THE CIRCULAR FASHION ECOSYSTEM PROJECT:

PHASE 2 – Developing the Roadmap for Change

PROGRESS REPORT

OCTOBER 2022

Initial Findings from Phase 2 of the Institute of Positive Fashion's Circular Fashion Ecosystem Project

B R I T I S H F A S H I O N C O U N C I L



INSTITUTE OF POSITIVE FASHION

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EXECUTIVE SUMMARY

The Circular Fashion Ecosystem Project (CFE) is the Institute to reach a circular fashion ecosystem are presented. of Positive Fashion's (IPF) flagship programme from the British Fashion Council (BFC). Phase 1 of the CFE Project: A Blueprint for the Future, published in September 2021, serves as an actions-oriented approach for industry transformation with innovation, research, jobs & skills, education, and community at its heart. It sets out a framework of 10 Action Areas and 30 Recommendations to achieve three target outcomes for a future circular fashion ecosystem in the UK.

This report presents findings from the foundational stage of Phase 2 of the CFE Project: Developing the Roadmap for Change. Based on research conducted between January -April 2022, insights into stakeholder advances and challenges be most challenging are listed below.

Specifically, engagement within the framework of 10 Action Areas and 30 Recommendations from Phase 1. By collating these advances and challenges, the complexity, ease, potential for collaboration and opportunity to leverage existing initiatives to transition to a circular fashion ecosystem can be understood.

Insights were gained from the following stakeholder groups: Academia, Brands, Collectors, Designers, Digital Innovators, Institutions / Industry Bodies / 3rd sector, Manufacturers, Reprocessors, and Retailers. Based on this research, the main recommendations which are being advanced or were found to

THE CFE RECOMMENDATIONS BEING MOST ADVANCED ACROSS **ALL STAKEHOLDERS**

MAINSTREAMING CIRCULAR DESIGN

MATCHING DESIGNS AND REPROCESSING

SHIFTING CONSUMER PRACTICES

THE CFE RECOMMENDATIONS WHICH ARE MOST CHALLENGING **ACROSS ALL STAKEHOLDERS**

MODELLING INDUSTRY AND INNOVATION HUBS

DIGITISING GARMENTS

MODELLING ECONOMIC AND MATERIAL FLOWS

CONTENTS

SECTION 1

1. A LETTER FROM THE CEO
2. INTRODUCTION
2.1 Overview
2.2 Why understanding the barriers to circularity is
2.3 Stakeholder support
3. THE SURVEY
3.1 Purpose and approach
3.2 Summary insights

SECTION 2

4. INSIGHTS PER STAKEHOLDER GROUP

4.1 Academia
4.2 Brands
4.3 Collectors
4.4 Designers
4.5 Digital innovators
4.6 Institutions, industry bodies, 3 rd Sector
4.7 Manufacturers
4.8 Reprocessors
4.9 Retailers
5. SUMMARY OF RESULTS
6. CONCLUSIONS
7. NEXT STEPS
8. IPF DELIVERY PROJECTS UNDERWAY

SECTION 3:

SURVEY RESPONDENTS
ACKNOWLEDGEMENTS
REFERENCES

	PAGE 5
	PAGE 6
needed	PAGE 9
	PAGE 11
	PAGE 13
	PAGE 15

	•			 	 •••	 	 F	Pμ	40	GE	Ξ	23							
				 	 	 F	P	40	GE	Ξ	25								
	•			 	 •••	 	 F	Þμ	40	GE	Ξ	27							
	•			 	 •••	 	 F	Þμ	40	GE	Ξ	29							
				 	 •••	 	 F	Þ	40	GE	=	33							
	•			 	 •••	 	 F	Þμ	40	GE	Ξ	35							
				 	 •••	 	 F	Þ	40	GE	=	37							
	•			 	 •••	 	 F	Þμ	40	GE	Ξ	39							
	•			 	 •••	 	 F	Þμ	40	GE	Ξ	41							
	•			 	 •••	 	 F	Þμ	40	GE	Ξ	43							
	•			 	 •••	 	 F	Þμ	40	GE	Ξ	45							
				 	 •••	 	 F	Þ	40	GE	=	46							
	•			 	 •••	 	 F	۶A	4(GE	Ξ	47							

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	 •	 •••	 			 		 		•••	 	 	 	 		Ρ	A	4(G	E	ļ	53	3
 	 	 •••	 			 		 		•••	 	 	 	 		Ρ	Α	4(G	E	ļ	54	4



1. A LETTER FROM THE CEO

Since the IPF's inaugural report 'The Circular Fashion Ecosystem: A Blueprint for the Future', was launched in September 2021, the need for a coordinated transition towards a circular business model has become apparent.

In this report the IPF has leveraged the convening power of the BFC to conduct a survey with multiple stakeholders from across the fashion value chain, to identify the opportunities and challenges they face in their bid to transition to a more circular model.



The insights from this Survey have influenced the design and launch of the following three, IPF Phase 2 projects:

1. CREATING CIRCULAR FASHION ECOSYSTEMS:

Establishing a scalable approach to implement the CFE vision in cities across the UK, by integrating Doughnut Economics principles and applying circular economy strategies. The vision is for these ecosystems to operate in a way that gives both society and our planet the ability to thrive.

2. SOLVING FASHION RETURNS - HOW TO **KEEP VALUE IN A CLOSED LOOP SYSTEM:**

Exploring the financial, environmental and societal impact of fashion product returns, in order to identify potential mitigations. The aim is to assess different measures and technologies which minimise returns and handle them more efficiently and sustainably.

3. EMPOWERING CITIZENS TO ENABLE GARMENT LONGEVITY:

Focusing on empowering citizens to care and repair their garments through information on QR codes. By exploring different technology and production approaches, the objective is to increase the number of times a garment is worn, given the trend of declining utilisation rates.

Thank you to all who have participated so far. Great progress has been made by independent businesses but we need collective action to in order to reach our vision of a circular fashion ecosystem by 2030.

Caroline Rush CBE. Chief Executive. **British Fashion Council**

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2. INTRODUCTION > 2.1 OVERVIEW

In 2020 the British Fashion Council launched the IPF with an ambition to unite and accelerate the fashion industry in its goal for a sustainable and equitable future. Focused on creating actionable pathways in response to the climate change agenda, the IPF's ambition is to build the foundations of a circular fashion ecosystem in the UK by 2030 whilst contributing to the UK's commitments under the 2015 Paris Agreement on Climate Change. The CFE is the IPF's flagship programme, underpinning the BFC's intent for industrial-scale change for the UK fashion industry. The CFE project is being delivered in three phases:

10 PRIORITY ACTION AREAS FOR REALISING THE TARGET STATE



Figure 1: CFE Phase 1 - 10 Action Areas & 3 Target Outcomes for a future circular fashion ecosystem in the UK Source: Institute of Positive Fashion CFE Phase 1 Report, 2021, Link



- > **PHASE 1:** A Blueprint for the Future
- Completed September 2021
- > PHASE 2: Developing the Roadmap for Change
- Commenced 2022
- **> PHASE 3:** Implementation of the Target State - Expected 2023 onwards

This report is based on the outcome of surveys shared with nine different stakeholder categories across the supply chain. The ambition is to identify the advances and challenges in reaching a Circular Fashion Ecosystem. The 10 Action Areas (Figure 1) and 30 Recommendations (Figure 2) to reach a CFE were used to design the research questions to these stakeholders.

STAKEHOLDER ACTIONS & CONNECTIONS



Lead stakeholder: Stakeholders identified as most suited to lead on implementing the recommendation.

Enabling stakeholder: Stakeholders that are needed as collaborators to make the recommended initiative a reality and a success.

