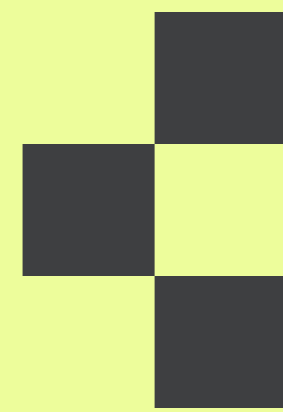


# YEAR ZERO

CIRCULAR FASHION REPORT 2020



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A collective report initiated by Circular Fashion Summit by lablaco in partnership with Vogue Business, PwC, Anthesis, Startupbootcamp and other leading organizations, with the goal to provide unique insights on the new digitized circular fashion industry.

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Image source: HAUS OF STONE

# Foreword.

Circular fashion, a next generation multi-trillion dollar industry for a better world.

2020 put a hard brake on time for everyone to rethink the way we operate our businesses. It's the starting point of a radical change driven by force majeure, the awakening of humanity, and the year when the fashion industry started making substantial progress towards digitization and circularity.

That's why we are calling the 2020 edition of our Circular Fashion Report "YEAR ZERO": it marks the beginning of the circular economy for fashion, by collecting reliable data from the entire value chain to predict and measure the potential of a digitized circular fashion industry. An inclusive, collaborative journey with industry, academic and governmental organizations, led by lablaco.

This first edition of the Circular Fashion Report also maps out the five key fundamentals of circular fashion, thanks to the collaborative work of the partners involved, with reader friendly editorial content, easy for everyone to digest.

Let's work together toward a more inclusive, profitable and sustainable Industry, today.

Co-CEO & Founder, Lorenzo Albrighti

Co-CEO & Founder, Eliana (ShihYun) Kuo



Source: IMSOMEWHERE

## About Circular Fashion Summit.

Circular Fashion Summit (CFS) by lablaco is on a mission to accelerate the transition to a "digitized and connected circular fashion industry" by setting three focused, measurable goals to achieve globally every year. These goals support the United Nations 17 Sustainable Development Goals that include reducing inequality, accelerating innovation for responsible consumption and transparency, and leveraging blockchain by 2030.

CFS 2020 VR edition has marked the beginning of a new era for digital fashion, by organizing the first ever Virtual Reality summit for the fashion industry, digitizing the iconic Grand Palais for Paris Fashion Week, in collaboration with Chatillon Architectes, Unity and Unilever and gathering the heads of the major international fashion weeks, from Paris, London, Milan, New York and Shanghai, united for the first time on a single panel to discuss the new fashion system.

# Contributors.



## ShihYun (Eliana), Kuo

Co-CEO and Founder at lablaco and Circular Fashion Summit. Kuo is a data and digital innovation entrepreneur with more than 10 years of experience in luxury fashion, retail buying and merchandising, brand management, and digital media. As one of the pioneers advocating a circular fashion consumption model back in early 2016, she was previously Retail Business Analyst in Etro, APAC Merchandising & Buying supervisor in Giorgio Armani HQ in Milan, and brought to life a few startups across Europe and Asia, focusing on digital transformation for lifestyle retail sectors. "Digitalization is the key to make fashion circular, transparent and more sustainable in business."



## Lorenzo Albrighi

Co-CEO and Founder at lablaco and Circular Fashion Summit. Lorenzo Albrighi worked for over ten years in the luxury fashion industry, cultivating a deep passion for design and Italian bespoke tailoring, which prompted him to start sewing as an apprentice tailor at age 20 in the historical sartoria A. Caraceni in Milan. After cutting and sewing suits for some of the most influential international figures in fashion and finance, he established his own fashion house in the Italian capital of fashion, before dedicating himself to building lablaco to solve the problems he found in working in one of the most disconnected and polluting industries in the world.



## Nick Hollins

Chief Communications Officer and Partner of lablaco and Circular Fashion Summit. Hollins is an experienced journalist, creative director and marketing consultant with 15 years working in web3, technology, music and fashion for companies such as Rolling Stone, Voyager Media, Alice, FBI Radio, and The University of Sydney.



## Sarah Shannon

Editorial Director at *Vogue Business*. Sarah Shannon's career spans over 10 years in business journalism, across the fashion, luxury and retail sectors. Shannon spent over eight years at Bloomberg News in London as senior retail reporter and has also been a regular contributor to the Financial Times and a contributing editor at the Business of Fashion.



## Erika Andreetta

Partner PwC leads the Retail and Consumer Goods consulting practice in Italy, with special focus on the luxury market. With a background in management engineering, she entered PwC's consulting practice in 1999 and has since then been involved in the luxury, and more general, fashion sector, first with a European reach, and after taking on a leadership role, focusing on Italian companies. She has been actively involved in important internationalisation projects of main players in the Chinese market and was a recognised member of the PwC's CINDIA (China - India) desk from 2000 to 2006. In the last few years, she was actively involved in system projects from reshoring to the international development of companies adhering to the "High Potential" initiative.



## Susan Harris

Technical Director at Anthesis Group, Susan has nearly 20 years' experience in sustainability and the apparel sector. As a Technical Director she brings a depth of experience in circular economy, sustainable supply chains, and stakeholder engagement. Susan was strongly involved in the development of the UK's voluntary sector commitment on clothing sustainability, SCAP2020. In addition, Susan is founder and former chair of the Sustainability Network at the Royal Society for the Encouragement of Arts, Manufactures and Commerce (RSA), founder of the clothing sector Business Leaders Forum, and is involved in several industry initiatives.



## Stefano Galassi

Managing Director at Startupbootcamp, leading the FashionTech Program in Milan. Galassi has extensive experience in fashion and luxury, having worked in the industry for 15 years across several projects and innovation ecosystems with digital players and startups. His span of expertise ranges across omni-channel customer experience, retail innovation, multi-channel strategy design and digital consulting for a broad variety of luxury brands including BMW, Luxottica, Gucci, Bulgari, Fendi, Tod's, Uniqlo, H&M, Prada, and Stone Island. He is the founder of the Accenture Innovation Global Hub, as well as a lecturer and professor at Bocconi University and Istituto Marangoni.



## Silvia Batello

Associate Lawyer at Rödl & Partner Milan. Silvia deals with energy law and sustainability, advising companies on the integration of sustainability into their business strategies, and is in charge of Italian Desk in Kenya. Silvia has acquired expertise in the fields of sustainable development, business and human rights, and public-private partnerships by working as a consultant for the Swiss Development Cooperation Agency, in the public sector, in bilateral and multilateral diplomacy for sustainable development at the UN and India, and with non-profit organizations in Indonesia and Italy. Currently, Silvia is also Vice-Curator of the Global Shapers Milan Hub, a youth initiative of the World Economic Forum.

# Vision.

There is no circular economy for Fashion without digitization.

New partnerships, more engaged supply chain relationships, and new tools; technology and innovations are the key.

Circular fashion is the natural evolution of the fashion industry.

The fashion system today is designed and capitalized based on a linear take-make-disposal approach: a 100 percent consumption model based on “units sold”.

Digitization has successfully disrupted other industries, transforming them from consuming physical products (units sold), to circular models – utilizing products (times used), such as Uber for the automotive industry, Spotify for the music industry, Airbnb for the hospitality industry, and many more.

Digitization is the key to make fashion circular, enabling traceability, transparency: A more sustainable ecosystem for both businesses and the planet. The new digitized and connected circular fashion industry can effectively activate new key performance indicators (KPIs) and business models. Moving away from the traditionally wasteful disconnected linear fashion industry. We are now passing from a consumption model (customers consume products) to ownership model (customers access to products), monetizing fashion in a more sustainable and scalable way.

– lablaco and Circular Fashion Summit

Circularity is still a nascent business model for the fashion industry, though it’s emerging as a greater priority as brands look to drastically reducing carbon emissions and waste, and using new resources.

To date, high-profile brands from Kering-owned Gucci to Eileen Fisher, Patagonia and Tommy Hilfiger have been making strides toward achieving it, alongside more niche fashion labels like Outerknown. But the change from a linear model to a circular one requires a strategic, industry-wide transformation, including product design and infrastructure. It requires new partnerships, more engaged supply chain relationships, new tools and often, new technology and innovations.

*Vogue Business* is pleased to partner with the Circular Fashion Report to not only provide an assessment of the size and potential of a circular fashion economy but also the framework for achieving it alongside the United Nations Development Goals and the fashion industry’s progress.

– *Vogue Business*

As of today, many brands are starting to include circularity in their business models, even making it a priority, but it is not yet a fully concerted action embracing the whole sector. The challenges of switching to circular business models and of reducing carbon emissions are hard to overcome. Some players have been able to take the lead in initiatives while others are lagging behind. This report helps in the important task of evaluating and quantifying progress. It considers the initiatives taken, and most importantly, it offers recommendations for common objectives and best practices.

The fashion industry is undergoing fundamental change, but it must make additional changes along with other industries -- and quickly -- as the UN has been quick to highlight in recent reports. The industry has a unique opportunity to build a solid foundation for a circular model that involves all players and sets tangible, achievable goals.

– PwC

This is the decade for the fashion industry to take concerted, significant and transformational action.

The timing of this report could not be more critical. We are continuing to break new ground in this space as an industry, and unifying around a definition and direction will help build collaboration and accelerate action around this singular yet multi-faceted concept.

Businesses throughout the fashion industry have shown ingenuity, passion and excitement around this opportunity, and we hope this report will help to demonstrate the impact and scale circular fashion can have. The UN is calling the next 10 years the “decisive decade” when ambitious action is needed to deliver sustainable development.

This is the decade for the fashion industry to take concerted, significant and transformational action. And that action must start now. Moving toward a new, circular fashion system is an important key to help us deliver the change that will be required.

— Anthesis Group

Innovation and technology are leading the way to a more sustainable fashion system.

The global desire to change fashion systematically to be more efficient and sustainable shows no signs of stopping. As Startupbootcamp FashionTech, we are proud to be a part of this movement by bridging corporate partners with open mindsets and startups with the vision to make a difference.

To achieve this goal, our team focuses on three main clusters: industry 4.0, omnichannel at scale, and sustainability-as-a-business. The latter is what we present in this report. Specifically, to achieve a more complete vision of how to empower new sustainable business models, we have visualized and analyzed every step of the fashion value chain. The Circular Fashion Report provides insights into reducing system inefficiencies and pollution, achieving green production and water reduction, and implementing new production processes and solutions.

— Startupbootcamp

For the fashion industry, sustainability goes hand in hand with innovation and digital transformation.

This year, more than ever before, made us all realize that sustainability and circularity are crucial for our planet. They are crucial for the environment and for society as a whole and need to become imperative for all businesses. Companies already embedding sustainable practices within their strategies have proven to be more resilient and adaptable. For the fashion industry, sustainability goes hand in hand with innovation and digital transformation, which provide incredible opportunities for a widespread attainment of the UN Sustainable Development Goals within 2030.

Yet technology drives sustainability only when its use is coherent and fully integrated with the strategic sustainability priorities of a given organization. Digitization of contracts, the use of blockchain to improve transparency and traceability, development of virtual channels, management of workers, employees, machines and robots, relationships with suppliers all along the value chain: given their ethical implication, all of these issues need to be properly addressed also from a legal perspective.

Roedl & Partner is thus very pleased to partner with the Circular Fashion Summit and join an incredible cohort of organizations in witnessing the transformation and reporting the progress of the fashion industry in its journey toward sustainability, sustaining and supporting all organizations ready to follow this adventure.

— Roedl & Partner

# Circular Fashion Definition.

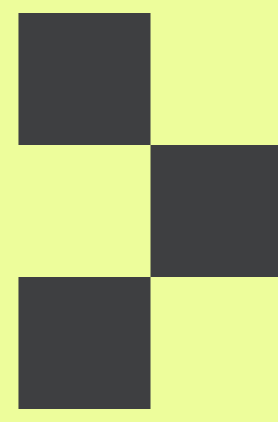


Image source: Rui Zhou

## What is Circular Fashion?



## Introduction.

### **Circular Fashion is a new industry for fashion yet to be clearly defined.**

Over recent years, circular fashion has gained traction within the fashion industry.

However, as a new, innovative and rapidly evolving concept, it remains largely undefined. This can lead to confusion about what circular fashion is, for not only brands, designers, retailers, supply chain operators and even the end customers. It can also lead to underestimate not only the scale of the opportunity and market transformation required, but also the success and market growth already being achieved.

Therefore, we believe there is a need for a common understanding of what we mean by circular fashion so that we can work together to transform the fashion industry into a more sustainable one that addresses the UN Sustainable Development Goals. It is important that circular fashion does not just become a buzzword -- the next cool thing for a fashion label to say they are doing. Action is what matters, and with this section, we want to bring a fresh perspective on circular fashion, where everyone can easily start to implement the principles in their business and behaviours.

**“Circular fashion is about moving away from a linear model of take, make, dispose and moving toward a new, regenerative model that can help us meet the UN Sustainable Development goals and revolutionize our consumption and production patterns to achieve a more sustainable world.”**

**Susan Harris**  
Technical Director, Anthesis

## About Anthesis.

Anthesis is the sustainability activator. We drive performance through sustainability. Anthesis's activator model empowers multi-expert teams to design and deploy solutions that grow productive, resilient organizations, ecosystems, cities, communities and people. From strategy to implementation, we offer an unrivalled spread of services to help you achieve your goals. We take our name from the Greek word "anthesis," the lifecycle stage of a plant when it is most productive.

Find out more at [www.anthesisgroup.com](http://www.anthesisgroup.com)

## What is Circular Fashion Exactly?

## Circular Economy v.s. Circular Fashion Industry.

“A circular economy is a systemic approach to economic development designed to benefit businesses, society, and the environment. In contrast to a “take-make-waste” linear model, a circular economy is regenerative and aims to gradually decouple growth from the consumption of finite resources.”<sup>1</sup>

The term “Circular Fashion” was shown in 2014, and has rapidly become one of fashion’s most embraced sustainability concepts since late 2018.

