

LEADING CIRCULAR

*Pathways for Evolving Apparel and Textile
Businesses from Linear to Circular*



SEPTEMBER 2020

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About The
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CHOOSING A NEW FUTURE

In early March we had planned to release our report on the power of circular business. It combines research that The Renewal Workshop has conducted over the last four years with examples of how circular practices are being used across the apparel and textile industry.

Then, as the severity of the pandemic hit us all, big projects that we'd been working on for months stopped instantly. Every priority shifted and our focus became two-fold: stabilizing our business to continue to serve our brand partners and keeping as many people employed as possible. In our case, that meant acting fast to shift some of our operations to gown production for healthcare workers as part of a public/private partnership being spearheaded by a local nonprofit. As we started to shift our operations back to a new "normal", the world was rocked again. This time a crisis centuries in the making was laid bare for us all.

On May 25th, George Floyd was murdered by a white police officer while other police

officers stood by and enabled this heinous crime. The profundity of this horrific act set off what may be the largest movement in U.S. history. At its peak on June 6th, the Black Lives Matter demonstrations brought a half a million people into the streets to protest systemic racial injustice in more than 550 locations across the country.

This movement creates for us a time of reckoning, a time to recognize and reform systems built on the principles of white supremacy. It is no secret, our industry has deep roots in unjust systems. The call to us all is to come to terms with our complicity in creating, sustaining and perpetuating exploitation of people and the planet. We have work to do. The hope that has come through the despair of 2020 is that as individual companies and as a collective industry, we are beginning to do the work. Like all of you, the first half of 2020 has forced us to take a step back and look at our work in a different light. What still mattered? What matters most right now? What are

we going to change for a better future for all? These are the questions that face all businesses, big and small. No one is immune to the impacts of 2020.

When we started working on this report, we were addressing a single acknowledged crisis: climate change. We knew from our experience that the drive for most apparel and textile brands to explore a circular model came from their sustainability teams. For good reason, circular is designed to address the surmounting problem of a finite planet running out of resources and the devastating impact of waste on that finite planet. That is still true.

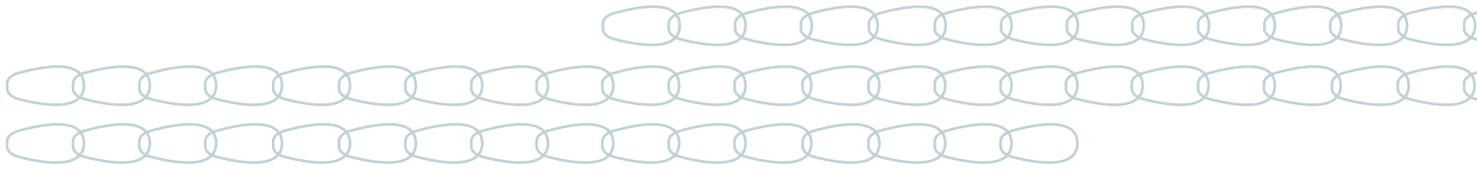
What is also true, and even more critical for CEOs to understand, is that circular is about the fragility of the economic model that linear businesses are built on. We are living through multiplicity of crises caused by systemic abuses of people and the planet. This is our wake up call. All of these crises are interconnected and they are not going away.

The world will forever be altered by the experiences of 2020. How this time of global introspection will change things has yet to be determined but there is an opportunity and a responsibility to reflect on the choices we can make. What behaviors, business practices, and economic systems do we

want to hold on to and how do we use this disruption to let go of what no longer serves us? What can we do to remake our businesses to be regenerative, inclusive, and diverse to ensure they are resilient in any crisis? Where can we realign our practices to be more just and fair to protect the people who create the value that the economy runs on? What steps can we take to reverse the damage we have already done and to protect this planet that we rely on?

All apparel and textile brands are experiencing the consequences of a linear model that no longer serves our community or our industry. We're seeing that evidenced in loss of revenue, furloughed employees, excess inventory, and disrupted supply chains. As every CEO is looking to solve both short-term and long-term problems, we invite you to consider circular.

The devastation 2020 has brought was unimaginable just a few months ago. We believe the recovery we can create together will be equally unimaginable because we know our industry has the power to make a world-altering difference. **As uninvited and unexpected as the last months have been, this is our moment to lead. The choice that we all have to make now is how we show up to the challenge.**



THE FUTURE OF BUSINESS IS CIRCULAR



Welcome from The Renewal Workshop Founders

Nicole Bassett and Jeff Denby

Since the Industrial Revolution, our economy has been based on a linear system, a model that takes raw materials, makes things, sells them to people, and when the consumer is done using them, the products are thrown “away.” This system of “take, make, use, and waste” further developed into practices of planned obsolescence that drive design, manufacturing, and sales decisions across almost everything we make. While the linear system drove growth, it is built on a fundamental deception that undermines economic and environmental stability. It assumes, falsely, that there are endless resources when we live on a finite planet. It assumes that we can just throw things away when, in reality, there is no “away.” A business

model that once spawned revolutionary change is now the source of sweeping destruction. It isn’t just an environmental burden; it is something we pay for in many ways. This is what a centuries-old mindset renders: a dying economic model that is killing our planet.

Our industry has a choice to make. Do we hold on to the old ways that no longer serve us, or do we act now to innovate and lead our businesses differently?

The future of business is circular. Circular is a new system that uses a holistic approach to create economic and environmental resilience. We take raw materials from a

THIS IS OUR GENERATION'S BUSINESS REVOLUTION; IT IS OUR CHANCE TO HAND THE FUTURE A REGENERATIVE ECONOMY.

responsible source, make things, sell, rent or share them, use and reuse them over and over, and by so doing, move them into different modalities and forms. There is no waste, only value being captured in new ways throughout the lifetime of a product.

From inception, a circular business takes into consideration where a product comes from and where it will go. Circular business models transform the ideas of waste, use, and value. This is our generation's business revolution; it is our chance to hand the future a regenerative economy.

Even before the COVID-19 pandemic, our industry was in transition. Changes of every kind have now been thrust upon all of us. It's a scary and challenging time to be a leader. While so many things feel out of control, it is important to recognize that we still have choices. We have opportunities to reshape financial, production, and technical

systems. We can foster growth mindsets and reward teams for embracing innovation and experimentation. We can build new, long-term relationships with customers instead of relying on expensive transactional acquisition strategies. This is your chance to shape the future of your business while recovering from this crisis and preparing to withstand the next one.

There is no single roadmap for transitioning one's business model from linear to circular. However, there are tested pathways that you can select to bring circular practices inside your company in ways that align with your culture and business priorities. Now is the time to invest in these experiments. There is no going "back" to business as usual. The faster we accept that fact, the stronger our chance at recovery. The massive disruption of this crisis requires a new kind of response from leaders. We have to create more resilient,

ethical, and holistic systems to protect our employees, our economy, and our ecosystem.