Figure 2: Stakeholder Actions and Connections Source: Institute of Positive Fashion CFE Phase 1 Report, 2021

RECOMMENDATIONS

Mainstreaming circular design Matching designs and reprocessing Designing for reprocessing Adopting digital prototyping Developing a digital tracking system Digitising garments Supporting manufacturing in the UK Manufacturing and distributing clothes on demand Utilising supply chain textile waste materials Educating for circularity Changing perceptions of recycled content Shifting consumer practices Formalising skills Expanding brand repair and care services Expanding rental and subscription Expanding product take-back and service provision Boosting recommerce Developing systems for optimised recirculation Standardising local authority collection systems Investing in advanced sorting Investing in upskilling for sortation and recycling Financing emerging technologies Scaling recycling Introducing an EPR scheme Developing feedstock and label standards Modelling economic and material flows Modelling industry and innovation hubs Mainstreaming metrics for societal prosperity Directing investment towards circular performance Providing grants and incubation

An interactive version of this diagram can be found here

Across the recommendations, there will be a need for one or more convening actors who can bring the relevant stakeholders together and ensure alignment against a common goal.



Priority action areas: The action area the recommendation is designed to contribute to the most.

Synergy action area: Additional action areas that the recommendation contributes to.

> 2.2 WHY UNDERSTANDING THE BARRIERS TO CIRCULARITY IS NEEDED

Fashion is a complex industry with supply chains that span across the globe, creating many challenges and issues relating to overproduction, under-utilised resources and inequalities. The UK Government is recognising these issues and aims to move from linear systems to those that are more circular. In June 2022, the Prime Minister announced plans for funding from the Department for Business, Energy and Industrial Strategy (BEIS) to accelerate a 10-year Fashion Industry Sustainable Change Programme.¹ The programme aims to invest in skills, innovation clusters and regional regeneration to support the move from linear to more circular systems. This move is in alignment with the Government's 2020 Environment Bill, which outlines a new direction for resource and waste management to keep resources in use for longer and to ensure maximum value is extracted from materials.²

As a convenor of industry and government, the BFC understands the need to facilitate crossstakeholder action to deliver a circular fashion ecosystem for the UK. To begin the transition from a vision to reality, an understanding of the barriers to circularity is required, in order to execute a clear path.

Industry challenges:

> There remains widespread adoption of the 'fast fashion' business model - which is based on overproduction and overconsumption. This is exacerbated by inefficiencies between supply and demand - creating an unprecedented level of textile waste and 'deadstock,' which requires disposal without ever being used. Opaque supply chains only add to the lack of visibility, traceability and data including on workers' conditions.³ > Industry is facing challenges around scalable solutions to fit all sized businesses. In particular, there is a lack of investment and funding to accelerate innovation to market level. For example, a lack of investment in alternative materials to accelerate solutions beyond SME level, to be adoptable at a larger industry scale. > Overall, greater empowerment and information is required throughout the industry, including clarity on how circularity has a major role to play to address climate change.⁴

Market Challenges:

> Pressure to maintain linear economic growth negates the opportunity to explore more alternative circular business models to address resource depletion to be part of net zero targets.

> Modern manufacturing practices with global supply chains and low labour costs have made reuse, repair and recycling more expensive than purchasing new. In order to move to new models, a clear plan on green jobs driven by the circular economy is required. There is a lack of preparation to upskill and retrain the workforce of the future.⁵

The post-use ecosystem, particularly recycling and reprocessing for remanufacture, is a grey area, meaning that industry is uncertain of how to commit to circularity.⁶ Inaccuracies on clothing labels and confusion over terminology only exacerbates this issue for both citizens and businesses.



Vivienne Westwood

> 2.3 STAKEHOLDER SUPPORT



THE ROLE OF THE BRITISH FASHION COUNCIL'S INSTITUTE OF POSITIVE FASHION

The BFC has a critical role in accelerating a transition to a circular fashion economy in the UK and advancing climate-related innovation. Acting as the main convenor across actors in the ecosystem, the BFC is already working closely with industry and government, and are in a unique position to bring together wider stakeholders who comprise this landscape in the UK and beyond.

Circularity has a key role to play in addressing the challenges of climate change, resource depletion and the societal inequality. The BFC is actively integrating a social lens into the traditional circular economy discussion through key CFE Phase 2 Projects, starting with City-Level Circular Fashion Ecosystems. Applying the Doughnut Economics model² at city level through the circular thinking approach of CFE framework enables the IPF to consider ecological ceilings and social foundations, through local action to influence global systems. The Circular Fashion Ecosystem report was a fantastic and timely piece of work. Just what was needed to bring clarity to this complex system and enable action.

DR KATE GOLDSWORTHY

Professor of Circular Design and Innovation, University of the Arts London

This programme is so important in nudging the fashion sector deeper into the circular economy. We can imagine that more and more recommerce services will accompany the sales of fashion items in future.

DAX LOVEGROVE

Global Sustainability Director, Jimmy Choo and Versace. IPF Steering Committee

The Circular Fashion Ecosystem report has given us a clear roadmap to define our own route. By laying out priority topics, we can select those most relevant to our business, and the ones we can influence the most.

GRAEME RAEBURN

Lead Designer, Albion

The CFE Blueprint for the Future Report enables us to realise the role of the circular economy in creating a thriving and sustainable future for fashion that benefits people and the planet.

HATTY COOPER

Director of Government and Institutions, Circle Economy

The CFE Phase 1 research mapped the ecosystem in an industry led approach that was a real first for the sector. This has proven incredibly useful to bring others into the journey towards circularity, including government who have valued the industry-led view.

ADAM MANSELL

Chief Executive Officer, UK Fashion & Textile Association

The Circular Fashion Ecosystem report is brilliant, and it helped us understand the market and its opportunities in a much deeper way.

TANYA MULESA

Co-Founder, CICON

It is through cross-collaborative actions such as those that have been identified through this latest work that we can deliver a viable circular textiles economy.

ALAN WHEELER

Chief Executive Officer, Textile Recycling Association

The Circular Fashion Ecosystem is a hugely influential project that is helping to accelerate a regional circular textiles system here in the UK.

CYNDI RHOADES,

Founder, Worn Again Technologies

3. THE SURVEY > 3.1 PURPOSE & APPROACH

THIS REPORT AIMS TO:

Identify the level of stakeholder engagement with the CFE Phase 1 framework of 10 Action Areas and 30 Recommendations

> Highlight stakeholder advances and challenges in adopting the 10 Action Areas and 30 Recommendations

Understand the complexity, ease of execution, potential for collaboration and opportunity to leverage existing initiatives, to begin the transition to a Circular Fashion Ecosystem

The proposed recommendations in our 'Stakeholder Actions and Connections' Diagram (Figure 2) highlights that action is required from multiple stakeholders across the ecosystem. As shown in the diagram each recommendation has identified 'lead' and 'enabling' stakeholders and a main priority action area under which it sits. The stakeholder diagram is dynamic each set of Recommendations and associated Action Area is visible when one clicks on a selected Stakeholder, per Figure 4. Surveys were conducted online by the IPF team and sent to key representatives of the UK's fashion ecosystem. As exploratory research, the insights are reflective of a sample size of over 100 stakeholders who responded between February -April 2022. Gaining both qualitative and quantitative insights, the survey responses are anonymised throughout this report, for the benefit of increased disclosure and engagement.

The respondent stakeholders represent both UK-based organisations and those who operate largely in, or have a high impact on, the UK market as part of a larger global network.

Responses from Digital Innovators and Reprocessors have been summarised, due to the smaller sample size compared to other stakeholder categories surveyed.

Stakeholder surveys were not sent to four stakeholder groups for the following reasons:

> Consumers - The CFE Phase 1 Report is industry and government-facing, therefore engagement will require a different approach to aid an understanding of how to bring these stakeholders on the journey to circularity. > Logistics Providers - Are considered enablers throughout the circular fashion ecosystem. Engagement is currently being progressed through a separate Phase 2 project (please see Page 47).

> Investors and Government - The findings of this report will be developed for these stakeholders, for purposes of investment flow and policy integration.