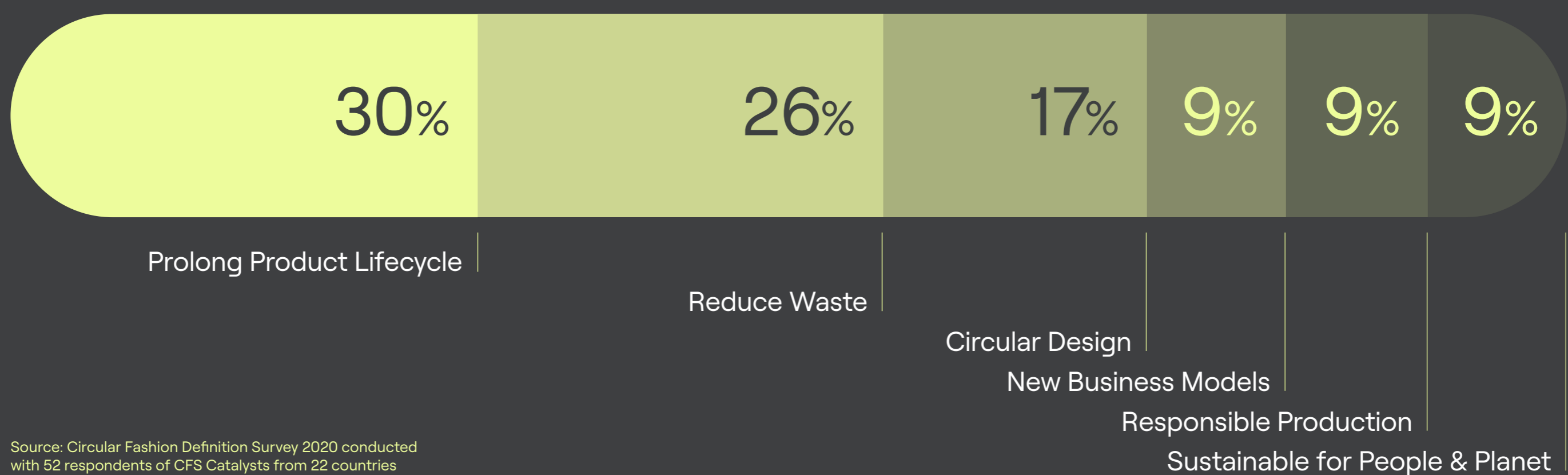
A circular fashion industry is one in which waste and pollution are eliminated, products and materials are kept in use for as long as possible, including through reusing and recycling, and where natural systems are regenerated.<sup>2</sup>

## The definition of circular fashion is not clear even for many industry insiders.

In September 2020, the Circular Fashion Summit team surveyed more than 50 CFS catalysts from fashion and sustainability in 22 countries to learn how they defined circular fashion. Respondents gave very different answers, underscoring the different opinions and definitions.<sup>3</sup>

The chart below shows the survey results.

Figure 1 – Circular Fashion Definition by CFS Catalysts 2020



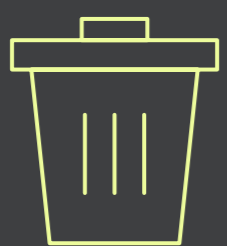
Source: Circular Fashion Definition Survey 2020 conducted with 52 respondents of CFS Catalysts from 22 countries

## The importance of understanding and acting for circular fashion.

### Linear fashion = Extreme waste, pollution, and resource intensity.

The current apparel system is extremely wasteful and polluting. Clothing utilisation worldwide – the average number of times a garment is worn before it ceases to be used – has decreased by 36 percent compared to 15 years ago. Every second, the equivalent of one garbage truck of textiles is landfilled or burned globally.<sup>4</sup>

Today’s linear system also uses large amounts of resources and has negative impacts on the environment and people. The textiles industry relies mostly on non-renewable resources – 98 million tons in total per year – including oil to manufacture synthetic fibres, fertilizers to grow cotton, and chemicals to produce, dye, and finish fibers and textiles.<sup>5</sup>



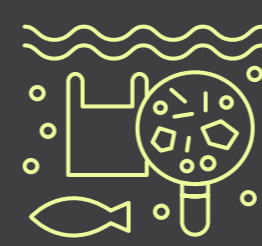
85%

of textiles go into landfills each year. That’s enough to fill the Sydney harbor annually.<sup>6</sup>



<1%

of material used for clothing production is recycled.<sup>7</sup>



500k

tons of microfibers go into the ocean each year by washing – the equivalent of 50 billion plastic bottles.<sup>8</sup>



93B

metres of water usage annually for textiles production (including cotton farming)<sup>9</sup>

# Diverse Circular Economy Models for Fashion

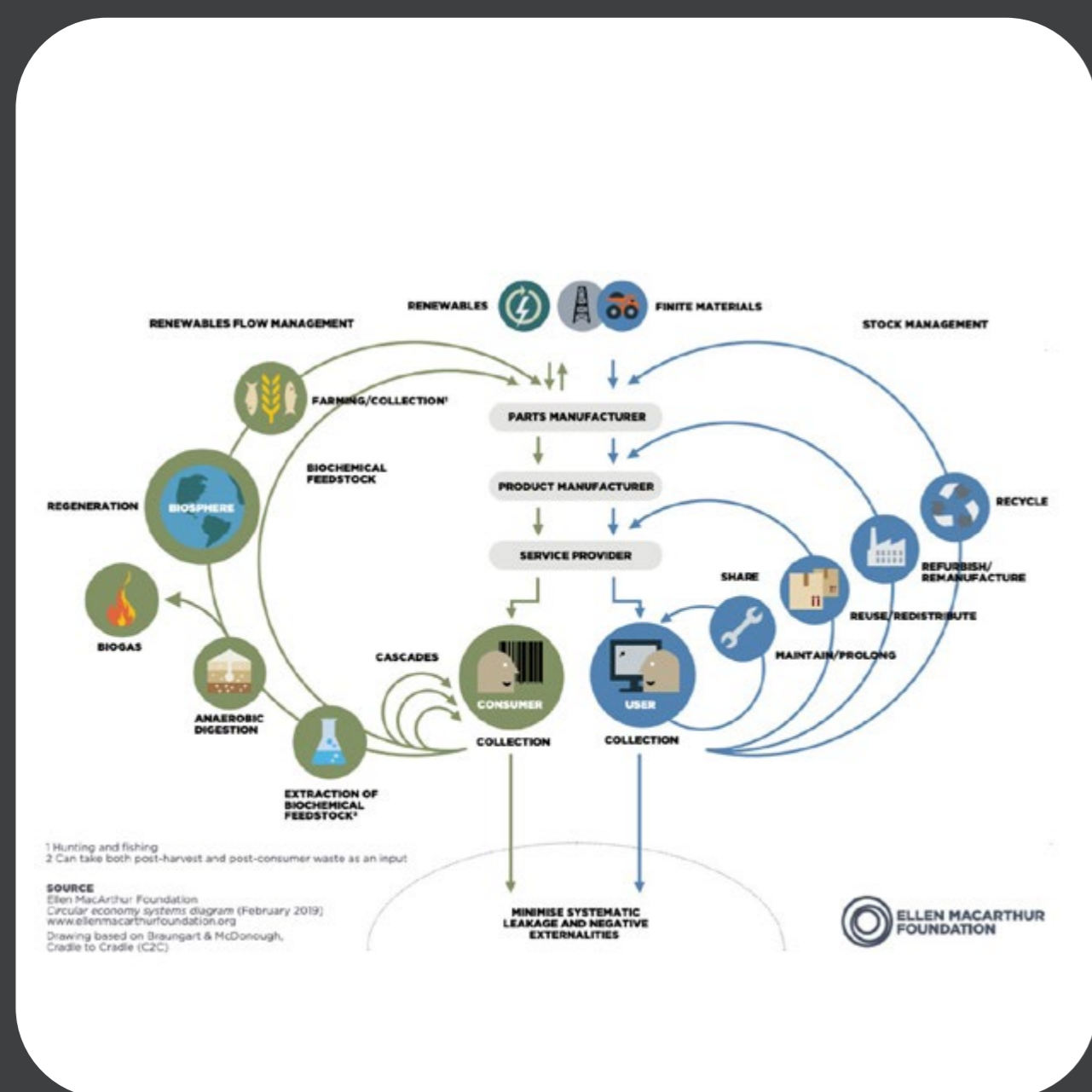
“In a circular economy, waste and pollution are designed out; products and materials are kept in use, and made from safe and recycled or renewable inputs.”

Ellen McArthur Foundation.<sup>10</sup>

Over the past 5 years, we have seen increasing interest in the circular fashion industry, with many different organizations raising the topic to a widening global audience.

A circular economy is by its nature broad and encompassing. Indeed, it goes beyond economic considerations to encompass a wide range of non-fiscal elements that contribute to sustainability, and as a result, has led to many different definitions and approaches.

Figure 2 – Circular Economy diagram for Circular Design by Ellen McArthur Foundation