We started The Renewal Workshop to solve hard problems and to create new systems that do what is good and right for people and for the planet. From the beginning we believed it was essential to integrate the economic reality of growing a healthy business with the ethical responsibilities of environmental stewardship. We believed that running a circular business ourselves was the best way to serve our employees, our customers, our brand partners, and our investors. Instead of issuing a traditional annual report with a scorecard of our accomplishments, we invested in Leading Circular with the goal of serving the industry. We debated the best time to share this work with the broader community. With so much trauma, fear, and uncertainty dominating our daily lives, was now really the right time to issue a report on innovation and experimentation in circular? Ultimately, we decided that sharing how our partners have tested pathways to circular,

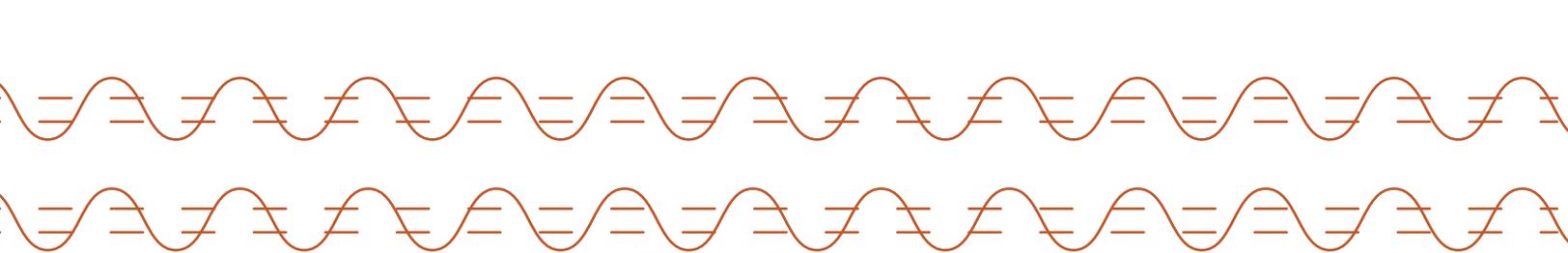
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as well as disseminating findings from our research, was the best way to serve the industry we love. As leaders struggle to decide where to invest and what to cut, the research and experiences we've gathered over the past four years could be helpful right now. In every way, we have endeavored to create a

business that operates as a partnership. This report is another reflection of that commitment. Our hope is that circular can serve you in your recovery.

It's important we all take this time to appreciate the people with whom we live, work, and share this world. We are grateful to everyone who has supported The Renewal Workshop in our journey. We especially want to thank all the contributors to this report and the brands for their willingness to share their circular initiatives with the industry.

For everyone reading this, we wish you safety, love, and more and more moments where light breaks through.



WHY LEADING CIRCULAR 2020 MATTERS



Partner Perspective from The Ellen MacArthur Foundation

Andrew Morlet
Chief Executive

In today's economy, disposability is built-in. Almost everything is designed to be thrown away. In fashion, production has doubled in the last 15 years while use-rates have dropped by 40%. Less than 1% of used clothing is turned into new clothing. This "take, make, waste" approach is run on fossil fuels and does not manage resources for the long term. As well as representing lost opportunity for the economy, it is the root cause of the climate crisis, biodiversity collapse, and pollution.

The circular economy is a framework for generating long-term prosperity while leading the response to these global imperatives. Take climate, for example. While 55% of

greenhouse gas emissions can be eliminated by switching to renewable energy, the remaining 45% comes from how we make products and manage land. We have already identified circular economy solutions that can halve those emissions - the equivalent of eliminating all global transport emissions - by reducing demand for carbon intensive materials, such as steel and cement, and using regenerative methods to store carbon in the soil. This does not rely on costly and unproven technology and results in huge economic benefits, contributes to meeting other Sustainability Development Goals, and can increase the resilience of supply chains and farmland to the effects of climate change.

Businesses are uniquely positioned to adopt these solutions. They can act globally and lead systems-level change at speed. In fashion, leading companies are already on an innovation journey. VF Corp has been expanding recommerce and rental initiatives, such as The North Face Renewed. H&M will soon retail a garment made from Re:newcell's innovative material using recycled cotton. But for the industry to make a decisive shift, several elements need to be in place. Creatives need to be on board because they shape products, determine how they are distributed, and stimulate the desire for them. The availability of circular products made from safe and renewable materials needs to increase hugely. Clothing needs to be used more and designed never to become waste. The industry needs to align behind a shared definition of what good looks like.

This Leading Circular 2020 report helps stimulate this wider transformation. It not only makes the case for why companies should embark on it, but crucially tells the inspirational stories of those already travelling down one of the many paths leading to a successful transition.

To make good strategic decisions about these pathways, companies need the right data, not just empty claims about impact. But to date, measuring the circularity of a business, not just its products, has been difficult and companies are finding it hard to fully capitalize on opportunities. Tools such as Circulytics help businesses understand their circular economy performance, track progress, and identify areas for improvement. Using them is a powerful way to quantify how a company is moving beyond measuring revenue, profit, and shareholder value to addressing some of the world's most pressing challenges.

When we talk about the linear economy at the Ellen MacArthur Foundation, we urge others not to blame the public and not to focus on consumer education and changing behavior because that is not the answer. Instead, we press companies to offer better solutions. Give people better choices. Make it easy for them to be part of a better system. By providing a professional, open-access platform that connects people to innovative companies in a new way, The Renewal Workshop, a true partner in the move from linear to circular, is doing just that.

A NEW SUPPLY CHAIN EMERGES

RETHINKING “WASTE”

Fashion generates 4% of the world’s waste each year.

- Pulse of the Fashion Industry, 2017

The first step to leading circular is to ask: “What is waste?” The answer may surprise you.

Over the past four years, The Renewal Workshop has conducted more than 50 product assessments for brands across the industry ranging from high fashion to specialty technical products. The purpose of the assessment is to evaluate what each brand designated as waste, things that they considered to have no further financial value. These are products that have been deemed unsellable for a variety of reasons including customer returns that could not be restocked because

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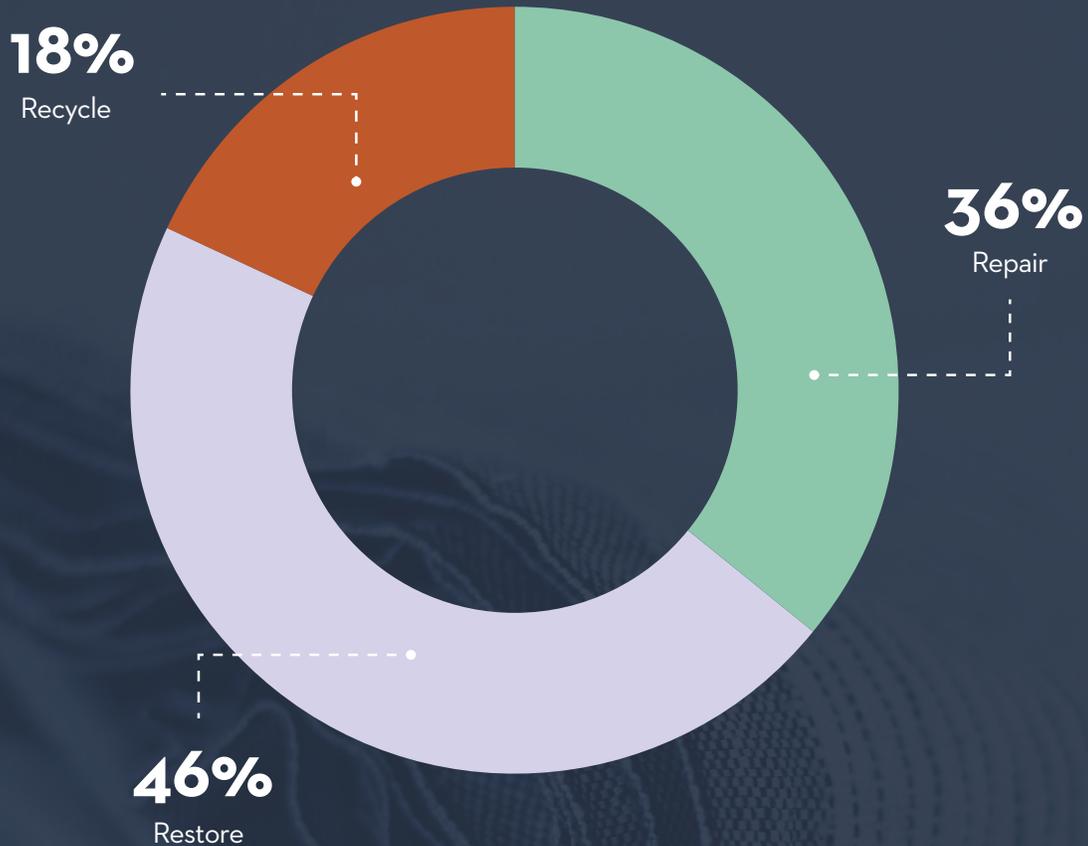
they were dirty, damaged, used, or returned at the end of the season. They also include warranty returns, take back programs, and items damaged during shipping, warehousing or in the store. Most of the products in our assessments had already been written off as losses representing both material and financial waste. However, our aggregate product assessment data challenges those assumptions and practices around what is,

and is not, sellable inventory.