Figure 3: CFE Stakeholders for the Phase 2 Survey

The surveys adopted both open and closed guestions that provided a number of answers from which the respondents could choose, for the benefit of providing both qualitative and quantitative insights.⁸

Each survey question revolved around asking the recipient if they were currently leading or enabling their recommendations. For example, 'Are you integrating circular design in your product lines?' Responses were synthesised and analysed in the following way in order to provide indicative data sets:

> Quantitative responses that were more than 70% yes/I am already doing this, were categorised as major advances.

> Quantitative responses that were less than 35% yes/I am already doing this, were categorised as major challenges.



Figure 4: CFE Stakeholder Actions & Connections diagram - Recommendations & CFE Action Areas for stakeholder group "Brands" Source: Institute of Positive Fashion CFE Phase 1 Report, 2021 Link

Respondents were further asked to provide details of their activities and the reasons for providing their responses. These responses were analysed thematically.

Where recommendations were the same between stakeholders, for example 'Educating for Circularity', which is a recommendation for four of the stakeholder groups engaged with, responses could be assessed broadly across the ecosystem to identify stakeholders who were particularly advanced or challenged in certain areas.

The following pages provide an overview of the major insights from the surveys. Section 2 of this report investigates the responses of each individual stakeholder group in depth, identifying which recommendations were being advanced and which were challenging.

> 3.2 SUMMARY INSIGHTS



This section provides an overview of the main findings across stakeholders. Stakeholder groups have been mapped to the CFE Recommendations they are advancing or finding challenging, and the corresponding priority CFE Action Area, as shown by the example in Figure 4. Leading and enabling stakeholders to realise each recommendation has been listed, with those advancing or challenged highlighted over this page and the next.

The CFE Recommendations & Action Areas being MOST ADVANCED across all stakeholders

4 stakeholder groups are advancing MAINSTREAMING CIRCULAR DESIGN



MAINSTREAMING **CIRCULAR DESIGN**

(DESCRIPTION FROM CFE PHASE 1 REPORT)

Brands to integrate circular

design into core business strategy (including across all product lines) and work with other academics, or other specialists, to deliver ongoing training on its principles to designers and key business functions, in line with the development of new technologies and end markets. This is in addition to continuing education and training on circular design for fashion students and independent designers.

ACTION AREAS

CIRCULAR DESIGN ENHANCED IDENTIFICATION AND TRACKING

Figure 5: Advanced CFE Recommendation: Mainstreaming Circular Design

STAKEHOLDERS 0 BRANDS 2 COLLECTORS DESIGNERS 6 REPROCESSORS

MATCHING DESIGNS AND REPROCESSING

(DESCRIPTION FROM CFE PHASE 1 REPORT)

Brands to lead a multistakeholder initiative to map out the improvements needed to a) ensure that clothing designs are suitable for reprocessing; b) ensure that recycled inputs meet the needs of design and creation, e.g. on choice, speed and price; and c) help companies identify, capture and resell excess materials and products.

3 stakeholder groups are advancing SHIFTING CONSUMER PRACTICES



SHIFTING CONSUMER PRACTICES

(DESCRIPTION FROM CFE PHASE 1 REPORT) Brands to lead a multi-stakeholder initiative on how brands, retailers and logistics providers can encourage consumer practices that maximise the use and enjoyment of clothes. The initiative should include a) discussions on extending consumer use of clothing; b) encouraging consumers to see clothes as an investment; c) helping consumers to use a larger proportion of the existing items in their wardrobes; d) helping consumers to pass on their clothes through reuse and recycling channels; and e) working with logistics providers to improve the convenience of reverse logistics for consumers.

4 stakeholder groups are advancing MATCHING DESIGNS & REPROCESSING recommendation

ACTION AREAS

CIRCULAR DESIGN	
CONSUMER EMPOWERMENT	
CIRCULAR AND SHARING BUSINESS MODELS	
DEMAND FOR RECYCLED AND RENEWABLE FIBRES	4
ENHANCED IDENTIFICATION AND TRACKING	5
POST-USE ECOSYSTEM	6
SORTATION AND RECYCLING	
ECOSYSTEM MODELLING	8
POLICY AND REGULATION	9
INNOVATION INVESTMENT	10

Figure 6: Advanced CFE Recommendation: Matching Designs and Reprocessing

ACTION AREAS

CONSUMER EMPOWERMENT

DEMAND FOR RECYCLED AND RENEWABLE FIBRES ENHANCED IDENTIFICATION AND TRACKING

Figure 7: Advanced CFE Recommendation: Shifting **Consumer Practices**

(2



The CFE Recommendations & Action Areas which are **MOST CHALLENGING across all stakeholders**

4 stakeholder groups are finding MODELLING INDUSTRY AND INNOVATION HUBS challenging



MODELLING INDUSTRY AND INNOVATION HUBS

(DESCRIPTION FROM CFE PHASE 1 REPORT)

Government to undertake a feasibility study, including economic and material flows modelling, for the development of centralised textiles circularity hubs that involve: a) co-location of R&D facilities; b) advanced and large-scale sorting facilities; c) warehouses and outlets for re-commerce and licenced upcycling; d) plants for reprocessing; and e) channels for the raw materials to feed into end markets, including UK textiles and garment manufacturing.

ACTION AREAS

(7 SORTATION AND RECYCLING

Figure 8: Challenging CFE Recommendation: Modelling Industry and Innovation Hubs

3 stakeholder groups are finding **DIGITISING GARMENTS** challenging



DIGITISING GARMENTS

(DESCRIPTION FROM CFE PHASE 1 REPORT)

Digital innovators to work with brands, retailers, and academia to continue researching and implementing technologies such as augmented reality (AR) and virtual reality (VR) to expand their use within the industry. These technologies allow consumers to 'wear' or try out products virtually through innovations such as biometrically-specific avatars and 'digital skins'. This research should also include the ethical/privacy implications of such technologies and their role in the reselling of products.

3 stakeholder groups are finding MODELLING ECONOMIC AND MATERIALS FLOWS challenging



MODELLING ECONOMIC AND MATERIAL FLOWS

(DESCRIPTION FROM CFE PHASE 1 REPORT) Institutions, Industry and 3rd Sector to lead a governmentcommissioned project dedicated to modelling the detailed economic and material flows of a future circular ecosystem for UK fashion. This would entail robust quantification of material flows, for instance through Material Flows Analysis (MFA). The modelling should also assess the subsequent economic implications of these flows, including economic impacts on businesses in the post-use ecosystem.

ACTION AREAS

2

CONSUMER EMPOWERMENT
CIRCULAR AND SHARING BUSINESS MODELS
DEMAND FOR RECYCLED AND RENEWABLE FIBRES
ENHANCED IDENTIFICATION AND TRACKING
POST-USE ECOSYSTEM
SORTATION AND RECYCLING

Figure 9: Challenging CFE Recommendation: Digitising Garments

ACTION AREAS

ECOSYSTEM MODELLING

8

When asked directly which CFE Action Areas stakeholders felt were most challenging, Policy & Regulation (CFE Action Area 9), Circular Design (CFE Action Area 1) and The Post-use Ecosystem (CFE Action Area 6) was cited.

'WHAT DO YOU FEEL ARE THE **THREE MAIN INDUSTRY CHALLENGES?**', % OF RESPONDENTS



Figure 11 - Respondents selected the top three main industry challenges from the 10 CFE Action Areas.

The summary insights indicate that brands, designers and retailers are especially active in the ecosystem.

However, the insights must consider that four stakeholder groups were not engaged with at this stage. In particular, government, who are set to lead 'Modelling Industry and Innovation Hubs,' has been cited as the most challenging Recommendation (P.17). The following Section presents the insights from each specific stakeholder group in greater depth, in order to understand how and why certain recommendations are being advanced or challenged.





4. INSIGHTS PER STAKEHOLDER GROUP > 4.1 ACADEMIA

SUMMARY TAKEAWAYS:

> 79% of respondents are advancing CFE Recommendation 'Mainstreaming Circular Design'.