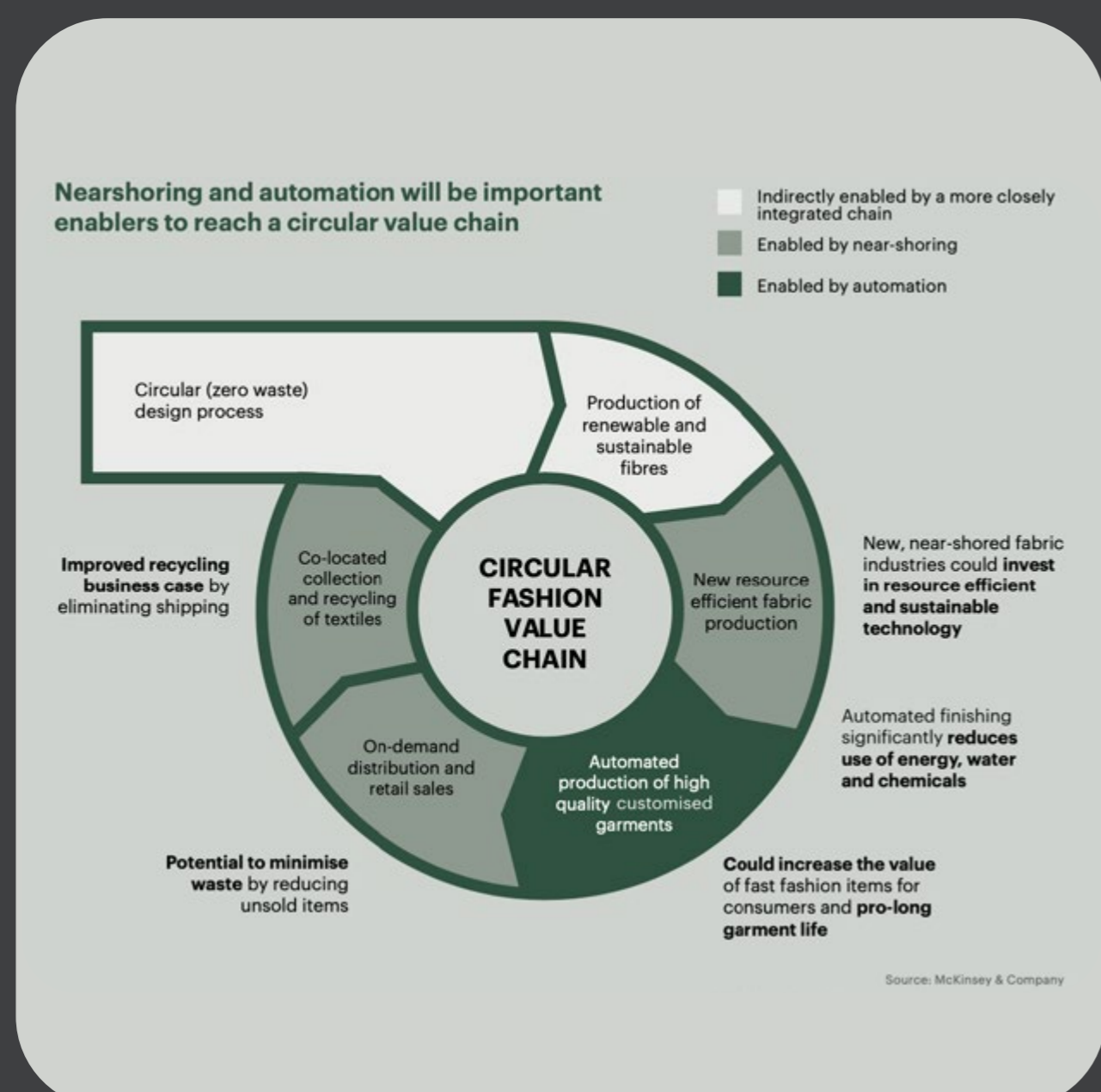
Source: Ellen McArthur Foundation

Figure 3 – Circular business models in relations to consumer fashion values



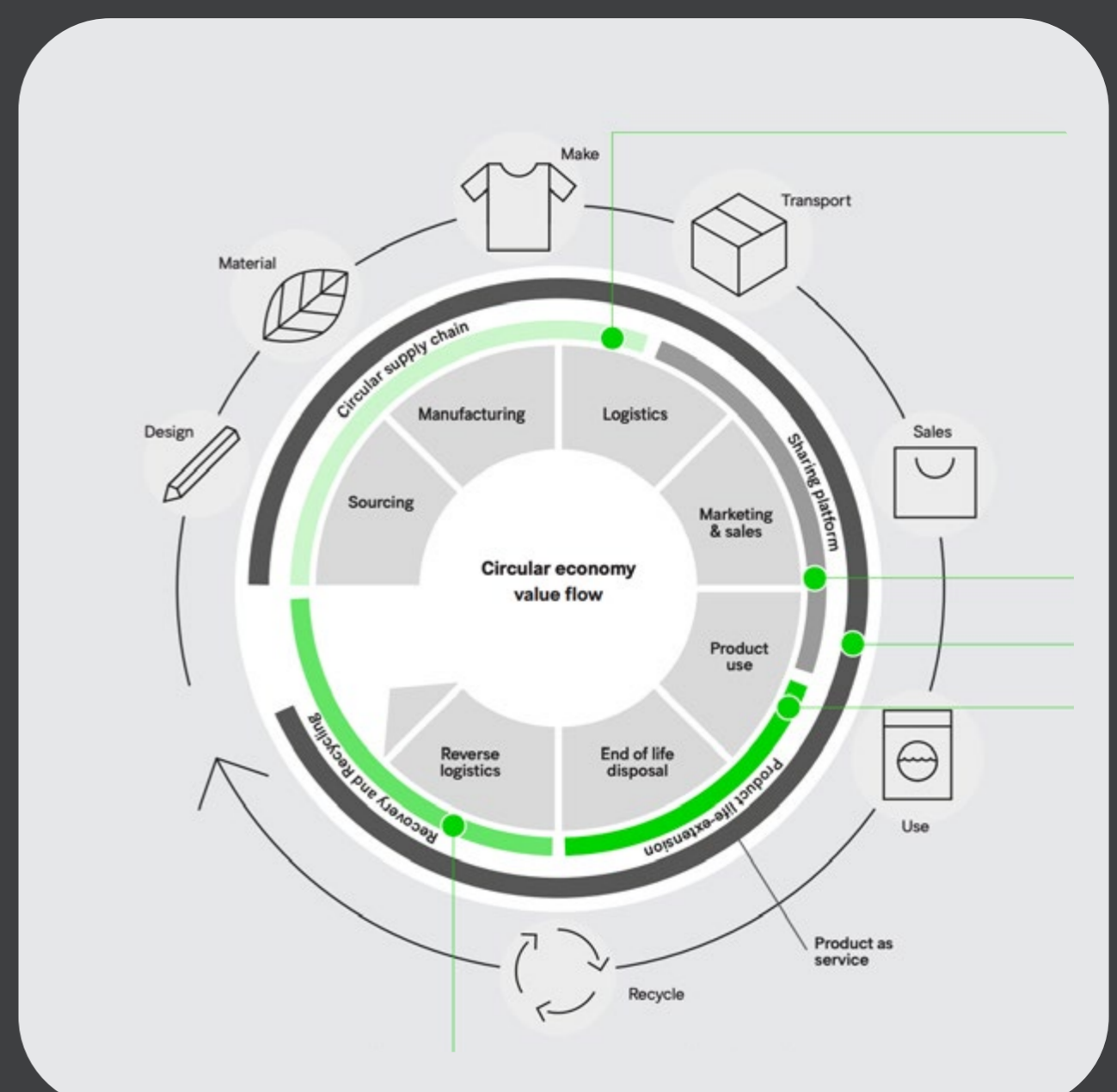
Source: Global Change Award 2020 & Accenture

Figure 4 – Circular Fashion Value Chain



Source: The State of Fashion by BoF 2019

Figure 5 – Circular Economy in Action



Source: The Circular Shift - A Closed Loop Partners Report

# A circular fashion system based on the fashion ecosystem.

To rally all stakeholders to take more tangible action towards circularity, we distilled the different circular economy models into three key players operating over the fashion value chain: Supply Chain (Sourcing, manufacturing), Brands (Designers), and Community (Retailer, final customers, content creators, digital creators... and so on).

We then highlighted their key actions and the interactions between them:

Figure 6 – Circular Fashion Ecosystem

## CIRCULAR FASHION ECOSYSTEM



Source: Circular Fashion Report 2020 <sup>11</sup>

Circular fashion cannot be fully exercised without considering digitization.

Digital has formed a new relationship among supply chain, brands, retailers, and final customers.

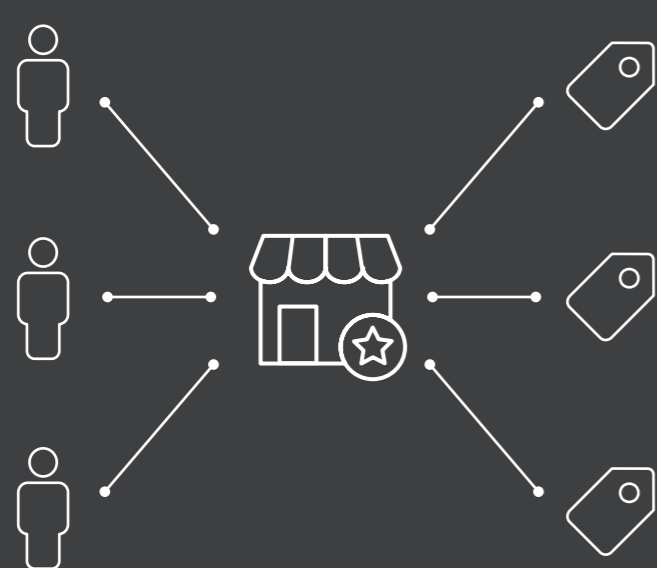
Thanks to social media and the emergence of more direct-to-consumer channels, the thin lines between brands, final customers and retailers are getting blurred. Now, final customers can easily step in with a sales channel, while brands, or even suppliers can easily enter the direct-to-consumer field.

What does this imply for the circular fashion ecosystem?

The focus will be no longer the store or customer, but products, where the data will be collected along the product life cycle.

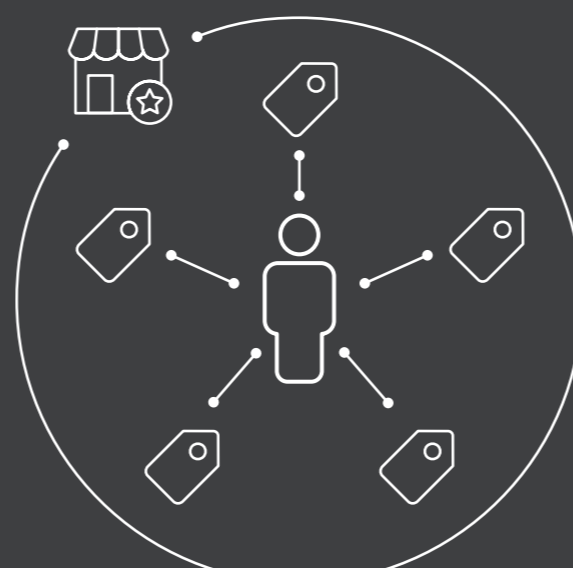
Figure 7 – A product centric - ownership based circular retail system will replace a customer centric, consumption based new retail system

PRE DIGITAL | 1825 -  
**TRADITIONAL Retail**  
100% Slow Consumption



Harrods

OMNI CHANNEL | 2016 -  
**NEW Retail**  
100% Fast Consumption



amazon

FULLY DIGITAL | 2020 -  
**CIRCULAR Retail**  
From Consumption to Ownership



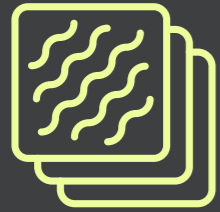
lablaco

Source: Bain & Company and lablaco <sup>12</sup>

Circular Fashion addresses a series of collaborative inputs enabled by a digitized and connected system, where circularity in Materials, Design and (re)Use are interlinked.

## Circular in Materials.

Key Player — the up-stream and down-stream Supply Chain.



### RENEWABLE AND REGENERATIVE MATERIALS:

Utilizing innovative materials with low environmental impact, where the need for virgin resources is minimized by increasing the use of existing products and materials.

### RENEWABLE MANUFACTURING AND PROCESSING:

Sourcing, production, distribution, sorting, and recycling of products is powered by renewable energy, non-toxic chemicals and low-environmental-impact processes.

### END-OF-LIFE REINVENTION:

post-purchased products and textile waste is eliminated and new materials are produced from cross-industry waste (e.g. waste from agricultural, plastic, or other sources)

## Circular in Design.

Key Player — Designer, Brands.



### DESIGN FOR PHYSICAL PRODUCTS:

Products are designed to last, to be reused, recycled or upcycled, based on a series of measurable, human-centric Impact Design criterias:

- **MATERIALS:** Products, packaging and their materials are designed and manufactured with regenerative materials and minimized chemical impact.\* (refer to Circular in Materials)
- **PROCESS:** Products, packaging and their materials are designed and manufactured to be reused, remade, recycled, repaired or upcycled.
- **PLANET:** Products, packaging and their materials are designed with the actions of off-setting the environmental impact (eg. through planting the trees), utilizing regenerative materials and renewable resources.\* (refer to Circular in Materials)
- **PEOPLE:** Products, packaging and their materials are designed and manufactured with actions to empower and support local communities, local craftsmanship and minority groups with sustainable businesses.

### DESIGN FOR DIGITAL PRODUCTS :

- **DIGITAL DESIGN PROCESS:** The design process for the physical products has been digitized (eg. 3D softwares) in order to avoid the textile waste created along the design process.
- **DIGITAL TWIN CREATION:** The digital version of physical products or the virtual products are created to trace omni-channel product data over the whole product lifecycle, or to avoid the waste created along the sales and promotion process

## Circular in (re)Use.

Key Player — Retailers, Final Customers, Content Creators.. and more



(re)Use through Physical Products: Businesses empower users with the necessary knowledge, tools, and services to maintain the physical and emotional appeal of products, including:

- **RESALE**
- **RENTAL**
- **SWAP**
- **BORROW**
- **DONATE**
- **SHARE**
- **REPAIR**
- **RECYCLE**
- **UPCYCLE**

Excess inventory is minimised and never destroyed.

### RE:USE THROUGH DIGITAL PRODUCTS (DIGITAL TWINS):

Businesses create or utilize digital version of products to minimize the use and transfer of physical products, while facilitating sales process of physical products with more efficiency

# Global Industry Overview.



# How Big is Circular Fashion Industry?

Image source: SPENCER BADU and Sindiso Khumalo

## Introduction.

### The industry is a collective force that makes circular fashion happen.

*Vogue Business* has reported on a plethora of circular fashion initiatives, including resale and repair programs extending the life of products like Thredup's "resale as a service" to companies like Gap, Walmart and JCPenney, the commercialization of fiber recycling like cotton and viscose by Finnish startup Infinited Fiber Company, and a new deadstock library by SupplyCompass and online marketplace Queen of Raw.

But there is much to do and environmental and consumer pressures continue. Today, the fashion industry still largely depends on producing clothing and products that use materials once, are sold by stores once and are used by one generation of consumers, who then discard or donate them.

Beyond eliminating fabric waste, a circular model involves eliminating external impacts, such as greenhouse gases and water contamination with toxic chemicals that are generated in manufacturing, as well as taking back garments to repair and sell, or recycle. It requires brands and consumers to change their behavior. Platforms like Thredup, Poshmark and The RealReal have made shopping for secondhand clothes easy and H&M's Cos recently launched its own resale platform, along with Europe's largest e-commerce retailer Zalando. But siloed efforts may not be enough. Collaboration across the fashion industry will be key.

“Collaboration and transparency are key to understanding and improving the fashion industry.”

Sarah Shannon  
Editorial Director, *Vogue Business*

## About *Vogue Business*.

*Vogue Business* is an online fashion industry publication launched in January 2019.

Headquartered at Condé Nast in London, *Vogue Business* offers a global perspective on the fashion industry, exploring how cultural trends and global patterns will impact fashion businesses. Harnessing insights from technologists, trend forecasters, futurists and innovators in other sectors,

*Vogue Business* is the leading source of information on how new technologies will shape the way products are developed, marketed and sold. While sharing the *Vogue* name, *Vogue Business* is operated as a wholly separate entity with an autonomous editorial team, developed with its own distinctive voice. So while we utilise the intelligence of Condé Nast teams globally, our journalism is completely independent.

At the moment, no one knows how big the circular fashion industry is, YET.

The current global fashion and apparel industry is valued north of \$3 trillion, making up two percent of the gross domestic product (GDP) according to FashionUnited<sup>13</sup>, which employs more than 300 million people along the value chain.

However, circular fashion is still a brand new concept and yet to be clearly defined. The CFS team has been researching a wide range of organizations over the past few months, without being able to find any mentions on the market size of the full picture of digitized circular fashion industry, as the current disconnected and linear fashion industry market size is known as the value of market (new products sold), followed by the fast-growing resale market (second hand products sold).

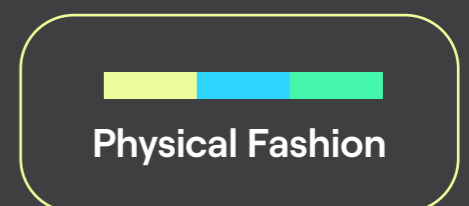
Figure 8  
Current Fashion Industry  
Market Size 2020

**CURRENT FASHION INDUSTRY**

**\$3T**

Market Value

(Retail value of luxury goods, Womenswear, Menswear, Bridal wear, Childrenswear, Sportswear, Accessories)



Source: GlobalData Market Sizing and Growth Estimates<sup>14</sup>

The current fashion system is mainly linear (take-make-waste) and disconnected with the post-purchase phase.

**Should fashion change key KPIs to adopt the new circular fashion industry?**

With the data available in the market so far, we can see that the key KPIs of the global fashion industry are still mainly based on general linear consumption models – products sold, both for first-hand and second-hand market.

There is no continuous data flow across the whole product life cycle to effectively improve the management of products prior to End of Life and to activate new business models with new KPIs.

The friction among different systems over the whole value chain is one of the main barriers and causes of a linear and wasteful fashion industry today.

Circular fashion industry scheme – from consumption to ownership; from physical to digital.

We have seen in the past 10 years how the music, movie, hospitality and media industries have been digitized and revolutionized by technology platforms such as Spotify, Netflix, Airbnb and Instagram. Physical products have either become digital, or are digitized (by connecting supply and demand) with new business models (eg. sharing model) – no more plastics CDs and papers, or spare spaces, which made the industry automatically become more sustainable and circular.

And this is what is about to happen in the fashion industry.