Our research shows that 82% of products classified as waste can be renewed and resold.

The product assessment research

redefines what waste is and creates the potential for a new regenerative supply chain for brands. There is more revenue potential in the products that have already



OF ALL THE GARMENTS THAT WERE PROCESSED IN PILOT PHASE, NEARLY HALF COULD BE RESOLD “LIKE NEW.” ANOTHER 36% COULD BE RESOLD WITH A REPAIR. ONLY 18% OF GARMENTS ORIGINALLY DEEMED AS “WASTE” ACTUALLY NEEDED TO BE RECYCLED.

been created than brands are realizing.

Of the total products, 46% only required light or minor repairs to restore them while the remaining 36% required more substantial or noticeable repairs. By applying the renewal certification process to these products previously considered waste, brands can sell them to customers.

Of the thousands of pounds of product that contribute to 4% of the world's waste each year, our research shows only 18% needed to be downcycled, upcycled, or recycled. Once we shift our mindset from "it is waste" to "it has value," products can be managed in a way that maximizes their use and reduces their negative impact on the environment.

The most compelling findings from our research are the scalable solutions for the vast majority of issues that are sending products to landfill. We can address the problems and connect these renewed products to a growing consumer base. The emergence of the recommerce market aligns with the availability of renewal systems to clean, repair, grade, certify, and productize renewed options. Brands have the opportunity to develop a rich source of new revenue through new product types and price points while reducing new inventory investments and waste management costs.

Until recently, brands faced a common set of constraints and the same set of limited linear options for inventory deemed unsellable. These included landfills, incineration, donating locally and overseas, or paying to manage and store product.

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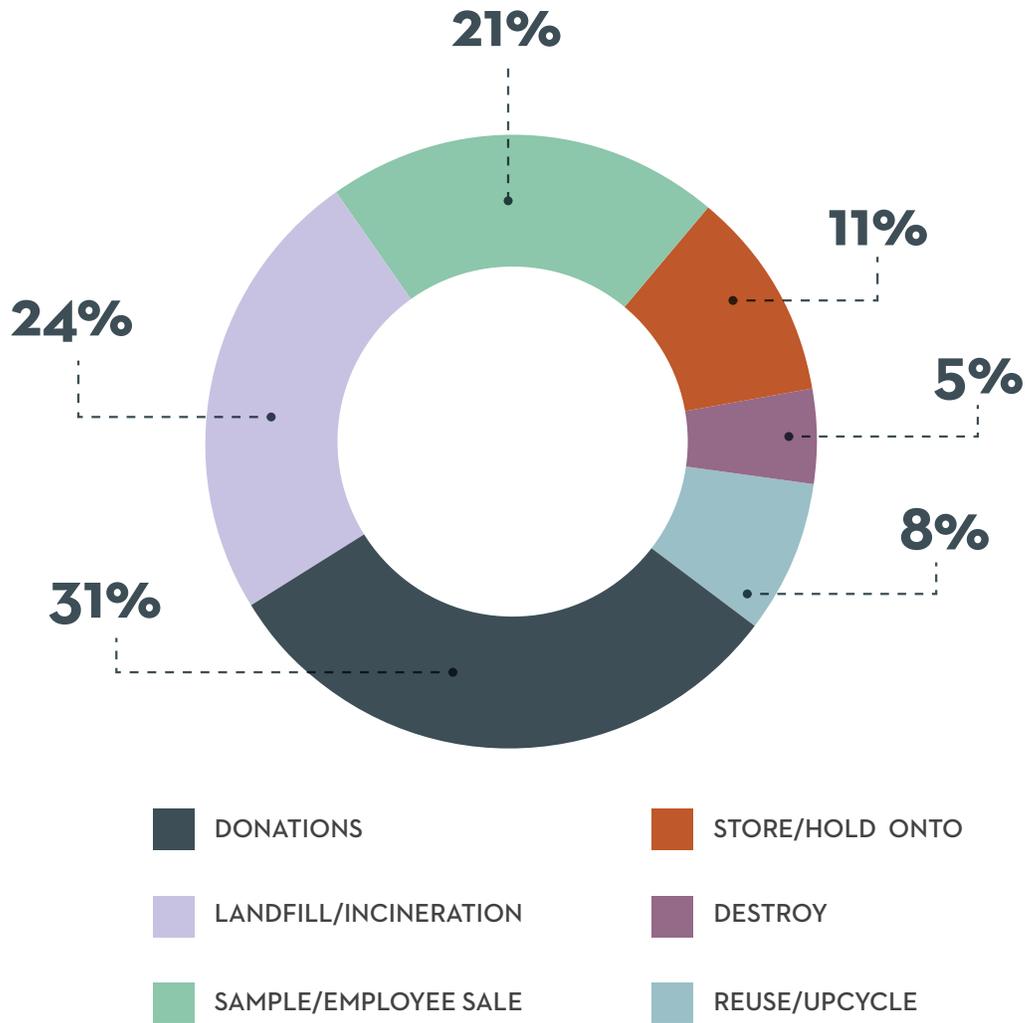
26% DIRT/ STAINS

21% HOLES

9% TEARS

7.5% BROKEN ZIPPERS

Current Pathways for “Waste”



The linear solutions of the past are no longer the only options for brands. There are new opportunities to use circular systems to recoup financial value from existing products. With an aggregate finding that 82% of unsellable inventory is actually resalable, brands are sitting on their next supply chain. The choice is whether to invest resources in linear methods like warehousing, incineration, and using landfill, or redirecting those financial resources to renewal processes and recommerce programs that can generate new revenue and new customer relationships.

CIRCULAR PATHWAY: RECOMMERCE



Partner Perspective from VF Corp

Barruch Ben-Zekry
Senior Director, New Business

CIRCULAR BUSINESS IS GOOD BUSINESS

Brands of the future will be purpose-led and at VF, our purpose drives us. Our purpose is to power movements of sustainable and active lifestyles for the betterment of people and our planet. We have tasked ourselves with delivering growth and value through our purpose. Our commitment to circular business models and the way we bring them to market exemplify purpose-led growth. However, before making the decision to double down on circular and investing our time and resources, we assessed the costs, benefits, and implications of doing so.

Often the first measure that we use to understand a new investment's trajectory is to get a sense of the trade winds that are either propelling it forward or holding it back. Circular models have some of the best tailwinds in the apparel and footwear industry today. According to thredUP's 2019 resale

report, over the last three years secondhand markets grew 21 times faster than the overall retail apparel market. Not only that, we see its greatest growth coming from millennials and Gen Z buyers, demographic groups in which we seek to grow.

Seeing tailwinds in a market is great but understanding why they exist is critical to capitalizing on them over the long term. Through our own research, and that of others, into the motives and need-states that accompany circular shopping, we can see user value propositions that will continue to propel resale and other circular models forward.

THE “EW” FACTOR IS TURNING INTO A FIRST-RATE CUSTOMER EXPERIENCE

Resale, rental, and other non-first sale models had a bit of an “ew” factor when applied to apparel and footwear. There are a number of reasons why this was the case but

probably most pertinent was the lack of value-add cleaning, repair, and fulfillment services. The traditional thrift store environment was characterized by clutter, dust, and other sensory experiences that felt old and tired. Today, the fastest growing resale and rental players have adopted a high-touch, high-value customer experience that sheds the old and tired feeling for one of energy and purpose that rivals, and in many cases beats, first-sale experiences.