Training in circular design in universities is focused on 'design to minimise waste' and 'design for longevity of use'.

Less than 8% of respondents are interested in CFE Recommendation 'Formalising Skills'. "Our final year students often experiment with creating their own materials, so we have had students designing entire collections out of bioplastics, waste materials or 3D printing using corn starch. We also have quite a few students who create some or all of their looks in 3D digital technology".

College of Art & Design, London.

CFE PHASE 1 RECOMMENDATIONS FOR ACADEMIA



Figure 12 - CFE Phase 1 Recommendations for Academia

MAJOR ADVANCES

Mainstreaming Circular Design:

> 79% are already providing training in circular design to their students.

The majority of respondents recognised that circular design is a vital part of fashion and textiles development at undergraduate and postgraduate level. Examples of new approaches to design were SMART on-demand manufacturing, data-driven design based on AI/ machine learning, digital track and trace systems for transparent supply chains, and immersive simulation and communication tools for fabric and garment aesthetics. Research and development hubs cited successful collaborations with industry, citizens and 3rd sector in running pilot projects in circular design. track and trace systems for transparent supply chains, and immersive simulation and communication tools for fabric and garment aesthetics. Research and development hubs cited successful collaborations with industry, citizens and 3rd sector in running pilot projects in circular design.

MAJOR CHALLENGES

Formalising Skills:

> Less than 8% would be interested in supporting the skills of high street seamstresses, dry cleaners, and repairers, among others through the creation of additional vocational courses.

The demands of undergraduate and postgraduate teaching was quoted as the main reason for not creating additional vocational courses. Respondents who showed an interest said it could align with current public-facing workshops on mending and refurbishment that they are hosting. However, it was clear that additional funding was necessary, and that formalising skills could come under the remit of circular cities development.

Modelling Industry and Innovation Hubs:

> Less than 30% felt it was important to develop centralised textiles circularity hubs that involve R&D facilities, sorting, warehousing, and outlets for re-commerce, upcycling, and re-processing.

Modelling industry and innovation hubs was not within the current focus area for most academics. Those who recognised the potential, felt that textile circularity hubs could align with current research on clothing longevity, and that there were existing reprocessing start-ups in the UK who could help realise the vision.



MAINSTREAMING CIRCULAR DESIGN

Training in circular design includes:



Figure 13 - Training in circular design by Academia

> 4.2 BRANDS

SUMMARY TAKEAWAYS:

> 100% of respondents are advancing CFE Recommendation 'Shifting Consumer Practices'.

 > 89% of respondents are advancing CFE Recommendation 'Mainstreaming Circular Design.' Training in circular design is focused on 'design for longevity of use'.
 > Digitisation is an overall challenge - CFE Recommendations 'Digitising Garments' and 'Developing a Digital Tracking System' is not being considered by the majority of respondents. "The styles in our collection have been created with circularity in mind. We've maximised the use of easily recycled and renewable materials such as recycled cotton, and removed unnecessary materials, like metal rivets, that hamper the recycling process so when you recycle your jeans through our in-store shopping service - more of the fabric can be recycled successfully."

Multinational British Retailer

CFE PHASE 1 RECOMMENDATIONS FOR BRANDS



Figure 14 - CFE Phase 1 Recommendations for Brands

MAJOR ADVANCES

Shifting Consumer Practices:

> 100% felt it was the responsibility of brands to support their customers to make considered purchases and tosupport consumers to maximise the use of their existing clothes.

Brands are using their websites, packaging and in-store decor to engage customers in making considered purchases. In addition, they are training their in-store staff through 'knowledge to share' programmes to answer customer questions about product sustainability.

Mainstreaming Circular Design:

> 89% are already providing training in circular design to their design teams and integrating elements of circular design in their product lines.

Designing for longevity, including offering repair and redesign services to extend product life was a priority for most respondents. The provision of in-house training in sustainability and circularity to all departments, not only design, was also popular and something that many brands wanted to increase.

Matching Designs and Reprocessing:

> 78% are already, or working to ensure, that designs are suitable for sortation or recycling.

To ensure designs are suitable for sortation or recycling, respondents are developing design approaches such as the use of mono-materials, and working with charities to ensure recyclable used clothing is collected. Many were also interested in learning how to use more recycled inputs from textile waste streams in the UK. However, overall, the approach of circular and sharing business models was preferred over recycling. Matching Designs and Reprocessing was seen as important, but many experienced technical challenges to embed this at scale.

MAINSTREAMING CIRCULAR DESIGN

Training in Circular Design Includes:

- Design to minimise waste low-waste pattern cutting, up-cycling or reconstructing existing material resources
- Design for low-impact materials and processes including energy, water use and chemical impacts
- Design for longevity of use including design that allows for repair, refurbishment, or adaptability of use (for example adjustable designs that fit different body shapes or can be used in multiple ways)
- Design for recyclability at end of life
- Other

Figure 15 - Training in circular design by Brands

MAJOR CHALLENGES

Manufacturing and Distributing Clothing on Demand:

> Less than 25% are providing on-demand manufacturing for their business (where products are only manufactured when needed and in quantities required), or trialing inventory models that enable the shipping of small batches of new products and designs before quickly ramping up production if they prove popular.

Most respondents felt that manufacturing and distributing on-demand did not fit with their business model, and over a third stated they are not considering it at all.

Developing a Digital Tracking System:

> Less than 25% would be interested in integrating digital tracking - such as RFID or QR tags - into their designs to help other stakeholders access item-specific information.

Digital tracking was not seen as an immediate priority, however, a small amount of respondents were interested in considering integrating RFID or QR tags into clothing if it could help increase product transparency.

Digiting Garments:

> Less than 25% would like to implement augmented reality (AR), virtual reality (VR) or other technologies so consumers can try products virtually or are creating digital products that consumers can purchase and wear in the metaverse.

Expanding Rental and Subscription:

> Less than 25% feel it is important for their consumers to receive more choices for rental and subscription packages, as an alternative to buying new.



> 4.3 COLLECTORS

SUMMARY TAKEAWAYS:

100% of respondents felt that CFE Recommendation 'Matching Designs and Reprocessing' was important, and some were working with brands to achieve this.
Designs that can be easily disassembled into parts for refurbishment or recycling was most helpful as part of the CFE Recommendation 'Matching Designs and Reprocessing'
The CFE Recommendation 'Expanding Product Take-Back and Service Provision' was divided; seen as both an advance and a challenge

"We are able to support retailers and brands with their take-back schemes because all donations received end up in our warehouse to be sorted and distributed among our charity shops, helping raise income to fund our International Development projects".

Textile Recycling and Aid Charity

CFE PHASE 1 RECOMMENDATIONS FOR COLLECTORS*



Providing Grants and Incubation:

*The following recommendations, not originally assigned in CFE Phase 1, were also posed to Collectors, since they could enable their advancement: Figure 16 - CFE Phase 1 Recommendations for Collectors Developing Systems for Optimised Recirculation
 Matching Designs and Reprocessing

MAJOR ADVANCES

Matching Designs and Reprocessing:

> 100% felt it was the responsibility of brands to ensure designs are suitable for sortation or recycling or are working with brands to achieve this.

Respondents felt it was important to educate designers to reuse existing resources, as part of the development of new collections, and some were working to provide them these resources. In addition, there was interest to provide manufacturers with post-consumer fibres to apply in the creation of textile goods.

MAJOR CHALLENGES

Developing Systems for Optimised Recirculation:

> Less than 20% are considering working with technological systems that ensure used clothes are sorted and rerouted to re-commerce platforms.

Respondents felt that there were too many variables to use technological systems, with almost a fifth not considering it or finding it important.

Modelling Industry and Innovation Hubs:

> Less than 20% would participate in a system that models the detailed economic and material flows of a future circular ecosystem for UK fashion.

Standardising Local Authority Collection Systems:

> Less than 30% would like to help improve kerbside textiles collection, sorting and recycling, to achieve a reliable and standardised system across regions.