# Global Circular Fashion Industry Market Size Estimation

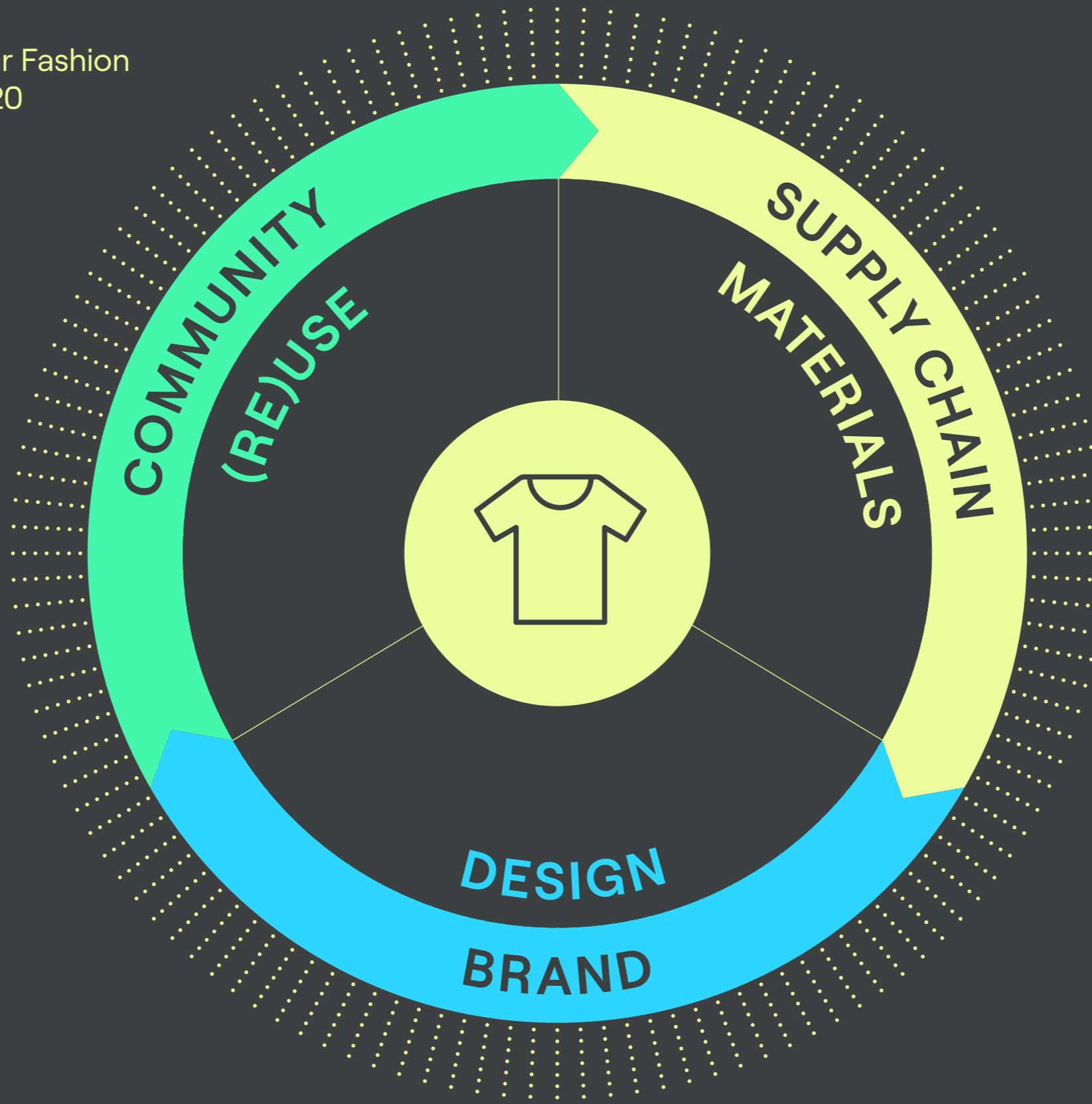
Could the digitized circular fashion industry be a \$5.3 trillion opportunity?

To give a full picture of the digitized circular fashion industry which is not defined yet, we tried to map out the all supplementary segments that will enable circular fashion over the whole value chain: from eco faber, manufacturing, 3D printing, digital fashion, packaging, logistics, product care, laundry, and other segments, which is overall estimated \$5.3 trillion, + \$2.3 trillion compared to the \$3 trillion market size of the traditional disconnected linear fashion industry.

Figure 9  
Estimated Global Circular Fashion Industry Market Size 2020

## CIRCULAR FASHION INDUSTRY

**\$5.3T**  
Market Value



Source: Circular Fashion Report 2020<sup>15</sup>

**\$350B**

opportunity identified for recycled materials in the Western Hemisphere

**\$40.38B**

Global eco fiber market size 2020 (CAGR of 4.6% from 2020 to 2027 (Revenue-based)

**\$554.7B**

Global tglobal apparel manufacturing market size 2019

**\$21B**

Global luxury packaging market by 2024

**\$18B**

Market value will be reached with sustainability focus

**\$16B**

3D printing market size 2020

**\$6.6B**

Global Virtual Fitting Room, by 2025 at a Compound Annual Growth Rate (CAGR) of 13.44% During the Forecast Period

**\$18.8B**

Global VR/AR Market Size 2020

**\$450B**

Fashion Counterfeiting Market Size 2017

**\$500B**

Market value was being lost annually due to clothing disposal, underutilisation and lack of recycling

**\$180B**

Dry-Cleaning And Laundry Services Market Size by 2022

**\$2B**

Clothing Alteration Services Industry 2020

**\$101.65B**

Global fabric care market size 2020

**\$64B**

Resale will be doubled in the next 5 years by 2024

Will digital fashion replace the current fashion industry market value?

It will be a collective effort at industry level to discover, in the next three to five years, how much and how fast the technology will make the shift for the fashion industry, and it could be at any level, eg. robotic automation production will reduce inventory volume, AR/VR technology will reduce marketing promotion waste, and more. What we can learn from this estimation as the first step, is that it shows the potential and incredible missing opportunities, especially due to the emergence of digital fashion, where the current fashion economy and value might be dramatically shifted.

## Monetizing Waste: blue ocean of end-of-life and recycling for material manufacturers.

An estimated USD 500 billion value is lost every year due to clothing being barely worn and rarely recycled. An analysis of global material flows of textile fibers by the Ellen MacArthur Foundation found that just 13 percent of the fiber input for clothing is recycled.

Less than 1 percent of material used to produce clothing is recycled into new clothing, representing a loss of more than \$100 billion (U.S.) worth of materials each year.<sup>16</sup> The considerable under-utilization of clothing and the very low rates of repurposing and recycling textiles after use represent considerable loss of material value.

Estimate based on Circular Fibres Initiative analysis on the share of materials and on a price of USD 2.8/kg for cotton yarn and USD 1.7/kg for polyester yarn. The global recycled textile industry was pegged at \$5.3 billion in 2018, and is expected to reach \$8 billion by 2026, growing at a CAGR of 5.2% from 2019 to 2026.<sup>17</sup>

**\$350B**

opportunity identified for recycled materials in the Western Hemisphere

**\$40.38B**

Global eco fiber market size 2020 (CAGR of 4.6% from 2020 to 2027 (Revenue-based)

**\$18B**

Market value will be reached with sustainability focus

**\$16B**

3D printing market size 2020

**\$500B**

Market value was being lost annually due to clothing disposal, underutilisation and lack of recycling

## Change KPI from “units sold” to “times used:” Blue ocean of circular business models for brands and retailers.

### Subscription models

A proven successful business model with a monthly fee for subscription services (e.g. rental package, short-term/ long-term rental) helps create brand and product exposure, develop closer and potentially long-lasting customer relationships based on loyalty, and provides a consistent revenue stream.

### Swap / Take Back Program

Easy-to-scan digitized IoT products enable easy tracking of the product journey and usage, facilitates take-back programs or swap of products after purchase, and increases customer retention. By fiscal year 2023, Patagonia expects Worn Wear to account for more than 10 percent of its overall business.

### Resale

Resale has grown 21X faster than apparel retail over the last three years. Selling used clothing alongside new clothing will be a new norm: Brands and retailers can not only tackle additional profits while feeding into the perception of quality, but also increase customer retention and attract new customers through incentives.

### Digital Fashion

- Utilizing AR/VR/Filter to replace physical products gifting has huge potential to grow, especially in terms of younger generation.
- On-demand manufacturing (eg. 3D Printing) could reduce brands' need to discount or discard overproduced items, while satisfying personal customization

**\$450B**

Fashion Counterfeiting Market Size 2017

**\$18.8B**

Global VR/AR Market Size 2020

**\$6.6B**

Global Virtual Fitting Room, by 2025 at a Compound Annual Growth Rate (CAGR) of 13.44% During the Forecast Period

**\$101.65B**

Global fabric care market size 2020

**\$64B**

Resale will be doubled in the next 5 years by 2024

The current global impact thanks to Linear Fashion.

**Carbon Emissions**

United Nations Climate Change News states that the fashion industry contributes 10 percent of global greenhouse gas emissions, more than all international flights and maritime shipping combined, due to its long supply chains and energy intensive production. The industry will use up to a quarter of the world’s carbon budget by 2050, and emissions from this sector are estimated to rise by more than 60 percent by 2030.<sup>18</sup>

**Water Usage**

Fashion is the second-largest consumer of the world’s water supply. Nearly 20 percent of global wastewater is produced by the fashion industry. It takes more than 5,000 gallons of water to manufacture a T-shirt and a pair of jeans and\* 20,000 liters of water to produce one kilogram of cotton.

**Chemical Pollution**

Cotton farming is responsible for 24 percent of insecticides and 11 percent of pesticides, despite using only 3 percent of the world’s arable land.<sup>19</sup>

**Waste**

Given the rapidly increasing production volumes and ever shorter product lifetimes, clothing production has approximately doubled in the last 15 years, while the number of times a garment is worn before being discarded has decreased 36 percent compared to 15 years ago.\* About 85 percent of this waste goes to landfills, where it occupies about 5 percent of landfill space, and the amount is growing.<sup>20</sup> Up to 95 percent of the textiles that are landfilled each year could be recycled.<sup>21</sup>

Figure 10 – Climate impact across the global value chain

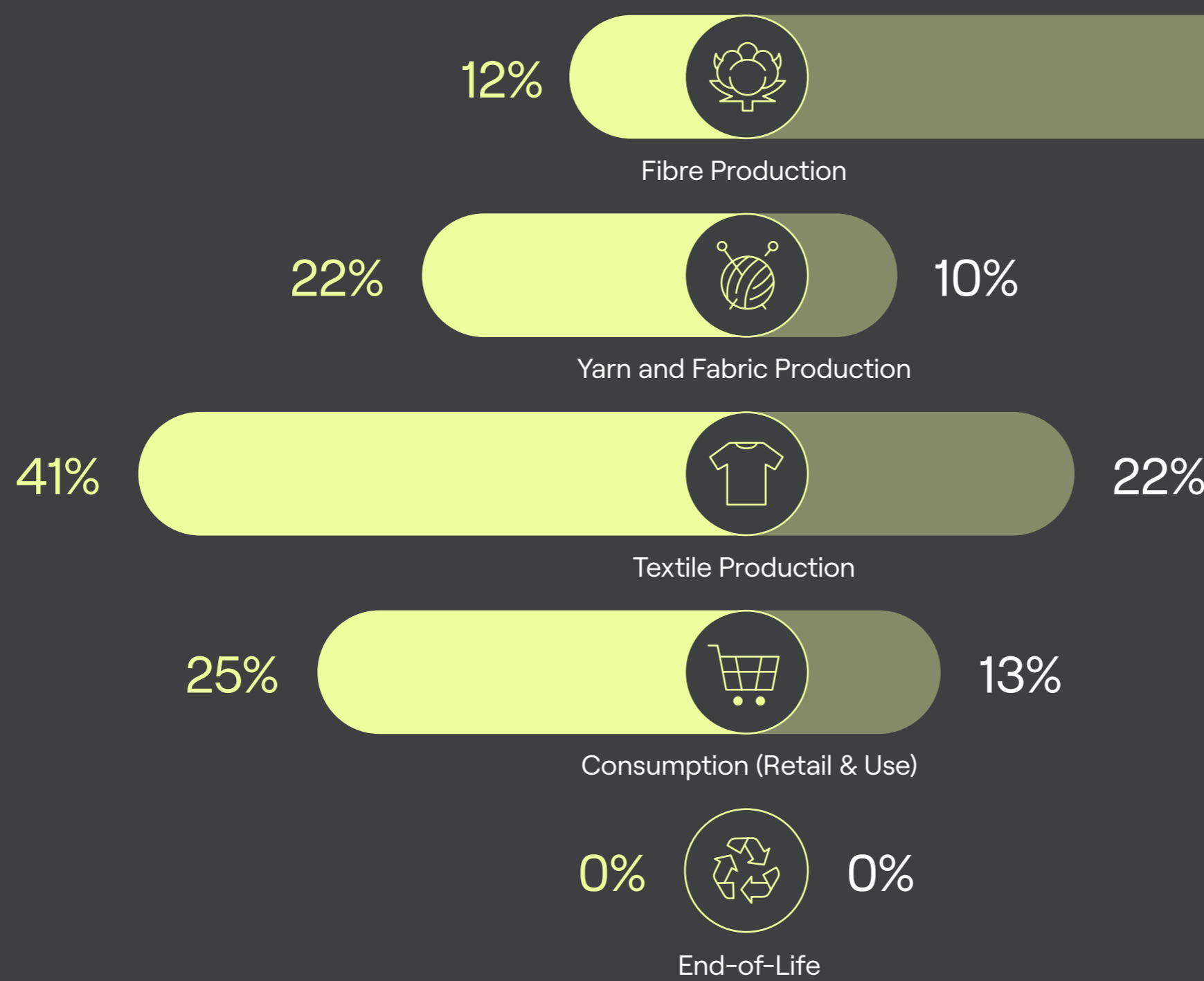
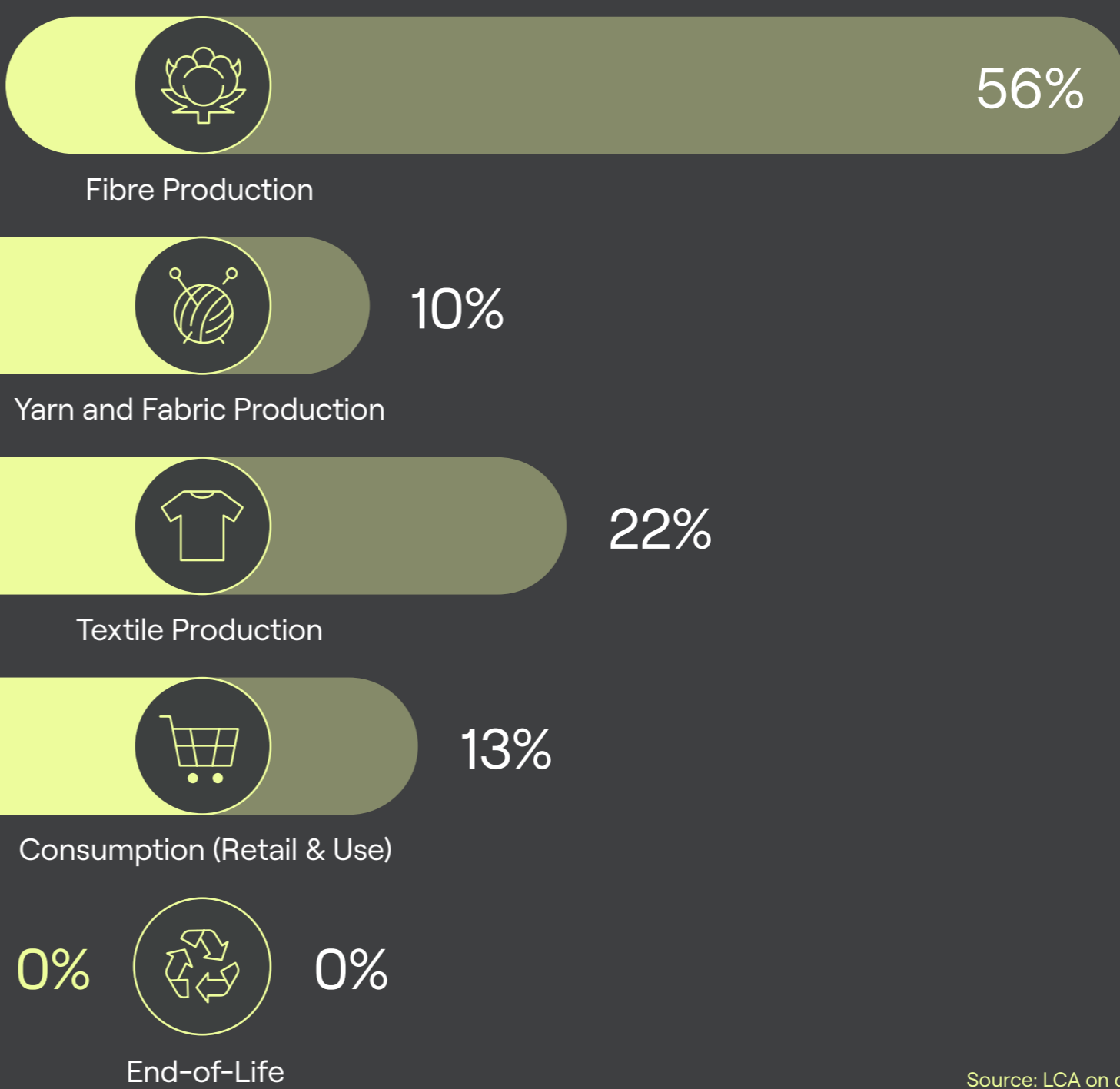