With our recommerce offering **The North Face Renewed**, we aim to create a first-rate customer experience. We only sell products that are cleaned to a “like-new” standard and whose condition we can stand behind with our one-year warranty. Our ecommerce environment is built to help customers easily navigate their resale experience while at the same time telling Renewal’s story. We don’t skimp on the details either. The unboxing and on-product experiences include 100% recyclable packaging, special sewn-in labels, and branding that are all unique to Renewed.

CIRCULAR WINS WITH EXPLORERS

Many shoppers enjoy the “thrill of the chase” or looking for something unique that not everyone has. Resale has the capacity to deliver the added benefit of higher quality items and better brands for the same price. The thrill of finding something unique is one of the strongest propositions in resale businesses, which is often filled with one-off items. While today’s resale market is limited by supply, companies are getting smarter about how to mine the closets of customers for the items best suited for resale, enabling a cost-effective replenishment strategy that will keep shoppers coming back.

On our Renewed platform we’ve built an entire shopping experience catering to the thrill of the chase - **The One and Only: One Size. One Color. One Chance**. By merchandising directly against the search-and-find need state, we’re finding it easier to introduce shoppers to resale while also catering to their shopping needs.

THE SUN IS SETTING ON OVER-CONSUMPTION

Whether for environmental reasons, to de-clutter, or something else, a meaningful decline in the appeal of fast fashion and other forms of over-consumption has begun. However, people's desire for newness and variety in their apparel and footwear is still strong. Enter rental. Not only do apparel and footwear rental services mimic the style, variety, and affordability of fast fashion, they're typically able to do so at much higher product qualities and with stronger brands. While customers slow their consumption, rental businesses will allow them to bring variety back into their lives guilt-free and clutter free.

We've also begun capitalizing on the rental market with a more utilitarian product category, luggage and bags. With our Kipling Brand in Europe, we've recently launched a luggage rental pilot called [Rent Your Kipling](#) that allows Londoners and others across Europe to de-clutter their living spaces and save money. Rather than purchase new luggage, they can spend on travel instead.

The tailwinds driving circular models are speeding up and the value propositions that support this broader trend are strong and rooted in real customer problems. We're going to continue to invest and grow circular models at VF.



CIRCULAR PATHWAY: RETAIL RECOMMERCE

The future of the in-store retail experience is more uncertain today than ever. With “Closed” signs hanging on every door, no one knows what the new reality will be when we can reopen. We know it will be different, however, and because of that there is an invitation to reimagine how to use in-person store experiences to engage customers.

One path forward is to reimagine the store as a blended experience that combines sales of new and renewed products with rental options, take back programs, and pop-ups that integrate online sales to augment in-store inventory. The circular store of the future can operate as a showroom, service center, and sales channel inside existing footprints with creative modifications to set ups and personnel retraining.

During the last few years several of our partners have engaged in successful circular experiments with renewed sales, take back,

and pop up shops. One of most promising experiments took place across nine cities on two continents by one of the world’s largest global fashion companies. H&M is often used as the exemplar of the fast and disposable fashion trend that drives an over-consumption model. However, there’s another way in which this Sweden-based company is emerging as an example for the industry. It is holding itself to a higher standard and actively exploring how to be a successful multinational company that reduces its negative impact on the planet.

Working towards a sustainability commitment and a vision to become fully circular, H&M launched a test collection of restored clothes under their COS brand. COS was launched in 2007 to offer a line of clothing made to last beyond the season. These essentials for the modern wardrobe are driven by the mantra “buy better, keep forever.”

The COS Restore Collection was sourced from both the supply chain and clothing returned by shoppers. In the Fall of 2019, the new collection was available in Berlin, Stockholm, and Utrecht and by early 2020 it was expanded to six other stores in Europe and launched in the US in select stores. COS also provided in-store education about the problems of a linear economy and the environmental impact of products that are given a second life.

Laura Coppen,
Circular and
Sustainable Business

Development at The Laboratory, H&M Group, offers a vision for the future of this work. “The ‘Restore’ collection is an important test to stretch our thinking around new Business Models for a Circular Economy,” she said. “We have a big responsibility with the scale and impact we

currently have on the environment and this test is one example of many where we are exploring new solutions. It is essential we ideate new solutions for a lower impact on our environment whilst offering customers quality, beautiful products that last.”

WE HAVE A BIG RESPONSIBILITY WITH THE SCALE AND IMPACT WE CURRENTLY HAVE ON THE ENVIRONMENT AND THIS TEST IS ONE EXAMPLE OF MANY WHERE WE ARE EXPLORING NEW SOLUTIONS. IT IS ESSENTIAL WE IDEATE NEW SOLUTIONS FOR A LOWER IMPACT ON OUR ENVIRONMENT WHILST OFFERING CUSTOMERS QUALITY, BEAUTIFUL PRODUCTS THAT LAST.

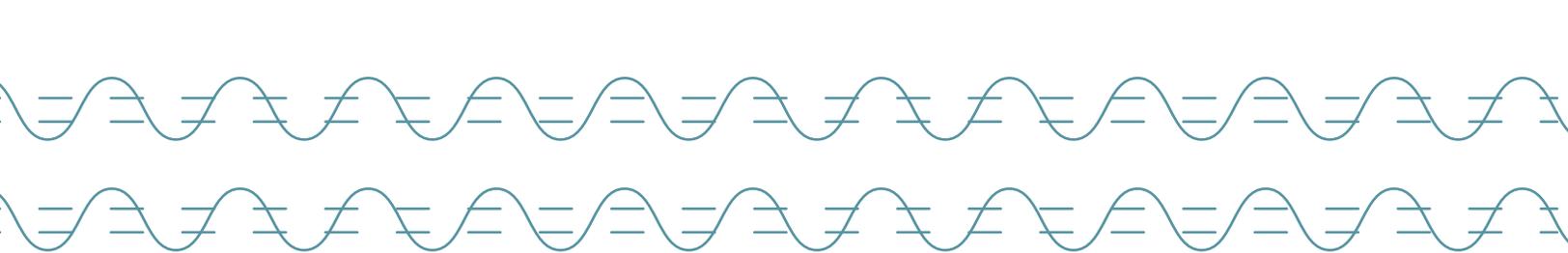
Restore is just one of several circular initiatives that H&M is pursuing as it leads by a new kind of example. All brands with brick and mortar stores have especially difficult challenges to face in the post-Covid environment. Some of the experiments undertaken before the pandemic

around circular education, products, and services offer pathways for a reimagined retail experience that can reach customers in new ways as we turn those “Closed” signs around and reopen stores around the world.

RECOMMERCE TIMELINE

Timeline of recommerce growth





CIRCULAR PATHWAY: RENTAL

Philips used to sell light bulbs. Now it sells the service of light. People don't want to be responsible for owning, managing, and disposing of light bulbs anymore, partially because new technological innovations and regulations have made it difficult to safely dispose of them. Customers want to turn on the switch and have light. Philips saw an opportunity to change the business model of owning light bulbs to a relationship with the customer of providing the service of light. The company now develops long-term contracts with clients, so when the light bulbs stop working, it is responsible for replacing them. This means Philips has the incentive to make durable, longer-lasting products because it owns the entire life cycle. The customer benefits by getting a better product and the service they need without the hassle of being responsible for a dead light bulb.

Products as a service is not a new circular business model, but it is expanding into

new markets. Consumers haven't stopped at renting cars, homes, and movies, they've also opened up their closets to reuse through rental.