Introducing an EPR Scheme:

> Less than 30% felt it is important to implement an industry-led approach to EPR legislation.

ADVANCES & CHALLENGES

Expanding Product Take-Back and Service Provision:

> Over 80% felt that they are able to or are already supporting retailers and brands with their take-back schemes and circular product services.

Of those already providing take-back schemes, this was predominantly in their own stores or charity shops.

> However, less than 20% found that there was demand in the UK for brands and retailers to receive sorted used clothing.

Several respondents claimed that brands are not interested in receiving back their used items but encourage customers to access a 3rd party re-commerce service. One leading collector stated that brands and retailers want to be more sustainable, in the way they produce, reuse and recycle clothing but are reluctant to use sorted clothing on a big scale.

MATCHING DESIGNS AND REPROCESSING

These design approaches would be helpful to them:



Figure 17 - Helpful design approaches for Collectors

> 4.4 DESIGNERS

SUMMARY TAKEAWAYS:

> 82% of respondents are advancing CFE Recommendation 'Shifting **Consumer Practices'**

> 82% of respondents are advancing CFE Recommendation 'Supporting Manufacturing in the UK'

> Overall, designers do not feel challenged by a specific CFE Recommendation

"We make everything in the UK from field to fibre. We believe supporting and investing in your local community, environment and country connects us as humans to tangible benefits from understanding where things come from and appreciating those who make them to being part of a resilient economy and experiencing better positive outcomes in those around us."

Sustainable Fashion Entrepreneur

CFE PHASE 1 RECOMMENDATIONS FOR DESIGNERS*



*The following recommendations, not originally assigned in CEE Phase 1, were also posed to Designers, since they could enable their advancement

- > Shifting Consumer Practices Supporting Manufacturing in the UK
- > Manufacturing and Distributing Clothing on Demand
- > Expanding brand care and repair services
- > Expanding Rental and Subscription
- > Expanding Product Take-Back and Service Provision

Figure 18 - CFE Phase 1 Recommendations for Designers

Shifting Consumer Practices:

> 82% are working for a brand that is already supporting their customers to make considered purchases and felt it was their responsibility to do this.

Designers agreed that longevity and thoughtfully designed clothing encouraged longer wear. Some promoted a buyto-share philosophy - encouraging customers to share their purchases with a rental company. Others encouraged clients to think about their purchase, how often they would wear it and consider each piece as a forever piece in their wardrobe.

Supporting Manufacturing in the UK:

> 82% are already supporting garment manufacturing in the UK, and manufacturing locally as part of their business model.

Supporting garment manufacturing in the UK and manufacturing locally were seen as a more convenient way to work. Designers saw value in being able to visit manufacturers and to solve problems, with shorter leadtimes, and better connection with product and processes.

Mainstreaming Circular Design:

> 80% are integrating circular design in their product lines and offering training in circular design.

The majority of respondents were integrating circular design approaches that included re-working past seasons garments into new items and using surplus fabrics, deadstock and pre-owned and vintage textiles, as part of an overall aim towards creating zero waste. In combination with this, many stated that they were integrating newly sourced organic plant-based textiles as they were seen as more environmentally friendly. Training was being adopted where possible, much of which focused on seeking online resources, especially for smaller designer businesses.

"We make everything in the UK from field to fibre. We believe supporting and investing in your local community, environment and country connects us as humans to tangible benefits from understanding where things come from and appreciating those who make them to being part of a resilient economy and experiencing better positive outcomes in those around us."

Sustainable Fashion Entrepreneur.

Matching Designs and Reprocessing:

> 75% are already, or working to create, designs that are suitable for sortation or recycling.

Although a major advance, many designers didn't envision their clothes being recycled or disposed of, as they are focusing on longevity and increased use through circular and sharing business models. Other designers were focused on biodegradability rather than recyclability. Those focusing on reprocessing were using mono-materials as an approach to aiding recyclability.

MAINSTREAMING **CIRCULAR DESIGN**

Circular design approaches include:



Figure 19 - Circular design approaches by Designers

DESIGNERS - DEEPER DIVE

Due to the high level of response from the Designer stakeholder group, respondents were grouped into high-end and mid-market categories in order to gain further insights.



HIGH - END

MAJOR ADVANCES

Manufacturing and Distributing Clothing on Demand:

> 77% are already providing on-demand manufacturing (where products are only manufactured when needed and in quantities required).

Many respondents were producing on-demand, by way of creating small batches or bespoke creations, since their business model is not mass-production.

Comparatively, mid-market designers that do not have a bespoke or batch-based business model are finding this challenging due to the high cost for small runs with external manufacturers.

Expanding Brand Repair and Care Services:

> 77% are already offering extended services to customers beyond point of sale, to include care/repair services.

Respondents are running workshops with free repairs on any branded products, including competitor products, as a provocation to the industry. Some others are providing QR codes which can be scanned to tell the wearer where to send items at end of use.

MAJOR CHALLENGES

Developing a Digital Tracking System:

> Less than 10% are considering integrating digital tracking - such as RFID or QR tags - into designs to help other stakeholders access item-specific information.

This is due to the uncertainty of how digital tracking can be integrated. There was interest if it can aid transparency for those along the supply chain, but concerns over data harvesting were expressed.

MID - MARKET

MAJOR CHALLENGES

Expanding Rental and Subscription:

> Less than 10% feel it is important for customers to receive more choices for rental and subscription packages, as an alternative to buying new.

Rental and subscription is not seen as a priority or relevant to mid-market businesses. However, those that expressed some interest felt that this would require collaboration with a 3rd party rental platform.

Expanding Product Take-Back and Service Provision:

> Less than 20% are offering re-commerce, repair, or redesign options as part of their business.

Respondents felt that they either do not have the resources to provide re-commerce, repair or redesign or there is not the demand from customers.

Digitising Garments:

> Less than 20% are implementing augmented reality (AR), virtual reality (VR) or other technologies so customers can try products virtually or are creating digital products that customers can purchase and wear in the metaverse.

Digitising garments was not seen as costeffective by respondents. However, some designers saw its potential in e-commerce, where giving customers a sense of the feel, texture or weight of fabric, as well as more fundamental issues around fit and final 'look' might enhance sales and reduce returns.

Adopting Digital Prototyping:

> Less than 30% are using digital prototyping to enable the visualisation of a complete product before it is physically built.

Respondents are not currently using digital prototyping due to lack of resources, or because it is not being relevant to their business as they prefer working with physical samples.

> 4.5 DIGITAL INNOVATORS

Responses from Digital Innovators have been summarised due to there being limited companies engaged in these activities compared to other stakeholder categories. This resulted in a comparatively smaller sample size.

SUMMARY TAKEAWAYS:

> 88% of respondents are advancing CFE
 Recommendation 'Developing a Digital Tracking System'
 > Less than 25% of respondents are advancing CFE
 Recommendations 'Manufacturing and Distributing
 Clothing on Demand' and 'Digitising Garments'



Figure 20 - CFE Phase 1 Recommendations for Digital Innovators

MAJOR ADVANCES

Developing a Digital Tracking System:

> 88% are creating digital tracking - such as RFID or QR tags - into designs to help stakeholders access itemspecific information.

Respondents described connecting the digital ID to an on-product digital label (such as a QR Code, RFID, NFC or digital fingerprint), so customers and stakeholders can scan and access information about the product, drive cross-selling, share styling advice, care instructions, sustainability information or offer new services like resale.

With digital ID, we are redefining how shoppers buy, sell, own and connect with products beyond the point of sale. This opens up a new digital channel to connect with consumers for extended services. By scanning interactive labels that are embedded in physical products, consumers can access content, with information that includes care or repair instructions, to help extend the life of their product.

Connected Products Innovator



APUJAN2022

MAJOR CHALLENGES

Manufacturing and Distributing Clothing on Demand:

> Less than 25% are developing or otherwise supporting on- demand manufacturing as part of their strategy.