Figure 11 – Land use across the global apparel value chain



Source: LCA on global apparel

Circular fashion impact road map: starting from reducing waste, to producing less, and better.

**Recirculating products proved to be the best, easiest way to reduce environmental impact.**

Circularity experts say that extending the life of a garment only by an extra 9 months reduces environmental impact by 20–30 percent. Producing a pair of jeans takes about 2,000 gallons of water. That’s more than enough for one person to drink eight cups per day for 10 years. By purchasing or swapping second-hand jeans, you are saving 2,000 gallons of water over creating a new one.

Using recycled cotton saves 20,000 liters of water per kilogram of cotton, a water-intensive crop.<sup>22</sup>

# Global Customer Trends Overview.

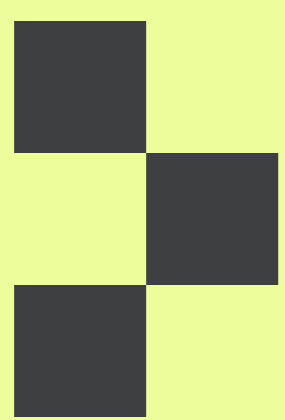


Image source: OKFASHION

## Introduction.

### Community is the main driver for circular fashion impact.

Consumers today place high value on brands' sustainability efforts when choosing what to buy. They are much more aware of the need to reduce waste and energy consumption and expect action to be taken by both governments and private companies, in an effort to curb the impact on the planet. In Italy, millennials and GenZ consumers are growingly sensitive to planetary health concerns; thus, they favor eco products and brands that promote sustainable practices.

Transparent communication about the steps and initiatives undertaken by a company is key to gaining customers' trust. In fact, consumers are willing to choose a brand if they perceive sustainability efforts to be real and effective. Suppliers' choices, caring for the consequences of company's behavior, and in Italy, renewed focus on made-in-Italy products, which represent quality and durability for young Italian consumers, are particularly important.

“This report witnesses the aspiration to promote collaboration among the leaders of the fashion business to move towards an innovative system whose main goal of a product life-cycle without environmental harm can be reached only if the industry embraces a restorative attitude.”

Erika Andreetta

PwC's Consumer Markets Consulting Leader, Italy

## About the Global Consumer Insight Survey by PwC.

The 11th Global Consumer Insights Survey aims to understand how consumer behavior and spending habits have been impacted by the social distancing measures put in place as a result of COVID-19.

The survey analyzed 23,545 respondents, across nine countries, between January and June 2020, with 4,447 responses received between April and May.

## About Millennials and Gen Z Observatory (Italy) by PwC.

The 5th edition of this survey looks at the behavior and spending habits of millennials and Generation Z, what they feel is important and how their priorities changed over the last 12 months, including throughout the pandemic. The survey analyzed 2,448 respondents in Italy from January to June 2020.

COVID-19 changing behaviors are accelerating trends along a reinvented customer purchase journey.

Consumers are the core driver for business growth, and the demand for sustainable and ethically manufactured products is rising among younger generations. Brands' shareholders, retailers and suppliers must have an in-depth overview of the direction their customers are moving before taking action. Consumer trends in fashion, retail and social experiences reveal growing opportunities in circular fashion. Our insights suggest the pace of change and industry disruption will drive the emergence and establishment of a new cohort of winners and laggards in our industry over the next decade, with the consumer at the center as never before.



### 36%

of global consumers will spend less in the next 12 months  
- 51% globally in fashion months purchases

### Expect market volatility and price sensitivity

Will secondhand products and new circular business models thrive?

- Customers will need an experience that reinforces safety
- They will want experiences that can be great anywhere



### 49%

of global consumers say that safety & security are the most important features of their city  
(vs 27% pre-covid)

### Consumer experience must be rooted in safety and accessibility

- Customers will need an experience that reinforces safety
- They will want experiences that can be great anywhere



### 86%

of global consumers have made online fashion purchases over the last 12 months

### Digital engagement will be robust and diversified

78 percent of global consumers have made a purchase by mobile.

- Consumers will have to get the balance right between digitalization and the traditional store format
- Consumers will experiment with and accelerate new channels, such as mobile



### 43%

of global consumers expect businesses to be accountable for their environmental impact

### Customers will become longtime advocates if companies prioritize care, sustainability and innovation

- Customers will want companies to show consideration for their well-being in the products and services they offer
- They'll expect customers to make sustainable, ethical choices that recognize stakeholders as much as shareholders
- They'll need innovations that solve traditional pain points

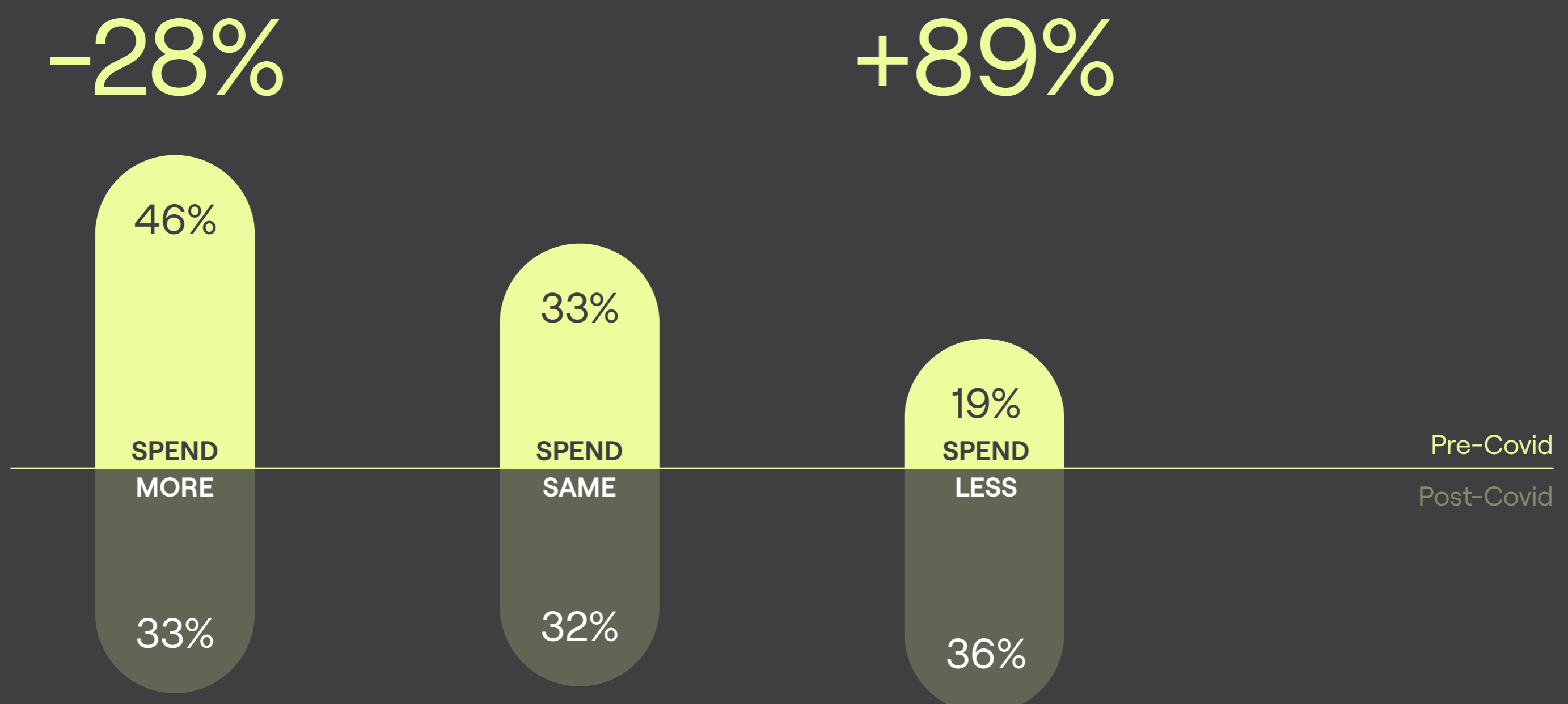
Global consumers who will spend less in the current COVID-19 environment have almost doubled.

When asked “ how the coronavirus had affected their lives, 40 percent of global consumers surveyed said they had suffered a reduction in income.

Expectations of future expenditure: Consumers in European countries are more cautious than in the Middle East and China.

Thirty-six percent of consumers will spend less in the coming months. Overall, customers in Europe are reducing their spending 30-60 percent, while customers in China and Middle East are increasing their spending 43 percent and 49 percent, respectively.

Figure 12 — Global consumers who will spend less in the «New Normal» have almost doubled

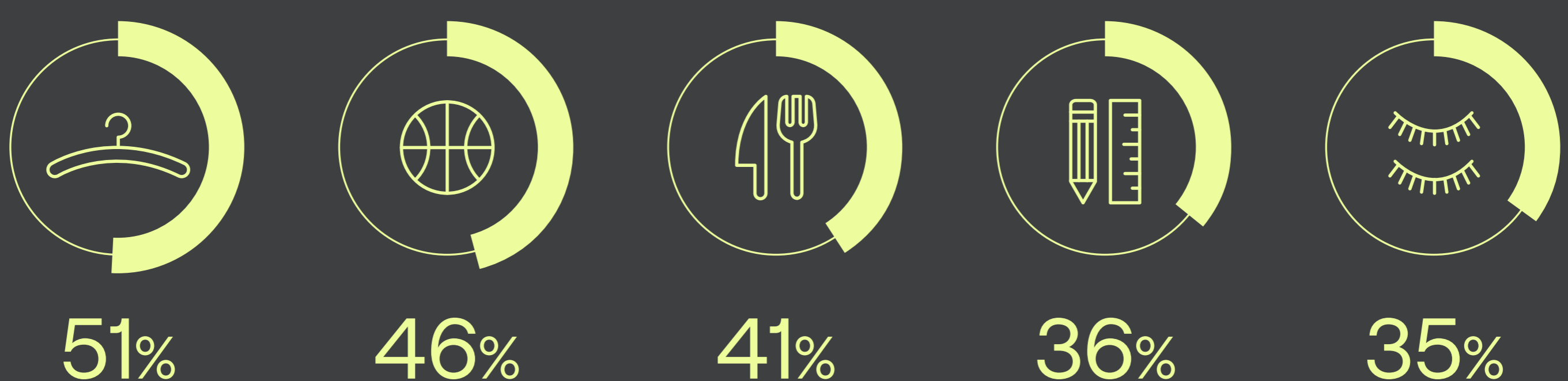


Source: PwC, Global Consumer Insights Survey 2020

Cuts in expenses: Fashion is the most affected sector by the discount mindset in all countries.

Fashion is the industry projected to take the biggest financial hit during the pandemic. Fifty-one percent of global consumers will spend less on apparel and footwear, and just 10 percent will increase their fashion purchases.