The biggest innovator in the women's rental market has been Rent the Runway. Founded in 2009 by Jennifer Hyman and Jennifer Fleiss, who were Harvard students at the time, the company is now worth an estimated \$1 billion with over nine million members actively using the platform. Offering fashion freedom, flexibility, and a smaller footprint, Rent the Runway has lived through growing pains and market ups and downs to emerge as the leader of the apparel rental revolution. In 2011, Gwynnie Bee entered the rental market with a focus on size inclusivity. Nuuly, launched in May 2019, takes an interesting approach by combining brands of parent company URBN (Anthropologie, Urban Outfitters, and Free People) into a single rental program. Brands are also beginning to

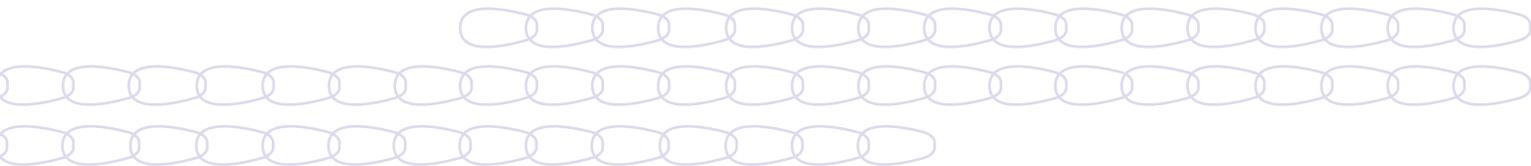
offer their own direct-to-consumer rentals. Examples include Ann Taylor Infinitely Loft, Banana Republic Style Passport, Vince Unfold, and COS, among others. And while rental has been hit hard during COVID, the foundation of reimagining ownership is something that will be relevant in the future.

Beyond apparel, other kinds of companies are beginning to experiment with rentals. As mentioned, VF company Kipling launched its Live Light in 2019 with luggage rental in the UK. REI winter gear rentals were available at 119 REI stores in 32 states this past season.

Rental business models apply the core principle of circular: reuse. From inception, multiple product uses are designed into the service system, generating various revenue opportunities. Rental systems can be combined with renewal processes to help products retain value longer and to avoid end-of-life financial and environmental issues that can undermine the long-term business model.

In the home textiles market, Coyuchi launched a fully circular subscription program called Coyuchi for Life in April 2017. The linens company, which is committed to sustainability, incorporated aspects of rental and subscription models to create a program that allows consumers to use its products for a chosen period

PRODUCT AS A SERVICE IS AN OPPORTUNITY FOR ALL BRANDS TO EXTEND THEIR INVENTORY INVESTMENTS IN NEW WAYS. AS MAKING NEW THINGS BECOMES MORE EXPENSIVE AND FEWER PEOPLE CAN AFFORD TO OWN EVERYTHING THEY NEED AND WANT, RENTAL PROGRAMS BECOME MORE APPEALING FOR BOTH BRANDS AND CONSUMERS.



of time. At the end of their use by the customer, the products are returned to Coyuchi and they are renewed, graded, and certified. The products that meet “like-new” standards are put to use again through Coyuchi’s [2nd Home](#) program and the items can be purchased at its store in Point Reyes, California. Product that cannot be renewed is recycled as part of the company’s zero-waste renewal process. In the Fall of 2020, Coyuchi will launch its first blanket made with recycled materials sourced from its own products. The intention is to create future products out of fibers from old ones.

Since Coyuchi thoughtfully designed its products at inception to be durable as well as recyclable, it has created a fully circular business model.

If you have ever experienced a linen closet full of sheets and towels that are old or worn out and have asked how to responsibly dispose of them, you’ve experienced the pain of ownership. Product as a service for your linens means you get the use of your sheets or towels and once you are done with them,

their next phase has been thought through and a system exists to ensure the highest use is maximized.

The Coyuchi program is an innovative approach in the textile industry because it changes consumer behavior: no longer will clients face an end-of-life problem for a product because its already dealt with in a completely circular way.

Product as a service is an opportunity for all brands to extend their inventory investments in new ways. As making new things becomes more expensive and fewer people can afford to own everything they need and want, rental programs become more appealing for both brands and consumers. With systems available to support cleaning and repairing, as well as up-, down- and recycling of products, brands are poised to serve their own customers through rentals rather than forfeit the business opportunities made possible by their products for others to monetize.

CIRCULAR PATHWAY: TAKE BACK

By definition, it's only circular when the loop is complete. Circular systems have to encompass planning for the whole life cycle of the product including what happens to it after it has been sold. The ownership may have transferred from the brand to the customer, but creating responsible systems to ensure products go to the next best use is something that customers and brands co-own. The "Take Back" is that new system and it's an area ripe for exploration and experimentation.

PVH TAKE BACK EXPERIMENT



Partner Perspective from PVH

Sam Simms

Vice President, Environmental Sustainability & Product Stewardship PVH

PVH's Corporate Responsibility strategy, Forward Fashion, aims to transform how clothes are made and (re)used through three focus areas: reducing negative impacts to zero; increasing positive impacts to 100%; and improving the over one million lives throughout our value chain. As part of this strategy, a target was set to make three of PVH's most commonly purchased products completely circular by 2025. To pursue this goal, products are being developed with safe and renewable materials and new business

models are being leveraged.

One of PVH's circularity initiatives is focused on evaluating different methods for upcycling, recycling, and repurposing post-consumer goods. To engage associates in this effort, and to test different ways PVH can reuse old clothing (textile waste) as a new feedstock, an internal clothing take back campaign was launched. Over the course of four weeks, PVH associates across the US contributed gently worn garments to be analyzed, then reused, refurbished,

and recycled at The Renewal Workshop, through a number of different methods. PVH associates contributed over 3,000 pounds of apparel, tripling the initial target for the pilot. The company is now exploring opportunities to replicate this program in other offices around the world.

CIRCULAR SYSTEMS
HAVE TO ENCOMPASS
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The Corporate Responsibility and Supply teams supported the campaign through in-person workshops, which surfaced great questions and inspired dialogue. For many, circularity is a complex topic so the internal workshops focused on clarifying the definition of circularity based on content from partners at the Ellen MacArthur Foundation. The teams also broke down the

different sources of waste throughout the supply chain and emphasized the role each individual can play in producing products that are truly circular.

From the garments collected as part of this pilot, PVH aims to better understand the potential for refurbishment and resell business models as well as test new recycling technologies. The company

believes sharing this approach, and the multi-faceted initiatives being undertaken to achieve it, will encourage movement from a linear economy of take, make, and waste, to a circular economy in which products are designed for reuse, and waste is an asset.

TAKE BACK

For brands to take responsibility for what they make and to capitalize on the full lifetime value of the product, take back programs are essential. There are a number of ways to work with consumers to take back your products when they are finished with them. Before committing to a single approach and building out a program, we advise brands to experiment with each of the four primary paths to collect data on customer behavior. Our process also includes recommendations for testing different incentive options. The Renewal Workshop Circle Back program offers brands a transparent and fully circular take back option so consumers know that brands are contributing to keeping everything they make out of landfill.





CIRCULAR PATHWAY: DESIGN

Design plays a major role in the circular business. From the first sketch, the life cycle of a product is being determined. The future rests in the hands of the designer. This year The Renewal Workshop team worked with a group of designers from The North Face to make that future circular.

[The North Face Design Residency](#) is an internal program with the goal of catalyzing system change throughout the company and influencing the industry at large. The North Face made a major investment into a circular future with the launch of its Renewed program in August 2018. By redefining what it considered waste and investing in extending the life of products already made through Renewal, the company redirected 112,310 pounds of “waste” back into circulation. Ready to go deeper on the circular journey in 2019, The North Face design team reached out to The Renewal Workshop and asked, “What’s next? How can we be proactive about what we make? And how can we be better designers

inside of a circular business?” These questions inspired The North Face’s Design Residency.

Designers participated in a robust education program. The first part focused on creating the skills to design for a circular business. This included a deep understanding of the various circular business models and how product moves through the different stages of its life cycle. Specifically, designers learned about circular materials, designing for durability, repairability, recyclability, resale, and different forms of use.

For the second part of the residency, four designers spent a week at The Renewal Workshop factory in Cascade Locks, Oregon. They worked side by side with experienced circular technicians to get hands-on practice with product. They took the knowledge they acquired and focused on what it means to disassemble, recover resources, repair, and remake product.



WHAT'S NEXT? HOW CAN WE BE PROACTIVE ABOUT WHAT WE MAKE? AND HOW CAN WE BE BETTER DESIGNERS INSIDE OF A CIRCULAR BUSINESS?