Many of the digital innovators felt that their product was not able to support on-demand manufacturing. One respondent however discussed the value of a blockchainenabled Global Marketplace to quicky and easily buy fabrics online. Their digital catalogue of readily available and locally sourced, rescued materials integrates into ondemand manufacturing via an API. Buyers find the fabric they are looking for and purchase it with the click of a button.

Digitising Garments:

Less than 25% are creating augmented reality (AR), virtual reality (VR) or other technologies so consumers can try products virtually.

Respondents were more focussed on developing the digital infrastructure for supply chain tracking and traceability than for consumers trying on products virtually.

> 4.6 INSTITUTIONS, **INDUSTRY BODIES, 3RD SECTOR**

SUMMARY TAKEAWAYS:

> 93% of respondents are advancing CFE Recommendation 'Educating for Circularity' > Designers and brands are the start-ups and innovators receiving the most support through grants and incubation, followed by reprocessors and manufacturers > The CFE Recommendation 'Developing Feedstock and Label Standards' was divided: seen as both an advance and a challenge

"We have offered grants to circular designers, facilitated incubators, and hope to train and provide workforce development in our upcoming institute. As we are a nonprofit, the amount and longevity of support is limited but we always spotlight and platform these businesses and innovators who align with our values."

Educational Knowledge Partner & Climate Innovation Hub.

CFE PHASE 1 RECOMMENDATIONS FOR INSTITUTIONS, INDUSTRY BODIES, 3RD SECTOR:



Figure 21 - CFE Phase 1 Recommendations for Institutions, Industry Bodies / 3rd Sector

MAJOR ADVANCES

Educating for Circularity:

> 93% are developing resources and workshops to educate citizens on sustainability, regeneration, and circular economy principles to empower people to make informed choices.

Examples of resources and workshops include open education classes, webinars, podcasts and reports on topics including (but not limited to) regenerative solutions, climate justice, human rights, circular economies, sustainability, and degrowth strategies.

Mainstreaming Metrics for Societal Prosperity:

> 86% are exploring alternative metrics for measuring business success and societal prosperity.

Many respondents stated that they were shifting away from traditional metrics and developing systems of value that prioritised society and the environment, resulting in slower economic growth.

Providing Grants and Incubation:

> 79% are supporting start-ups and innovators who adopt circular business models.

Most start-ups and innovators receiving support were apparel brands who are adopting circular and sharing business models. Support included providing online and physical platforms, such as exhibitions and catwalk shows, as well as pitching opportunities. Some respondents were also facilitating match-making services between investors and start-ups.

PROVIDING GRANTS AND INCUBATION

Types of start-ups and innovators they have supported:



Figure 22 - Types of start-ups and innovators Institutions, Industry Bodies / 3rd Sector have supported

MAJOR CHALLENGES

Modelling Economic and Material Flows:

> Less than 30% would be interested in developing a system that models the detailed economic and material flows of a circular fashion ecosystem for the UK.

Reasons for the lack of interest in modelling economic and material flows were attributed to lack of resources or relevance to the individual respondent. However, a minority of respondents expressed interest in collaborating with any relevant initiatives.

ADVANCES AND CHALLENGES

Developing Feedstock and Label Standards:

> Over 70% are interested in developing label standards for ensuring accurate and standardised information for textile reprocessors, manufacturers and consumers as part of an Extended Producer Responsibility (EPR) scheme.

Some of the respondents were looking at supporting measures to drive change in product design and material usage, with a focus on improving durability, recyclability, and increased use of sustainable and recycled materials. Alongside this they were seeking better information on the resource efficiency of products to enable informed consumer choice. Transparency of product information through label standards, was seen as critical in sorting and recycling of textiles.

> However, less than 30% would like to develop feedstock standards for the textiles recycling industry as part of the EPR scheme.

For several respondents, developing feedstock standards was beyond their scope of work. Others mentioned ongoing work mapping textile waste streams, which could be relevant for future projects in this area.



> 4.7 MANUFACTURERS

SUMMARY TAKEAWAYS:

 70% of respondents are advancing CFE Recommendation 'Manufacturing and Distributing Clothing on Demand'
 Less than 20% of respondents are integrating CFE Recommendation 'Developing a Digital Tracking System'

Digitisation is an overall challenge - CFE Recommendations 'Developing a Digital Tracking System' and 'Adopting Digital Prototyping' is not being considered by the majority of participants "We have worked on a few upcycling projects with clients and there is a demand for it, as consumers are increasingly aware of how much non-biodegradable clothing waste is polluting our planet."

Product Design & Development Studio.

CFE PHASE 1 RECOMMENDATIONS FOR MANUFACTURERS



Figure 23 - CFE Phase 1 Recommendations for Manufacturers

MAJOR ADVANCES

Manufacturing and Distributing Clothing on Demand:

> 70% are already providing on-demand manufacturing (where products are only manufactured when needed and in quantities required).

The manufacturers who are already providing on-demand are producing small made to order or pre-ordered batches. The ease of using textile inputs that are sourced within the UK sped up production and kept their carbon footprint to a minimum.

MAJOR CHALLENGES

Developing a Digital Tracking System:

> Less than 20% are integrating digital tracking such as RFID or QR tags to help other stakeholders access itemspecific information.

Respondents cited cost as a barrier to integrating digital tracking, especially for small businesses. A minority were willing to adopt digital tracking but would require the help of a specialist technology developer for integration.

Developing Feedstock and Label Standards:

> Less than 25% were interested in collaborating with raw materials suppliers, brands, and retailers to develop post-consumer (textile and non-textile) feedstock and label standards.

Most manufacturers were not exploring the development of feedstock and label standards. Some were open to adopting standards and acknowledged it was badly needed, especially for raw material manufacture. They were keen to understand whether labels had to be sewn into the garment or if the QR code needed to relate to the process of a specific product type.

Utilising Supply Chain Textile Waste Materials:

> Less than 30% were collecting and reusing textile waste from the supply chain.

Respondents cited the lack of quality or consistency as the main reason for not being able to utilise textile waste from the supply chain. Other manufacturers have tried using bobbin waste from yarn spinners in the UK who process wool and cashmere fibres. These manufacturers are exploring post-consumer fibres to produce a circular textile from old clothes.

> Less than 30% feel it is important to be familiar with digital prototyping as part of their manufacturing process.

Digital prototyping was not a priority due to issues with accuracy and fit when translated into physical garments. Examples included fabric that did not digitally translate, requiring additional work to sample and amend patterns accordingly.

Modelling Industry and Innovation Hubs:

> Less than 30% were interested in developing centralised textiles circularity hubs that involve R&D facilities, sorting, warehousing, and outlets for recommerce, upcycling, and reprocessing.

Funding was cited as the main barrier to developing centralised textiles circularity hubs. Some manufacturers were aware of the growing demand for circularity amongst their clients. Others expressed a need to facilitate more knowledge exchange and a place to swap waste materials and support the re-value-add for upcycled materials and R&D.



> 4.8 REPROCESSORS

Responses from Reprocessors have been summarised due to there being limited companies engaged in these activities compared to other stakeholder categories. This resulted in a comparatively smaller sample size.

SUMMARY TAKEAWAYS:

 100% of respondents felt that CFE Recommendation 'Matching Designs and Reprocessing' was important
 Designs with QR or RFID tags that hold product information was most helpful as part of the CFE Recommendation 'Matching Designs and Reprocessing' "Existing clothing is already suitable for recycling but could be optimised better to increase output yields through better design. Brand engagement on this is essential as part of the wider buy-in that is needed from them."

Waste Management and Reprocessing Organisation.

CFE PHASE 1 RECOMMENDATIONS FOR REPROCESSORS



Matching Designs and Reprocessing:

MAJOR ADVANCES

> 100% felt it was the responsibility of brands to ensure designs are suitable for recycling or reprocessing.

Respondents felt that brands need to be considering future design of new products, but also be looking at what needs to happen with old products. They felt brands should be looking at a generic modular approach to repair items.