Figure 13 — Cuts in household expenses: fashion is the most affected sector by the discount mindset in all countries



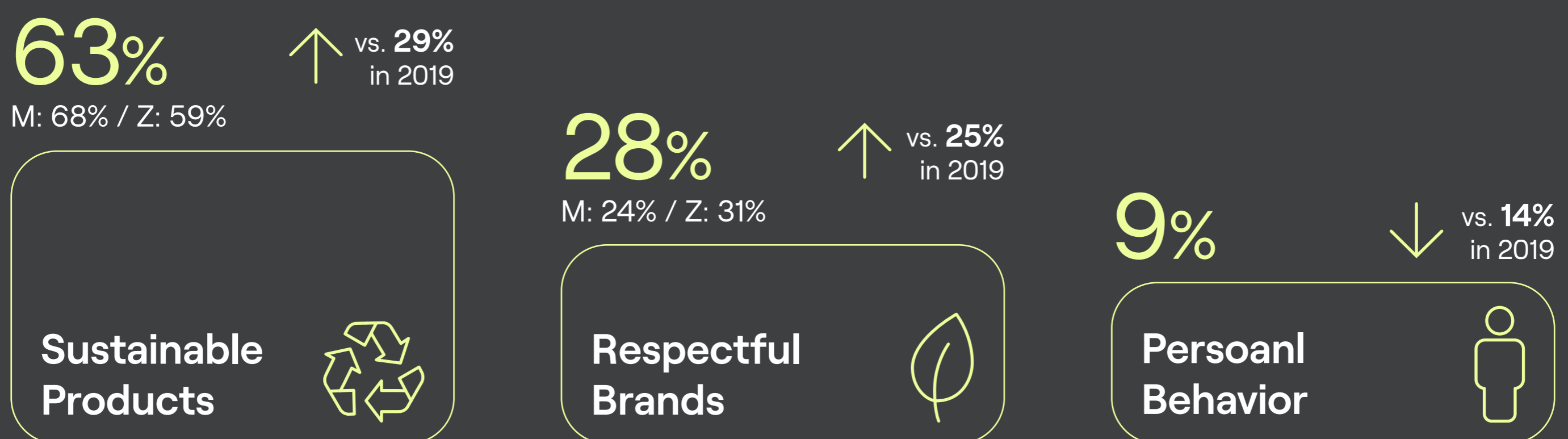
Source: Global Consumer Insight Survey Pulse 2020 PwC

Millennials and Gen Z are sensitive to personal & planetary health, and paying particular attention to eco products. They are also conscious of the need to reduce plastic use and expect brands/retailers to support this.

Sustainability is important: Young millennials and Gen Z are sensitive to personal and planetary health, paying particular attention to eco products. Sixty-three percent of consumers support sustainable products, up from 29 percent in 2019. Millennials and Gen Z are hungry for circular products, swaps and recycling of materials. Forty-five percent avoid using plastic whenever possible.

Figure 14 – Sustainability is important: young M&Z are sensitive to Personal & Planetary Health, with growing attention in particular on “eco” products

Source: PwC Millennials vs Generation Z 2020



Millennials and Gen Z are conscious of the need to reduce plastic use and expect brands/retailers to support this.

Sustainability is important: Young Millennials and Gen Z are sensitive to personal and planetary Health, paying particular attention to eco products. 63 percent of consumers support sustainable products, up from 29 percent in 2019. Millennials and Gen Z are hungry for circular products, swaps and recycling of materials. Forty-five percent avoid the use of plastic whenever possible.



Millennials are the generation to act or expect action around sustainable activities.

In 2020 only 6 percent declare not to be interested in sustainability (vs 13 percent in 2019). Twenty-eight percent consider retailers’ environmental and social efforts and reputation. Twenty-six percent choose products with a traceable and transparent origin. Nineteen percent would reconsider their amount of air travel based on climate change trends.

As a personal commitment they are inclined to share.

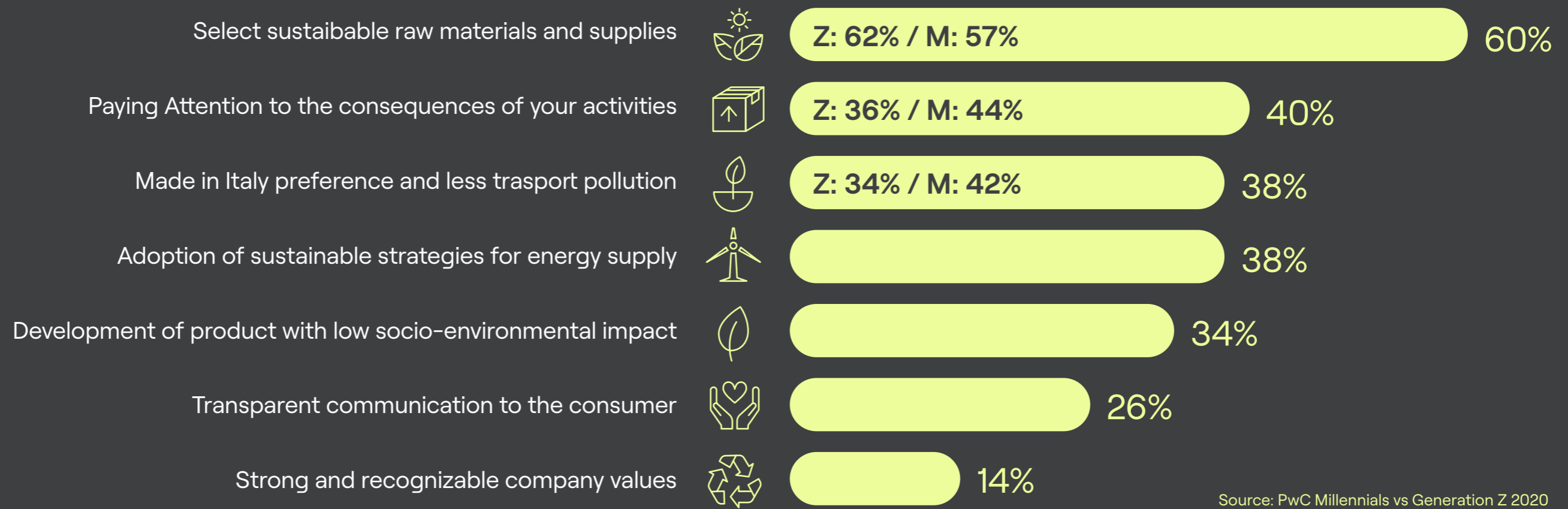
Thirty-six per cent of customers will spend less in the coming months. Overall, European customers are reducing their spending by 30-60 percent; while customers in China and Middle East increase their spending 43 percent and 49 percent, respectively.



## The choice of sustainable supplies and raw materials is fundamental for future customers.

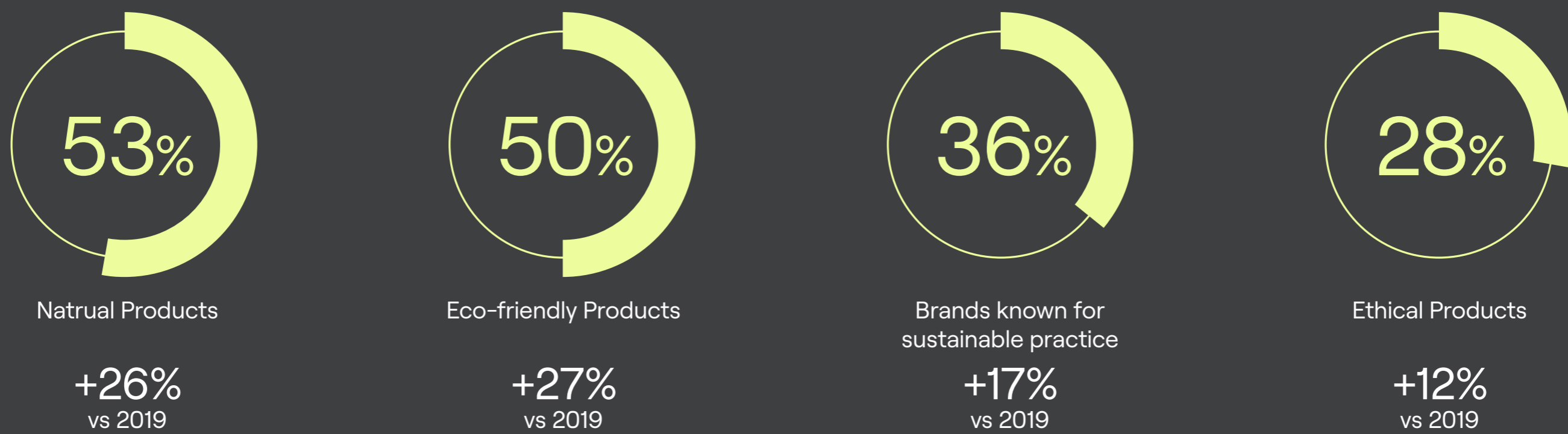
Companies' behavior counts for future customers. The perception of a company is becoming increasingly important when it comes to making a purchase. Sixty-six percent of consumers choose clothing and footwear made with non-animal materials; 57 percent are driven mainly by concern for animals' well-being; 34 percent are concerned for the environment; and 9 percent pay attention to their own well-being.

Figure 15 – The choice of supplies and raw materials is fundamental for the sustainable reputation of companies



## During the pandemic, consumers are seeking natural, sustainable and ethical fashion products.

Consumers were already paying greater attention to sustainable products. This trend has grown even stronger during the pandemic. Less than 10 per cent of those surveyed do not recognize a small premium price.

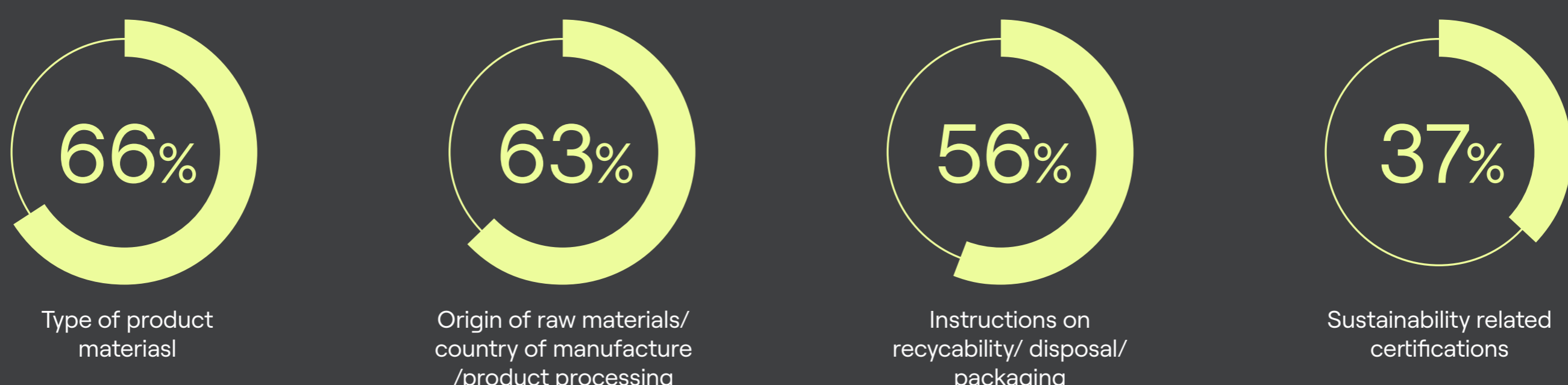


## The label is the most effective tool to communicate information about sustainable products to customers.

More than 76 percent (vs 2019) of Millennials and Gen Z consider the label as the most effective way to learn more about a product's sustainability and a company's commitment. Technologies such as IoT, connected products with interactive QR codes on labels and NFC chips providing solutions foreseen to drive a huge impact on interacting with final customers and opening to new product storytelling opportunities through transparency and circularity.

## Transparency: M&Z expect to find the information about ingredients and product origin.

Almost 64 percent of companies haven't done anything to show the transparency of products yet, while over 90 percent of respondents are ready to change their mind about a company's sustainability.



# Science and Technology Trends Overview.



Image source: Renewcell



## Introduction.

### The tools to tackle your circular fashion growth.

Pure fashion-tech players accounted for fewer than one in five fashion companies that made initial public offerings in 2018 and 2019. But these tech companies' IPOs accounted for almost half the total \$3.7 billion that fashion IPOs raised during this period.

Fashion industry changes spurred by COVID-19, technological innovations, as well as other factors have illuminated the need for the industry to reinvent itself. As we often say, in the challenges lie the seeds of an opportunity and we began directing our research to new sustainable business models that will help us to reconstruct a future-proof fashion system.

We believe that fashion and luxury companies are ready to meet the demand for sustainable business models. At Startupbootcamp, we strongly encourage this kind of collaboration since it provides immediate solutions to the rapidly evolving customer needs and tackles modern sustainability challenges.

“Collectively leveraging open innovation we could achieve a more efficient digital and sustainable fashion sector.”

Stefano Galassi

Managing Director, Startupbootcamp FashionTech

## About Startupbootcamp.

Startupbootcamp is one of the world's largest startup accelerators with 16 hubs on five continents. The company receives 20,000 applications per year and has a portfolio of 1,000 companies. Startupbootcamp FashionTech is SBC's first accelerator in the fashion industry. Based in Milan, the program will last for three years and accelerate 30 high-potential startups worldwide.

This ecosystem includes the corporate partners covering the entire fashion value chain (Prada, Stone Island, Accenture, PwC, Sopra Steria, DedaGroup Stealth, Gellify, Canclini, Marzotto, Ratti, Albini, Reda, Eurojersey, Altagamma, the Italian Textile Foundation and Withers Worldwide), the international open innovation network of connected academic and private accelerators (eg., European Polytechnical Polifactory, FashionTech Lab, The Luxury Institute in NY, VivaTech in Paris, Chalhoub Dubai), and the global community of mentors, who will support and develop them commercially and financially.

Receive the full SBC Global FashionTech vertical on sustainability as business and join us at the open innovation platform for best start-ups and luxury brands: [openinnovation@sbcfashiontech.com](mailto:openinnovation@sbcfashiontech.com)

## Methodology.

The Circular Fashion Report begins with a breakdown of solutions by country to show how different regions tackle different parts of the fashion system. It is based on data that Startupbootcamp has collected about more than 2,000 startups in more than 40 countries, Startupbootcamp's database is powered by the AI-driven scouting technology platform FuelUp.