During the week, the designers created a small series of handcrafted circular products. They used these creations to inspire and inform a special Residency Project collection that was produced in partnership with the Renewal technicians. These one-of-a-kind products were the inspiration for The North Face Renewed REMADE line.

The results of the residency included mindset shifts that will be applied to future seasons as new products begin to be made within a circular model. By incorporating circular into its philosophy, The North Face is building processes to operate within the constraints

of a finite planet. The North Face Design Residency is an example of a company moving deeper into the circular model. Beyond that, the Design Residency is a great example of two other important principles of the circular model. First, circular is, at its heart, a creative endeavor. It involves experimentation and exploration. Second, there is great joy and fun in the process. There are endless discoveries, new possibilities, and a wellspring of inspiration in the process of creating circular options. Circular design reminds us of the joy that can come from the process of solving hard problems.

CIRCULAR PATHWAY: RECYCLE

Recycling tops the list of the most misunderstood concepts and misused words in the apparel and textile space. It is used to describe everything from donation to upcycling, downcycling, and reuse.

In order for the apparel and textile industry to operate a truly closed loop system, the fibers in textiles need to be captured and used to create new products. This is what it means to recycle something. It's how we move away from relying on new virgin materials. If the apparel and textile industries want to continue to grow on a finite planet, the raw materials of the future will have to come from the clothing and textiles of the past.

In order to move textile recycling forward, the industry has to recognize the current

limitations of recycling options, address process gaps, develop new technologies, and change design and manufacturing choices.

LIMITED OPTIONS

Textile recycling options are extremely limited today. To truly recycle textiles, new innovation is required on two fronts: material identification and recycling technology. A

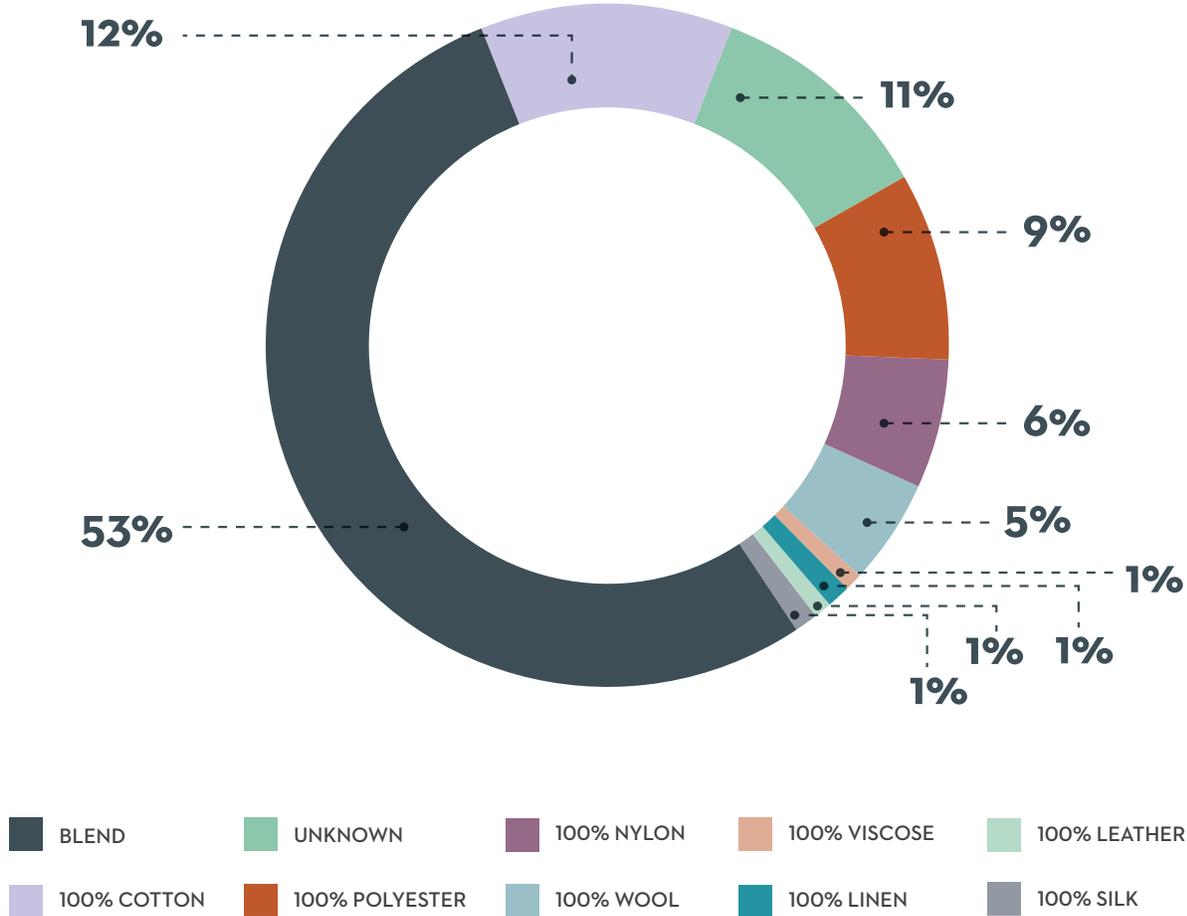
product can only be recycled if it is clear what it is made of, so that when technology breaks it down, melts it, or changes the state of the material, we know what the finished product will contain.

Today's recycling technology is over 100 years old. It is predominantly done through a mechanical process and only works for single material products such as cotton, wool, or polyester.

**IF THE APPAREL AND
TEXTILE INDUSTRIES WANT
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WILL HAVE TO COME
FROM THE CLOTHING AND
TEXTILES OF THE PAST.**

As mentioned earlier, The Renewal Workshop has conducted more than 50 product assessments for brands across the industry ranging from high fashion to specialty technical products. Those assessments were analyzed to develop a clearer picture of the opportunities and challenges for recycling as part of textile R&D efforts. The biggest challenges are unknown materials and blends because these two categories currently do not have recycling options. This means the industry is predominantly creating products without end-of-life solutions. Given the reality of what we produce and the available recycling options, brands have two paths that need to be invested in simultaneously: enable reuse of products as much as possible and change design standards to create more recyclable products.

Here are the product assessment findings for material content trends:



The possibility of textile recycling is thwarted by a massive disconnect between what is made and what can be recycled. While new technologies are emerging, they are not being developed fast enough for the industry to rely on recycling as a viable waste management solution. When we consider the data on product composition and overlay it with the overall growth in production and consumption patterns, the number of blended products in circulation means that recycling is the last and least viable option available for apparel and textiles.

GAPS IN THE SYSTEMS

Eureka Recycling, the primary recycler for the cities of Minneapolis and Saint Paul in Minnesota, conducted a multi-year study to “determine the most effective ways to collect and educate for a city-wide household textiles collection program while attempting to understand the supply chain for discarded textiles as it exists today.” Its research shows that as the geopolitical landscape shifts we need to understand that **we own our waste.**

The lack of recycling technologies has inspired innovators to explore what it would take to use the embedded resources in clothing and textiles to create new fibers. Learn more about some of the companies trying to find solutions using post-consumer textile waste.

EVRNU - Chemical recycling focused on post-consumer textile waste

RENEWCELL - Inspired by the pulping industry, taking cotton products and turning them into new fibers

WORNAGAIN - Converting Polyester and Polycotton into new raw materials

TYTON BIOSCIENCE - Taking cotton, polyester and cotton/poly products and chemically processing into new fibers

The system for getting the right product to the right recycling solution was compromised. It is no longer enough to make a recyclable product; you have to ensure that your product can get through the right system to actually get recycled.

For textiles, one of the biggest challenges recyclers face is being able to identify the composition of feedstock so they can be easily sorted and processed. Companies such as EON are working on solving this problem. EON has launched an initiative called Circular ID that will track the composition of fiber in clothing with the hope that as recycling technologies develop, the information can be fed back into traditional recycling programs to enable chemical processes to break down fibers to be used as building blocks for new materials.