Scaling Recycling:

> 83% are developing or supporting technologies that enable closed loop and regenerative recycling that can maximise material recovery.

Reprocessors are using automated infrared and colour sorting processes at scale to sort non-renewable post-consumer clothing into different fractions for closed loop recycling.

Introducing an EPR Scheme:

> 83% feel it is important to implement an industry-led approach to Extended Producer Responsibility (EPR) legislation, to incentivise brands, designers, and retailers.

Respondents felt the only way to significantly move the dial was for EPR to be a collective industry-led approach. They recognised there has been a grace period where brands and retailers can voluntarily choose to adopt more sustainable practices, which many have done, whilst some of the bigger companies, with the largest environmental impact had chosen not to. Legislation, therefore, was necessary to bring all businesses in line with each other.

Developing Feedstock and Label Standards:

> 83% feel it is important to collaborate with raw materials suppliers, brands, and retailers to develop post-consumer (textile and non-textile) feedstock and label standards.

Reprocessors are developing one-on-one relationships and conducting private commercial discussions as well as industry initiatives with suppliers, brands and retailers. Others are sharing their feedstock specifications and aiming to create a design for cyclability guide with other stakeholders and run pilots with brand partners to create new collections based on the guidelines.

Utilising Supply Chain Textile Waste Materials:

>83% are able to help others such as manufacturers, recycling brokers and other recycling companies recycle more post-industrial and post-consumer textile waste.

Figure 24 - CFE Phase 1 Recommendations for Reprocessors

MAJOR CHALLENGES

Modelling Industry and Innovation Hubs:

> Less than 35% would be interested in developing centralised textiles circularity hubs that involve R&D facilities, sorting, warehousing, and outlets for recommerce, upcycling, and reprocessing.

Those who are proactive in this area stated that, as part of their future growth strategy, they would like to look at options around centralised hubs and at what they can do further down the life cycle of the product. One of the reprocesors is involved in the ReHubs project, which is aimed at developing several textile recycling hubs in Europe for the processing of textiles: re-use, high value recycling and down-cycling.

Modelling Economic and Material Flows:

> Less than 35% would like to participate in a system that models the detailed economic and material flows of a circular fashion ecosystem for the UK.

MATCHING DESIGNS AND REPROCESSING

These design approaches would be helpful to them:



Figure 25 - Helpful design approaches for Reprocessors

> 4.9 RETAILERS

SUMMARY TAKEAWAYS:

> 100% of respondents are advancing CFE Recommendation 'Mainstreaming Circular Design'
> As part of 'Mainstreaming Circular Design,' they would most encourage 'design for longevity of use'

Less than 15% of respondents are integrating CFE Recommendation 'Digitising Garments' "We support the principles of circularity; it is the foundation of our business. Since our very beginning, we have worked with our brand partners to provide a second life for pastseason stock. In this sense, our collections have been driving the circular economy since the mid-1990s."

Designer Outlet Shopping Centre.

CFE PHASE 1 RECOMMENDATIONS FOR RETAILERS



MAJOR ADVANCES

Mainstreaming Circular Design:

> 100% would like to or are already supporting brands to integrate circular design into their core business strategy, across all product lines.

Respondents see circular fashion as an important element of their future customer and commercial proposition. They are rating brands on circularity and sustainability via a recognised provider and are offering to refurbish damaged returns to resell on their platforms.

Shifting Consumer Practices:

> 83% feel it is the responsibility of retailers to support their consumers to make considered purchases.

Many retailers were already encouraging their customers to make considered purchases to increase longevity. A minority were looking to implement digital product passports to communicate care and maintenance to customers to extend the life of their products. Others were providing rating systems on their retail platforms, so that consumers can determine the best products.

Introducing an EPR Scheme:

> 75% feel it is important to implement an industry-led approach to EPR legislation.

Respondents stated that the only way to significantly move the dial was for the EPR to be a collective industryled approach. They recognised that there has been a grace period where brands and retailers can voluntarily choose to adopt more sustainable practises, which many have done, with some of the biggest companies, with the largest environmental impact had chosen not to. Legislation, therefore, was necessary to bring all businesses in line with each other.

Figure 26 - CFE Phase 1 Recommendations for Retailers

MAJOR CHALLENGES

Digitising Garments:

> Less than 15% said they would like to implement augmented reality (AR), virtual reality (VR) or other technologies so consumers can try products virtually.

Respondents that were tech-based were constantly testing and refining their offering based on data. Others recognised its potential to reduce stock damage, to minimise the number of returns and to reduce travel and excessive carbon emissions.

Developing Systems for Optimised Recirculation:

> Less than 35% are interested in working with technological systems that ensure used clothes are sorted and rerouted to re-commerce platforms.

Respondents felt that working with technological systems to ensure used clothes are recirculated was not a priority because it did not fit with their business model or was deemed too complex. However, some were working with brands to resell and remake used clothing into new styles.

MAINSTREAMING CIRCULAR DESIGN

They encourage these design approaches:



Figure 27 - Design approaches Retailers encourage

5. SUMMARY OF RESULTS



Figure 28 - Main advances by stakeholder group

MAIN CHALLENGES BY STAKEHOLDER GROUP

	STAKEHOLDERS	
P	ACADEMIA	- FORMALISING SKI
	BRANDS	MANUFACTURING AND DIS CLOTHING ON DEM.
8	COLLECTORS	DEVELOPING SYST FOR OPTIMISED RECIRC
	CONSUMERS	
0	DESIGNERS	
	DIGITAL INNOVATORS	MANUFACTURING AND DISTRIBUTION
6	GOVERNMENT	DIGITISING GARME
	INSTITUTIONS, INDUSTRY BODIES, 3RD SECTOR	- MODELLING ECONOMIC AND M
	INVESTORS	
	LOGISTICS PROVIDERS	
	MANUFACTURERS	- DEVELOPING A DIGITAL TRAC
0	REPROCESSORS	MODELLING ECONOMIC AND M
		MODELLING INDUSTRY AND INI
0	RETAILERS	DIGITISING GARME

Figure 29 - Main challenges by stakeholder group



6. CONCLUSIONS

The level of stakeholder engagement in the CFE phase 1 framework of 10 Action Areas and 30 Recommendations were high. However, this doesn't take into account all activity in the UK. The IPF is committed to continue dialogue, particularly with the remaining four stakeholder categories: Consumers, Government, Investors and Logistics Providers in order to accelerate activities.

It was found that the following three Recommendations are being advanced the most by stakeholders (P.15-16):

- > Mainstreaming Circular Design
- Matching Designs and Reprocessing
- > Shifting Consumer Practices

These Recommendations are housed under the following CFE Action Areas:

> Action Area 1: Circular Design (Mainstreaming Circular Design)

> Action Area 4: Demand for Recycled and Renewable Fibres (Matching Designs and Reprocessing)

> Action Area 2: Consumer Empowerment (Shifting Consumer Practices)

The following three Recommendations were expressed as being the most challenging to take forward by stakeholders (P.17-18):

- Modelling Industry and Innovation Hubs
- Modelling Economic and Material Flows
- > Digitising Garments

These Recommendations are housed under the following CFE Action Areas:

- > Action Area 7: Sortation and Recycling
- (Modelling Industry and Innovation Hubs)
- > Action Area 8: Ecosystem Modelling
- (Modelling Economic and Material Flows)
- > Action Area 2: Consumer Empowerment (Digitising Garments)

Stakeholders felt that CFE Action Areas Policy & Regulation, Circular Design and Post-use Ecosystem were the top overall industry challenges to move to a circular fashion ecosystem.

Insights from the surveys found common themes:

> Brands, Designers and Retailers felt it was their responsibility to support their customers in making considered purchases and to maximise the use of their existing clothes.

> Academia, Brands, and Institutions / Industry Bodies / 3rd sector are advancing education into circularity.

> Overall, circular and sharing business models (CSBMs) that enable the re-use of existing garments was preferred over recycling.