The report's framework aims to visualize different steps of the fashion value chain, followed by an in-depth analysis of every step and related startups you should monitor.

Overall, this research should give readers a comprehensive overview of what is happening in each dimension and how innovative companies are tackling the fashion industry's challenges differently.

The demand for sustain-able fashion is the main driver of innovation.

New consumer habits and younger generations' heightened social consciousness of the fashion industry have prompted brands and retailers to concentrate more on social impact issues. This new focus has spawned innovative production processes, materials, products and business models.

The role of Startupbootcamp FashionTech is to search for solutions and drive change. We help generate innovation by matching corporate partners' needs and startups' solutions. This may occur through different initiatives: mentorship programs, pilot projects, partnerships and/ or collaborations. Startups can also be a huge source of innovation for larger companies.

Figure 16 – Startupbootcamp FashionTech startups focus



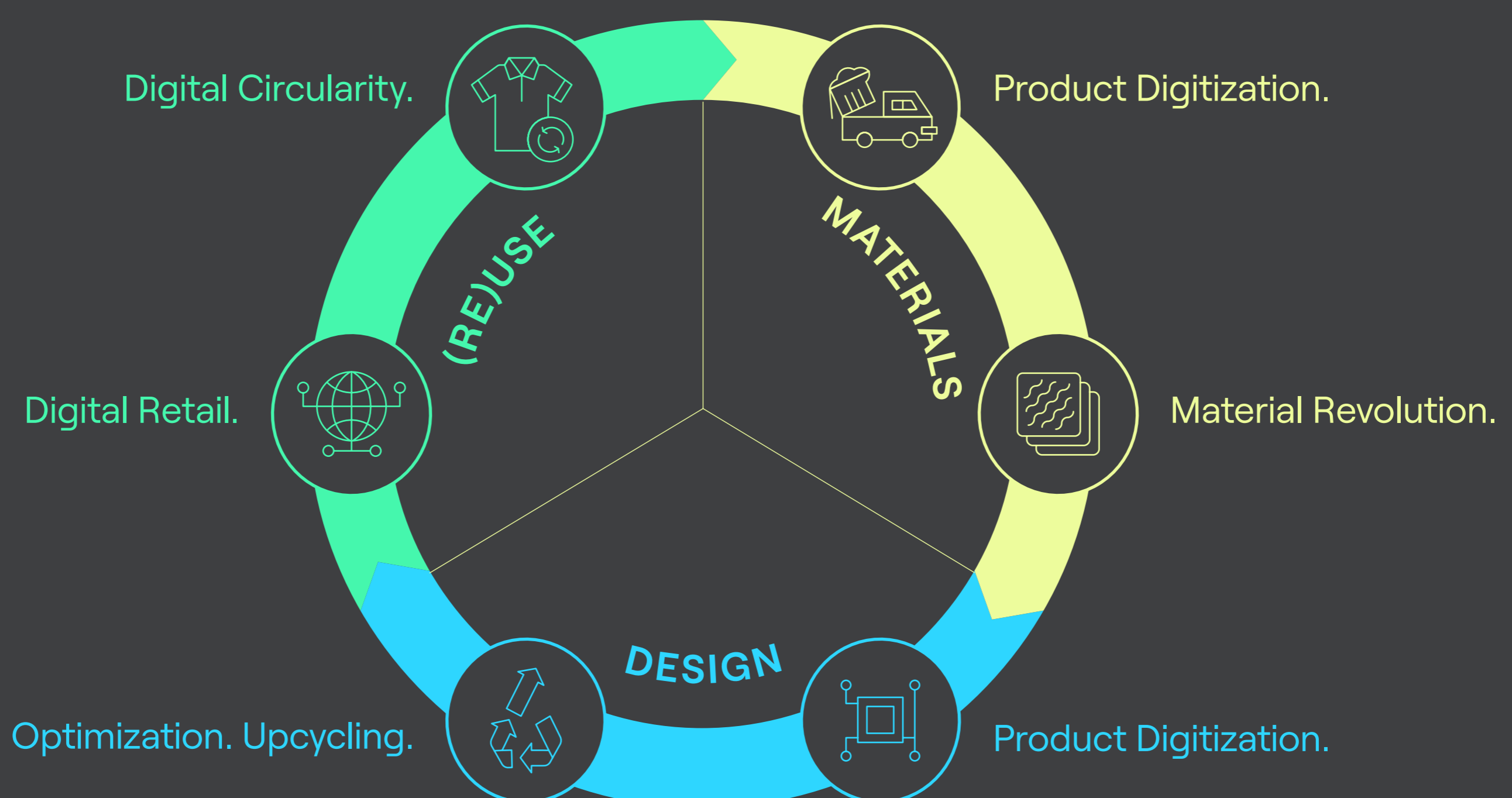
Source: Startupbootcamp FashionTech

Circular fashion as a business innovation.

The Startupbootcamp Circularity Framework has been developed to visualize and analyze sustainability through every stage of the value chain starting from the material revolution (the input) to recycling, upcycling, and recovery (the end-of-life of the product).

The framework has resulted from analysis of all the startups in the Startupbootcamp FashionTech database, which covers the most notable, innovative solutions of more than 2,000 fashiontech startups globally.

Figure 17 – Circular Fashion Innovation Framework



Source: Circular Fashion Report 2020

## Material Revolution.



The intersection of fashion and science which aims to create environmentally efficient alternative materials and/or substitutes to the chemical dyeing process.

- Innovative regenerative production
- Bio technology: bio-materials, organic materials - renewable manufacturing and process: renewable energy, natural resources, waste water processing
- Chemical science: clean dyeing process.

### Regenerative Production



### Bio Technology



### Renewable Process



### Chemical Science



Editor's Pick

**Evrnu**  
Canada

The inventor a wide range of regenerative fiber technologies, enabling entirely new products to be made from discarded clothing multiple times.

**SPIBER**  
JAPAN

A biotech company developing microbially-fermented Brewed Protein™ materials to help build a more sustainable society.

**SeaChange Technologies**  
USA

Developing and offering wastewater treatment that eliminates sludge, reducing chemical discharge and greenhouse gas emissions for apparel manufactures.

**Spindye**  
Sweden

SpinDye® colors the textile with 75% less water consumption, 90% less chemical consumption, CO2 imprint reduced by 30% and 100% Recycled.

## Waste Reinvention.



New technologies have made it possible to turn waste into textiles. Materials for these processes can come from sources like pineapples, oranges, mushrooms, and grapes as well as traditional textile waste.

- Cross industry waste reinvention: plastic waste, organic waste, agricultural waste
- End-of-life Renovation: apparel waste, textile waste - recycling.

### Bio Waste



### Textile Waste



### Plastic Waste



### Agricultural Waste



Editor's Pick

**Desserto**  
Mexico

Luxury vegan leather made with nopal (a cactus), cruelty free, without any toxic chemicals, phthalates and PVC.

**Renewcell**  
Sweden

Recycling clothes by dissolving cotton and viscose, turning them into Circulose® - a natural, biodegradable raw material.

**Plastic Bank**  
Canada

Turning collected ocean plastic into Social Plastic® which can be easily re-integrated into products and packaging as part of a closed-loop supply chain.

**Circular Systems**  
USA

Waste-to-fiber platforms, offering break-through solutions for the most efficient management of textile and agricultural waste streams.

## Product Digitization.



The widespread use of digital consumer touchpoints, exacerbated by the COVID pandemic, has pushed fashion brands toward mass digitization of their product catalogues. New technologies, such as blockchain and 3D printing, can increase product value for consumers.

### DIGITAL PRODCUTION

- Traceability, blockchain
- 3D printing, digital modeling

### DIGITAL DESIGN

- Digital twins, 3D design
- Augmented reality (AR), virtual reality (VR)
- Gaming

#### Traceability



**TextileGenesis**  
Hong Kong

fibercoins™ creates the ability to transparently trace & manage the textile products across the apparel supply chain.

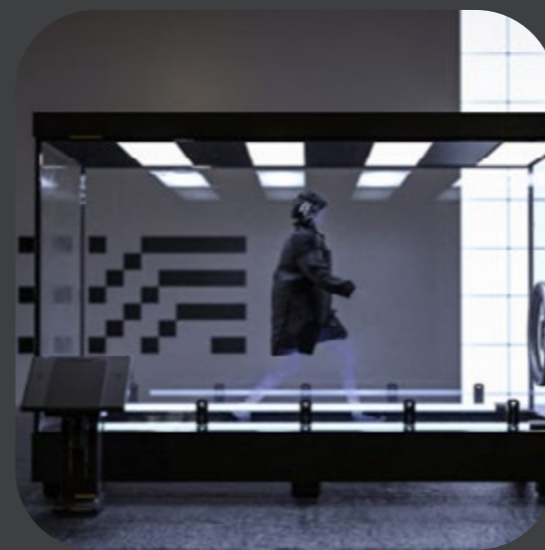
#### Blockchain



**Ethereum 2.0**  
Switzerland

Next generation of Ethereum – decentralized open source blockchain featuring smart contract functionality, more secure and sustainable.

#### 3D Design



**M–XR**  
UK

Developing the next generation 3D capture system for accurate and automatic 3D conversion of the real-world.

#### 3D Printing



**Carbon**  
USA

Carbon® Design Engine can fabricate latticed designs with excellent detail and surface finish at any volume in a wide range of rigid and elastomeric materials.

Editor's Pick

## Optimization. Upcycling.



New customers' demand is driving large corporations to invest in recovery and upcycling projects. According to the 2019 survey of apparel company chief procurement officers by McKinsey, increasing the use of recycled fibers is one of four innovation-led disruptions likely to prevail throughout the industry by 2025.\*

- On-demand production, product automation
- Upcycling textile and apparel
- Recovery
- DeadStock mManagement: minimize inventory, return

#### Automation



**UNMADE**  
UK

An operating platform that enables fashion and sportswear brands to connect demand to product and production.

#### On Demand



**INTURN**  
UK / USA

The global enterprise software to provide a system of record that manages slow-moving or excess inventory across industries.

#### Recovery



**QUEEN OF RAW**  
USA

Marketplace to buy & sell unused textiles, keeping it out of landfill & turning pollution into profit.

#### Upcycling



**Bank & Vogue**  
Canada

Sourcing used or unsold clothing around the world from returns at retail stores, donations, unsold thrift items and more for wholesale in bulk.

Editor's Pick

## Digital Retail.



Retail is radically changing. Fashion brands are increasingly working with virtual and augmented reality providers to digitize their physical stores. Social media promotions are pushing new boundaries.

### PHYSICAL PRODUCTS

- Conscious shopping: make sustainable shopping easy
- Retail optimization: on-demand sales, customization, smart sizing, inventory optimization - retail tech: smart store, 3D virtual showroom

### VIRTUAL PRODUCTS

- Virtual shopping: mixed reality (XR)

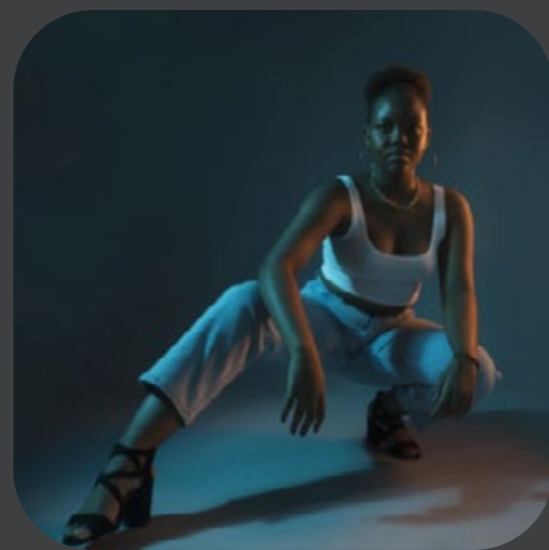
### Conscious Shopping



**Renoon**  
Netherlands

The Search Platform empowering conscious shoppers to find fashion among the World of Sustainable options available online.

### Customization



**UNSPUN**  
HongKong / USA

A robotics and digital apparel company building custom jeans for each consumer, on demand.

### Digital Showroom



**ByondXR**  
USA

Enabling the creation of new breed of virtual stores and virtual showroom experiences, with new dimensions of online experiential retail.

### Virtual Shopping



**Genies**  
USA

Virtual marketplace where celebrities can sell exclusive digital goods to fans, followers, and consumers who want to adorn their own avatars with digital items.

Editor's Pick

## Digital Circularity.



Companies are embracing circularity. An increasing number of luxury brands are implementing take-back programs to maintain control of products after their life cycles end, a problem that has always been an issue in luxury fashion.

Business to customers - resale, rental, circular retail - take-back programs

Customers to customers - swap, borrow, sharing

Circular packaging

### Resale Tech



**REFLAUNT**  
UK

Reflaunt gives brands the technology to build and reclaim the secondary market.

### Take Back Solution



**Trove**  
USA

End-to-end technology and logistics platform through white label solution for brands ready to take back secondary market.

### Circular Packaging



**RePack**  
Finland

Reuse as a service, where packaging is reusable and returnable, and users rewarded. The end of trash.

### Circular Retail

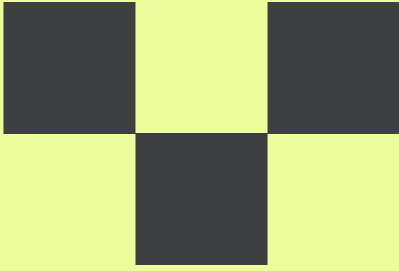


**SPIN by lablaco**  
France / Singapore

Shaping the next-generation lifestyle of Circular Fashion for everyone in a global platform powered by Blockchain.

Editor's Pick

# UN SDGs x CFS Action Goals 2020.





## Introduction.

### **Plug-and-play global collective actions to exercise scalable, measurable circular fashion practices.**

Big things start small. To drive the whole industry towards a digitized circular fashion industry, we must maximize the resources, starting with simple, easy-to-implement practices.