As apparel and textile brands start to design products that can be recycled, they must also invest in bridging gaps in the systems that collect and prepare these products to be processed for recycling.

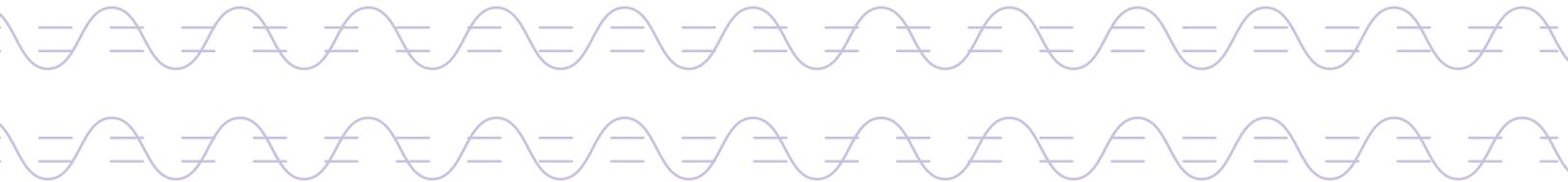
NEW TECHNOLOGICAL NEEDS

Closed Loop Partners is an investment firm focused on building the circular economy. Through its investment pipeline, it explores leading circular solutions across a number of verticals, including packaging, recycling,

fashion, and food. The company's multi-market perspective has identified themes that the recycling systems face, regardless of the material moving through the system.

What it sees is an increasing demand for recyclables but the current recycling system cannot keep up. A lack of investment over the years, coupled with increasingly diverse materials, are just a few of the issues plaguing the system. This is creating the perfect storm. For example, if you look at the plastics recycling infrastructure, we recycle a mere 9% of all the plastic waste produced globally yet the global demand for plastics is forecasted to triple by 2050. If we're to meet demand in a sustainable, renewable way that doesn't rely on raw material extraction, we need to invest more in the system and scale innovative technologies to help.

The apparel and textile industries face the same challenges because polyester, nylon, and other materials that are polymers are considered plastics. A growing number of brands have made commitments to include recycled content in their upcoming seasons. However, the predominant recycled fiber is polyester from plastic bottles. In order to align with demand for recycled content, brands must invest in technologies that are recycling textiles into new fibers.



The Renewal Workshop mapped over 45 technologies currently in development around the globe including mechanical recycling, depolymerization, and transforming cotton into new cellulose. The innovations are inspiring and many are progressing well through the development cycle but in order to accelerate these technologies to scale, brands need to support them, whether through direct investment or contracts for sample and future production. Without investment from an industry that needs these innovations, we will have a gap of supply and demand. Brands can help close this gap.

ACTIONS BRANDS CAN TAKE NOW

The first step brands can take to develop products that can be recycled is to define the full life cycle path at the inception of the product design. There are choices throughout the design and manufacturing process that create more, or fewer, opportunities for a garment to be renewable or recyclable. The Renewal Workshop provides partners feedback on their products so designers know the options and limitations of their design choices.

An old adage is still the best advice for apparel and textile leaders: REDUCE how much we make, REUSE products for as long as possible, and only once we have done both of these, RECYCLE those products into new raw materials. However, as we have seen in the apparel and textile industry, recycling is complicated and isn't a readily available option right now. While we love putting something in the blue bin instead of the trash, the industry has a great deal of work to do to build technology, processes, and recycling infrastructure to create a meaningful blue bin that will make those good feelings real.

The most responsible path for brands is to begin by keeping the things they make out of landfill. This means revisiting what is being declared waste, investing in renewal systems, designing and redesigning products to be more recyclable, using more of the materials that already exist, creating opportunities for reuse through recommerce and rental, and taking back the products when customers have finished with them. Alongside investments in recycling technologies, we can create a fully circular apparel and textile system.

CIRCULAR CONSUMERS: A NEW MARKET EMERGES

From the beginning, The Renewal Workshop has taken a customer-forward approach in circular business strategies. We focused on trying to understand the humans whose choices shape this emerging market. Clothing and textiles are some of the most personal shopping decisions people make. Partnering with customers as they explore buying things that are neither new nor do they meet the definition of “used” as it has been established through the existing thrift and secondary markets, has been central in the development of every aspect of our business from our recommerce technology platform to the calculation of our Impact Score. The revolutionary move from linear to circular requires a new relationship between customers and businesses. We have to move away from the transactional nature of customer acquisition strategies, the one and done marketing efforts that burn budgets. Instead of advertising that intrudes into the social lives of customers, brands have the opportunity to be a regular part of their customer lives through circular programs and practices.

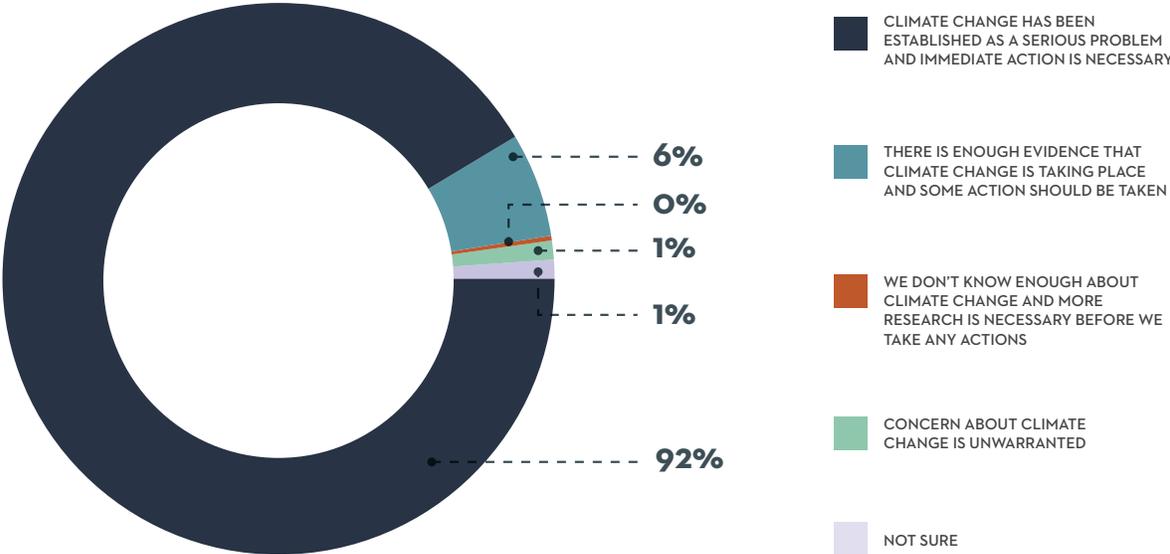
Over the past four years, we’ve regularly conducted observational and interactive customer research. We’ve also pored over every comment, email, interview, poll, and customer service inquiry from the time before we even had a factory, let alone products to sell. We’ve intentionally gathered and incorporated customer feedback into the standards, processes, and tools we use to support circular business. This has led to revisions in everything from how our technology works to the quality standards we set for renewed products. We consider the early cadre of circular customers as our founding partners. Alongside the brands that have started on the path to circular, they are the leaders of this movement. Three years after initially introducing the concept of Renewed Apparel through our first Indiegogo campaign, we undertook a comprehensive customer survey¹ to better gauge awareness of renewed products in the market and to gain insights about how the circular customer has evolved over time. We’ve selected a few of the most important findings to for industry leaders considering the move to circular:

1. The data comes from a consumer survey conducted by The Renewal Workshop. A 39 question survey was distributed to existing customers through email and social channels and was publicly available through our site for 4 weeks in November 2019. It was also shared by our extensive partner network.

