from other countries like France and Italy
- What is voluntary and what is mandatory
 - Minimum floor of mandatory requirements (The EU regulations set a good example, BUT countries like Italy have a much more advanced and well funded textile recycling system - in Prato for example)
 - How far can voluntary commitments change the industry and consumer behaviours
- Effects of regulation made in isolation from other Responsible Business legislation or proposed legislation (eg Mandatory Carbon Disclosure, Green Claims Code, Responsible Business Act). This makes the legislative landscape difficult to navigate and filled with loopholes - we need joined up thinking across legislation so an EPR does not counteract other efforts (e.g. work with academics to determine the impacts of recycling fibres, vs. keeping garments in use for longer through repair)
- National vs brand specific post consumer collections
- Brand responsibility vs manufacturing stakeholders responsibility
 - Manufacturers and upstream stakeholders are often left out of these conversations

Products

- Products are often made using mixed fibres. This creates challenges to either chemically or mechanically break them down to a viable and reusable product
- Finishings and trims can impact recyclability
- Some products contain toxic dyes, particularly older clothing before ZDHC etc. was introduced. This is a documented problem with natural materials like wool and cashmere (APEOs were used in the past to clean and scour wool). There is no guarantee that some clothing bought now does not contact toxic dyes if it was not properly tested.
- Mechanical recycling reduces the quality of the fibres, virgin fibres have to be included with recycled content to improve quality and longevity
- Chemical recycling only works on certain materials and can use toxic chemicals, there is research to separate polycotton into constituent poly/cotton but this is through fashion conglomerate funding and they may own any patents/processes discovered
- There is interesting research into enzyme recycling

Issues that can be interdependent or cross over with EPR

- Microfibres
 - Released throughout lifecycle from textile production to end-of-life

- Lack of research into microfibre release and capture
- The [Microfibre Consortium](#) are a good connection here
- Net Zero
 - Issues with LCAs about the climate impacts of different fibres
 - Lack of local UK infrastructure increases export of waste textiles
- Design for End of Life
 - Good work being done on this at the University level
 - Promote cross pollination of ideas from academia to business
- Repair industry
 - Lack of support and funding for these businesses - often resulting in repair being more costly than new garments
 - Lack of consumer education on product repair and extending life
- Customer education
 - Links with repair
 - Are brands responsible for educating consumers on how to care for the products they sell
- Accuracy of garment labelling so collected garments can be identified correctly
 - No standardised clothing size range (difficult to solve)
 - Difficulty in sizing clothes (especially for women)
 - There are tech advances here particularly within tech (see e.g. zozosuit)
 - Garment labels can be removed by consumers making clothing difficult to sort. Some work is being done on this using RFID
 - A fashion watchdog could mandate
 - Standardised sizing (challenging)
 - Product measurements for all products sold online

Opportunities for DEFRA to explore

- Learnings from other waste stream EPR systems such as WEEE
- Learnings from other initiatives such as Textiles 2030
- Learnings from privately managed Take Back Schemes (such as John Lewis and Marks and Spencer / Oxfam Schwopping)
- Learnings from manufacturing sector (as opposed to only Brands). Cross learning opportunities from Italian Mills as well as UK based.
- Learnings from academia
- Funding paths for all of the above

Ideal outcomes from EPR regulation

- Products are in use for much longer through rental, resale, repair and general care guidance
- Manufacturers, brands and other industry stakeholders in alignment on how to extend the life of products and manage-end-of-life
- Prohibit the destruction of unsold textile goods

- Limit the export of used textiles to markets/businesses that have not been assessed for capacity and sustainability of waste streams (a fashion watchdog could oversee this)
- Design for Environment is embraced by brands and suppliers
- Supports initiatives to reduce waste at all levels of the fashion value chain: design, production, sales and post consumer levels

This will create a valuable circular economy industry based around providing the services to enable EPR

- Boosts UK textile manufacturing and garment producers
- Boosts use of natural fibres and UK Wool in particular
- Repair and Resale industry are supported
- Boosts Creative Upcycling industry
- Destroying unsold textiles becomes prohibited

Possible challenges raised by an EPR

- A recycling industry develops that isn't aligned to a UK path to Net Zero (energy use, water use, imbedded carbon in new buildings, waste etc)
- Exports to global south become a cheap work around, worsening the crisis of dumped textiles already created
- Microfibre and plastics pollution continue or are exacerbated
- Overproduction isn't addressed as a key driver for waste, End of life provisions disincentive slowing up over-production
- Small Resale, Repair or Creative Upcycling businesses struggle to compete with larger brands
- End of life or use of recycled fibres used as Greenwashing by brands to mask poor production practices (environmental and social)