For this reason, the Circular Fashion Summit set three focused, measurable goals to be achieved collectively within 12 months. A team of global industry insiders, called catalysts – a group of industry, academic and governmental organizations and individuals – will ensure the necessary resources, connections and knowhow are available for everyone. CFS will then set three bigger, more ambitious goals for the ensuing 12 months. This process will repeat in additional 12-month cycles.

The tech partnership with lablaco will enable CSF to achieve its goals with measurable impact. lablaco's plug-and-play, circular retail tool is powered by blockchain to digitize and connect items (IoT) throughout the value chain. It allows companies to trace and monitor its activities, activating circular business models such as take-back programs for resell, rental, swapping and manage upcycling in a data centric ecosystem of services.

**“Definitely ambitious goals, but achievable, as they should be!”**

**Christine Goulay**  
Head of Sustainable Innovation at Kering Group

## About Circular Fashion Summit Goals.

Each year, the Circular Fashion Summit by lablaco sets up three key actions in design, technology and sustainability, to achieve together with CFS catalysts and community around the world, supporting United Nations Sustainable Development Goals 2030.

All these collective efforts will be gathered, presented as best practices in the annual Circular Fashion Report, shared publicly with the knowledge and shining a light on the individuals and organizations that are creating collective measurable impact and making fashion circular.

## About UN Sustainable Development Goals.



### **Transforming the world: the 2030 Agenda for Sustainable Development.**

It's a plan of action set by the United Nations for people, planet and prosperity and to take the bold and transformative steps which are urgently needed to shift the world onto a sustainable and resilient path. The 17 Sustainable Development Goals and 169 targets demonstrate the scale and ambition of this new universal Agenda.

Through its three, initial action goals, CFS is focusing on Global Goals 9, 10 and 12.

## Why CFS opted for these three global goals as the first steps toward circular fashion?



### SDG Goal 10 Reduce Inequalities

10.2 By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status

By setting three global goals, CFS is aiming to demystify circular fashion and provide a user friendly blueprint for individuals and businesses to follow. The goals are supposed to also foster a sense of accomplishment, encouraging both groups to continue their efforts.

### Prioritizing spare products for a traceable socially good use.

Reducing inequalities and ensuring no one is left behind are integral to achieving the Sustainable Development Goals. Inevitably, COVID-19 has deepened existing inequalities, especially for older/ disabled people, children, women, migrants and refugees.

Figure 18 – Circular Fashion Innovation Framework



Source:un.org/sustainabledevelopment/



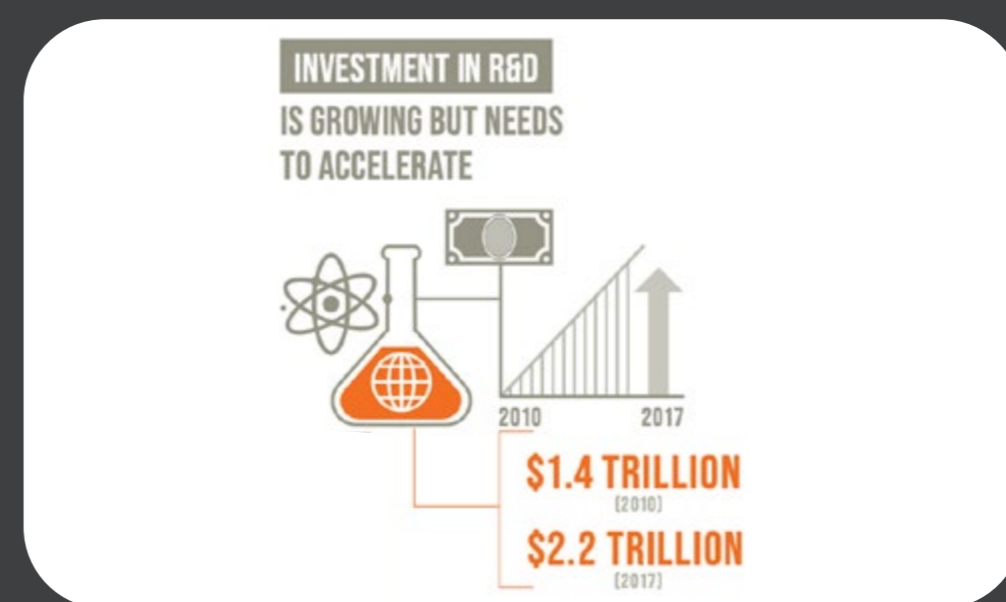
### SDG Goal 9 Industries, Innovation and Infrastructure

9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities

### Accelerating digitization over the whole value chain for transparency and traceability.

Inclusive and sustainable industrialization, together with innovation and infrastructure, can unleash dynamic and competitive economic forces that generate employment and income. They play a key role in facilitating international trade and enabling the efficient use of resources.

Figure 19 – Circular Fashion Innovation Framework



Source:un.org/sustainabledevelopment/



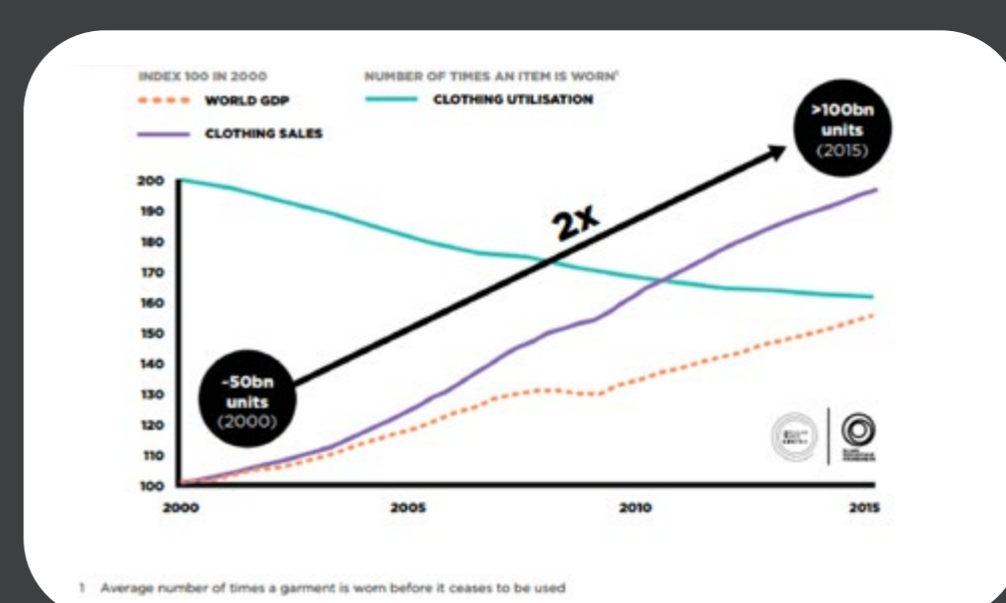
### SDG Goal 12 Responsible Consumption and Production

12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse

### Increasing use of items to dramatically reduce waste.

Worldwide consumption and production – a driving force of the global economy – use the natural environment and resources in ways that have a destructive impact on the planet. The fashion industry is currently one of the world’s most wasteful industries.

Figure 20 – Growth of clothing sales and decline in clothing utilization since 2000



Source: Ellen Macarthur Foundation, Euromonitor International Apparel & Footwear 2006 (volume sales trends 2005-2015); World Bank, World development indicators - GD (2017)



CFS Goal 1  
Design Upcycling  
for Good



### 1,000 x Upcycling

We are providing 1,000 pairs of upcycled, recycled, or sustainably sourced sneakers to underprivileged children in Kabul, Afghanistan. The initiative is using sports to empower children, with blockchain technology helping us trace the use of the sneakers and measure the initiative's success. We believe that education and sports can effectively help kids stay healthy both mentally and physically. We intend to share more positive stories within a global conversation.

## Why upcycling sneakers to reduce inequalities?

**INEQUALITY**  
Education of children is the most important development in all human communities. Nearly half of children in Afghanistan – 3.7 million children between ages of 7-17, are out of school due to conflict, poverty, child marriage and discrimination against girls.

**SOCIAL EMPOWERMENT THROUGH SPORTS**  
Physical activity benefits children's physical and psychological health and overall development. More specifically can have even greater impact in these areas of growth while improving social skills.



Source: Afghanistan Libre, Nike

## Whats the Impact?

In addition to donating 1,000 pairs of sustainably sourced sneakers, we will provide local kids with sports coaching through the local NGO – Afghanistan Libre -- of which Nadia Nadim, the Afghan-Danish football player from the celebrated French first division club Paris Saint-Germain is spokesperson of honor. We will use the lablaco IoT blockchain system for good, to trace the stories of the children who receive the sneakers and how they are being used. Providing transparency of donations.



1,000

Afghanistan 12-18 yrs old children empowered through Sports



32K

Estimated CO2 saved from landfill

## Progress of the Goal.

60%

Commitment Rate

- (V) Afghanistan children: Thanks to this partnership with Afghanistan Libre, we will provide children at seven schools with sneakers and training sessions
- (V) Mentors: Football player, Nadia Nadim and the Danish national women's team
- ( ) 1,000 pairs of upcycling / sustainably sourced sneakers: sourcing in progress
- ( ) Final execution



CFS Goal 2  
Product  
Digitization



10,000 x Tokenization

By tokenizing 10,000 sustainably manufactured fashion products high in the supply chain, we aim to accelerate the digitization of the fashion industry. We aim to create a more transparent and circular industry that uses blockchain technology to allow consumers to trace product information, environmental impact and digital ownership.

Why digitize products to renovate the industry?

TO IMPROVE WHAT CAN BE MEASURED.

Digitizing and connecting products is fundamental for measuring performance over the whole product life cycle. It is the first step for manufactures, brands and retailers to become circular.

TRACEABLE TRANSPARENCY AND CIRCULARITY.

“Transparency and traceability are the enablers of change” Leslie Johnston, Chief Executive Officer at Laudes Foundation. It helps to optimize available resources, facilitating the reuse of materials, authenticating products, and ensuring fair and sustainable trade. Traceability allows companies to take control of their products’ carbon footprints.



Source: M-XR, Vogue Italia, loDF, Adobe, MFT

Whats the Impact?

Through this goal, we are guiding and supporting designers and corporate brands to create sustainably-made IoT products. We have connected them with innovative technology companies showcased at Innovation Hub, including Unity, Renewcell, Plastic Bank, Circular Systems and Project 2030. Ultimately, lablaco provides the data-centric circular retail system to enable end-to-end traceability throughout the supply chain and beyond, including firsthand and secondhand users. It also offers product life-cycle analysis, which leads to understanding and controlling the environmental and social impact of any type of product.

Blockchain technology is proving invaluable in helping companies trace the production, transport, sale, use and resale of products. For every industry, traceability fosters a smarter, safer, more connected and efficient global supply chain. It is the key to a more sustainable world.

Progress of the Goal.

60%

Commitment Rate

(V) Match-making Impact Design Hub brands with sustainable material companies to exercise

(V) Encourage brands to provide supply chain information to customers, which will be traced on blockchain

( ) Pilot Products Ideation - In Progress

( ) Final Execution - In Progress



**CFS Goal 3**  
Waste  
Reduction



### 100,000 x Recirculation

By encouraging recirculation of 100,000 fashion items through swapping, sharing, renting and reselling apparel, shoes and accessories, we aim to increase their lifespans and to save an estimated 2,000 tons of CO2 and 3,000,000 liters of water, and to lessen dependency on landfills. Recirculation is the most effective way to lower our fashion footprint.

## Why recirculate products for responsible consumption?

### THE MOST EFFECTIVE SOLUTION FOR EVERYONE

By (re)using secondhand products through resale, swap, borrow and rental, we can reduce environmental impact. Recirculation of garments and shoes can reduce CO2 emissions, and the use of water, pesticides, fertilizers and waste materials that are manufacturing byproducts. About 600 kilos of used clothes will cut 2,250 kilos of CO2 emissions, save 3.6 billion liters of water and enable the planting of 144 trees.<sup>23</sup>



Source: SWAROVSKI, The Lane Crawford Joyce Group, British Fashion Council, Ukrainian Fashion Week

## Whats the Impact?

In order to make wider influence on responsible consumption, we set up the toolkit to guide and support retailers and organizations to connect and recirculate items by activating circular business models, such as take-back programs for resale, rental and swapping, igniting circular consumption powered by blockchain all over the world. Some catalysts already started to make a huge impact: The Lane Crawford Joyce Group, British Fashion Council, Global Fashion Exchange, Swapchain and many others.

Furthermore, CFS also partners with catalysts from Unilever, Who Cares Chronicles, Fashion Revolution to share the Care Guide and promote product care to extend the life cycle of products.



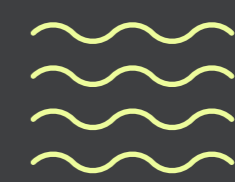
**100K**

Products Recirculated



**2K+**

Estimated tonnes of CO2 saved from landfill



**3M+**

Estimated litres of water saved from landfill

## Progress of the Goal.

**290%**

Commitment Rate

(V) Creating the Swapchain toolkit to activate instantly recirculation in collaboration with Global Fashion Exchange

(V) Sharing the Care Guide in collaboration with Who Cares Chronicles

(V) Activate local swapping, resale, and circular fashion events to promote responsible consumption - many to come

# Acknowledgements and Support.

## Main Partners.



## Catalysts.

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Head of Sustainable Innovation at Kering

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Founder at Bettter

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Chief Representative France at London & Partners and Founder at WHO CAREs!?! Chronicles

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Founder of Patrick McDowell

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# Endnotes.

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CIRCULAR FASHION  
SUMMIT  
by lablaco

Circular Fashion Summit is the global Collective Action summit for fashion, gathering innovation leaders from design, technology and sustainability to share knowledge, and more importantly, to ignite immediate action on the three CFS Action Goals with an international team of Catalysts from Unilever, Unity, H&M, Global Fashion Exchange, Lane Crawford, Circular Systems, Kering, and more than 50+ cross-industry companies and organizations globally.

Keep updated on the progress of the three CFS goals:  
<https://www.circularfashionsummit.com/the-goals>

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