> Retailers and Reprocessors are most supportive of implementing an industry-led approach to EPR legislation. Overall, there was awareness by many stakeholders that policy was needed to change the industry.

> Manufacturers and Reprocessors see the need for feedstock standards to boost their operations. Although there is interest in developing label standards, there is less apparent understanding of feedstock standards for the textiles recycling industry.

> SME Designers, Brands, Reprocessors and Manufacturers are those receiving the most support through grants and incubation from Institutions / Industry Bodies / 3rd sector for adopting circular business models. This reflects how Designers, Brands and Reprocessors are those advancing their recommendations to reach the circular fashion ecosystem the most.

> Manufacturers and Collectors are particularly challenged, as they are currently overwhelmed with lower grade items which are difficult to sort, with too many variables of content received. There is high support for UK manufacturing but high comparative prices with international markets make this difficult, especially for mass-production.

> Digitisation was cited as a challenge by many due to cost. This includes digitising garments, integrating digital tracking system, and ondemand manufacturing and distribution. It was felt that digitising garments specifically; to try products virtually or purchase virtual products, was not yet relevant or cost-effective.

7. NEXT STEPS

Insights from this report have aided an Certain CFE Action Areas can be accelerated, understanding of the complexity, ease of execution, since stakeholder groups are already potential for collaboration and opportunity to advancing some of their corresponding leverage existing initiatives, to begin the transition recommendations. This would include CFE to a circular fashion ecosystem. Specific advances Action Areas: Circular Design, Demand and challenges can be used to provide supporting for Recycled and Renewable Fibres and information for industry demonstrator projects Consumer Empowerment. based on stakeholder collaborations, with the potential to be progressed by an industry-led Opportunities to partner stakeholders to develop Centre of Excellence. The report has validated collaborative pilots and proof of concepts that the specific interdependencies essential for would address challenging Recommendations developing a critical path of activities to develop could include: a roadmap for change. These activities to be progressed should include: Modelling Industry and Innovation Hubs

> A focus on identifying the barriers felt to advance the CFE Action Areas: Policy & Regulation, Circular Design and Post-use Ecosystem.

> Addressing challenges within the Post-Use Ecosystem as this Action Area brings into account all stakeholder groups and has the most Recommendations out of any of the Action Areas. The post-use ecosystem is part of upcoming regulatory changes, including textiles EPR and arguably holds the key to unlocking circularity at scale.

> Design an EPR scheme to address the issue of low-grade clothing which is difficult to recycle and reprocess at scale. This links to the recommendation: Matching Designs and Reprocessing, which is currently being advanced by industry.

> Further advancing education into circularity both within organisations and consumer-facing activities to instigate change.

> To be led by Government Partner with Brands and Institutions / Industry Bodies / 3rd sector who are not finding this a challenge

Manufacturing and Distributing Clothing on-demand

- > To be led by Brands, but this Recommendation was one of their
- Challenges
- > Partner with Manufacturers
- who are advancing this Recommendation

There are further opportunities presented throughout this report, detailing advances being made by stakeholders across the ecosystem. With stakeholders aligned behind the need for transformation and taking action to achieve it, the UK fashion industry is evidencing an opportunity to create a world-leading circular fashion ecosystem that provides a radical roadmap for change.

8. IPF DELIVERY PROJECTS UNDERWAY

CREATING CIRCULAR FASHION ECOSYSTEMS

IPF & Circle Economy

This is the overarching Programme of Change from the Institute of Positive Fashion which covers all stakeholder groups, recommendations and CFE Action Areas.

In April 2022, the BFC commissioned Circle Economy to partner on a foundation phase to assess the feasibility of developing Circular Fashion Ecosystems in UK Cities, starting in London and Leeds, through the lens of the Doughnut Economics model.² The overall intention is to kick-start a multi-phased innovation journey for all UK cities, to drive their fashion sector from the current state to a fully circular future state.

The ambition in this phase is to create a replicable framework in two cities renowned for the growth of engineering, transport and commerce during the Industrial Revolution and the globalisation of the garment industry. The social dimension will play a prominent role – the need for a just transition and meeting the levelling-up agenda through:

> Reskilling the workforce with new green jobs

 Addressing quality of work issues – new roles will be created that will be well paid and are of good quality

 Inclusivity - the approach opens up equality of all, paying attention to those who may be further away from the jobs market or have different socio-economic backgrounds

SOLVING FASHION RETURNS - HOW TO KEEP VALUE IN A CLOSED-LOOP SYSTEM

IPF & Roland Berger, supported by DHL

Today, every third fashion item purchased online in the UK is returned, with returns costs, including markdowns, transport and returns handling, costing more than the original retail price for the item in some cases. Overall, in 2019 fashion returns cost the British fashion industry at least £7bn.⁹ Additionally, returns create needless greenhouse gas emissions, mainly through reverse logistics. Considering the projected growth of online fashion, which has the potential to overtake bricks & mortar shopping by 2024,¹⁰ returns present a serious challenge for fashion companies and for society.

This project explores the financial, environmental and societal impact of fashion product returns, and identifies potential mitigations by looking at different measures and technologies which can help avoid returns, as well as handle them more efficiently and sustainably. Additionally, it will explore how circular and sharing business models could be part of the solution to address overproduction.

EMPOWERING CITIZENS TO ENABLE GARMENT LONGEVITY

IPF & GreenWith Studio, supported by Vanish

Around 300,000 tonnes of textiles are disposed of every year through household waste, ending up in landfill or incinerated, while less than 1% of garments are recycled at the end of life.¹¹

The project sets out to integrate digital garment care & maintenance instructions, and product composition data through QR code labels. The ambition is to empower citizen behaviour change by providing informed choices at point of purchase and throughout the use phase about the care & maintenance of garments, ultimately leading to longer utilisation rates through garment longevity.



Palmer Harding 202



SURVEY RESPONDENTS

ACADEMIA:

An equal number of Teachers (Tutors, Lecturers or Teaching Fellows) and Researchers (Post-docs, Research Fellows, Readers, Assistant Professors or Professors) based in the UK.

BRANDS:

Half are large brands (more than 250 employees) and at the high-end market. Others include medium-sized brands (50-249 employees) followed by a smaller percentage of those working for small brands (less than 50 employees), and from high street or mid-market segments. Almost all respondents were those from a sustainability strategy/CSR department, with a small sample responding via their design, product development, or innovation departments.

COLLECTORS:

Half of the textile and clothing collectors work for medium sized organisations (50-249 employees). The other half of the sample consist of large organisations (250+ employees), and smaller organisations (less than 50 employees).

DESIGNERS:

The designer respondents from mid-market and high-end markets were all working for brands with less than 50 employees. Most designers were working freelance or as an employee for their own label or one specific brand.

DIGITAL INNOVATORS:

Digital innovators are those from mostly small sized organisations (less than 50 employees) who were producing digital garments, developing a digital tracking system or developing other methods of tracing fashion supply chains.

INSTITUTIONS, INDUSTRY BODIES, 3RD SECTOR:

More than three quarters of institutions, industry bodies and 3rd sector consisted of those working for small sized organisations (less than 50 employees). The remainder consisted of medium sized organisations (50-249 employees), followed by large organisations (250+ employees). Most of the organisations categorised themselves as 3rd sector.

MANUFACTURERS:

Manufacturers that completed the survey were all small organisations based in the UK, with less than 50 employees. Half of the respondents were garment manufacturers and the other half comprised of dyers, textile manufacturers, material creators, printers, surface decorators, and other innovative businesses contributing to the manufacture of garments.

REPROCESSORS:

This included sorters and graders, traders of used textiles and chemical or mechanical recyclers. The largest group was chemical or mechanical recyclers. These were mostly small organisations (less than 50 employees).

RETAILERS:

The majority of retailers were large organisations (with more than 250 employees). Half of the respondents were department stores, and the other half were comprised of online stores, recommerce platforms and outlet retailers.



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