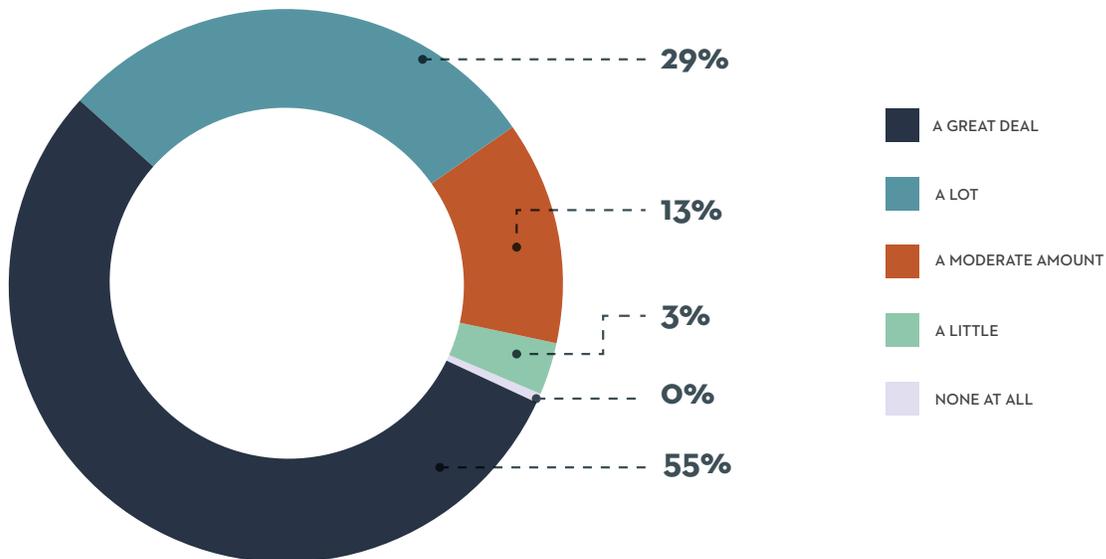
FINDING 1 - CUSTOMERS ARE AWARE AND CONCERNED

Customers care about climate change and they want action. According to the Pew Research Center, “Public concern about climate change has remained steady even as concerns about the spread of infectious diseases have risen. In [an April 2020] survey, six-in-ten Americans said global climate change is a major threat to the country, up from 44% in 2009. Respondents who took the survey in the latter part of the month - after the March 13 declaration of a national emergency due to the coronavirus - were about equally concerned about climate change as those interviewed earlier in the month.”

Which of the following statements come closest to your opinion about climate change?



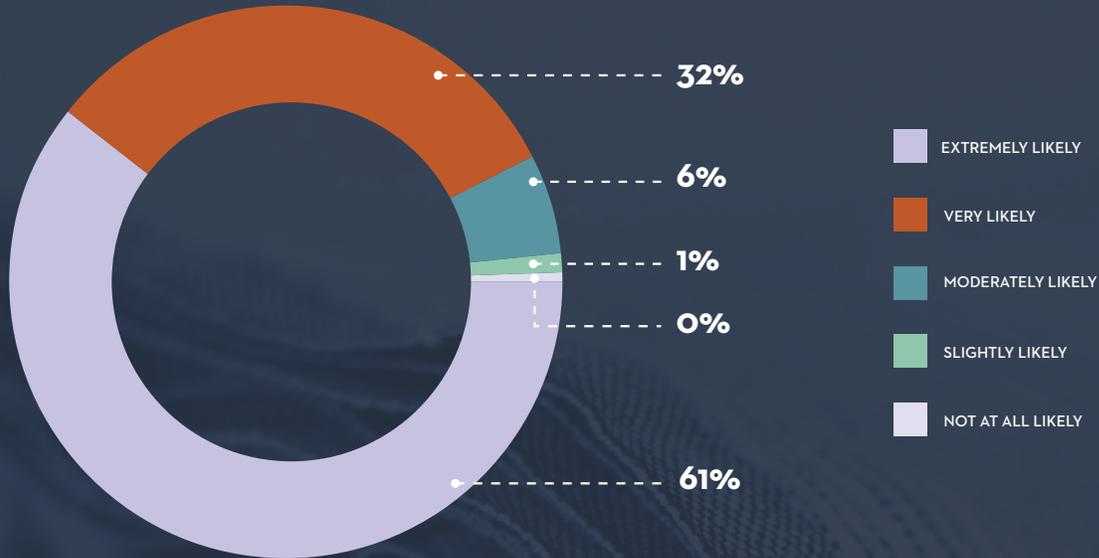
Consumers are aware of the role the apparel and textile industries play in the climate crisis. In the last few years, media attention has increased exposure to fashion’s negative environmental impact and it’s changing consumer expectations. This is the moment for brands to engage their customers in the conversation about their efforts and experiments to reduce their negative impacts. Don’t wait for customers and investors to divest. Make them part of the process now.



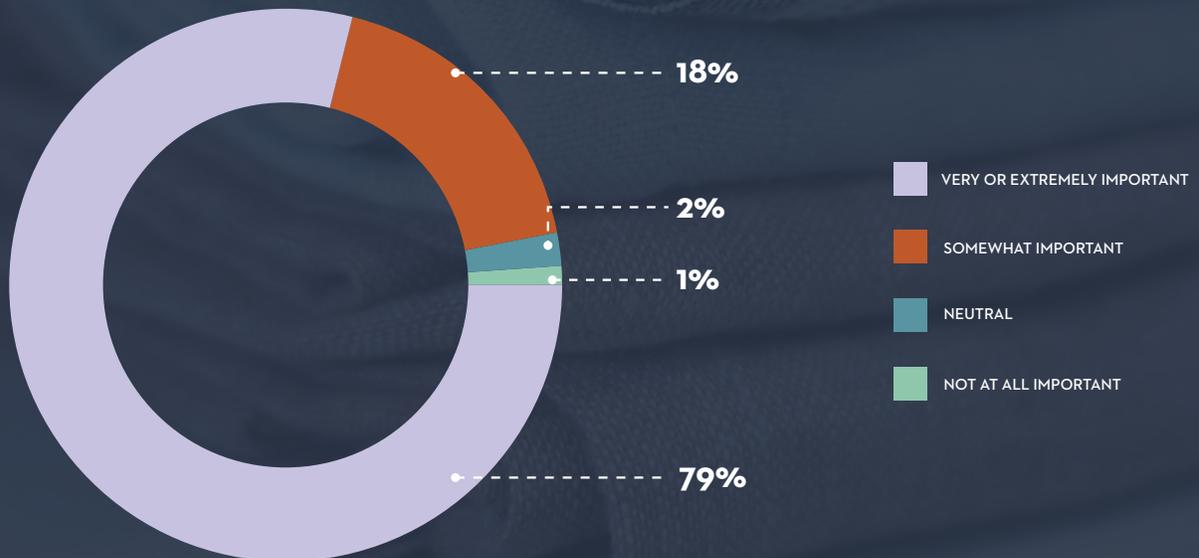
FINDING 2 - CUSTOMERS WANT SUSTAINABLE OPTIONS

Consumers care and they are willing to act through how they shop. The rapid growth of environmentally conscious brands like All Birds, Lush, Method and Seventh Generation demonstrate an active market willing to spend their dollars on sustainable products. More than half of consumers said they would pay more for sustainable products designed to be reused or recycled, according to results from a June 2019 survey from Accenture. “While consumers remain primarily focused on quality and price, 83% believe it’s important or extremely important for companies to design products that are meant to be reused or recycled. Nearly three-quarters (72%) of respondents said they’re currently buying more environmentally friendly products than they were five years ago, and 81% said they expect to buy more over the next five years. ‘The shift in consumer buying, with more consumers willing to pay extra for environmentally friendly products, reinforces the need for companies to increase their commitments to responsible business practices,’ said Jessica Long, a managing director in Accenture Strategy. ‘Companies across industries have started to lead with **purpose**, including embracing the circular economy as a greater opportunity to drive growth and **competitive agility**.’”

How likely are you to buy a product if it's more environmentally friendly?



How important is sustainability when purchasing apparel?

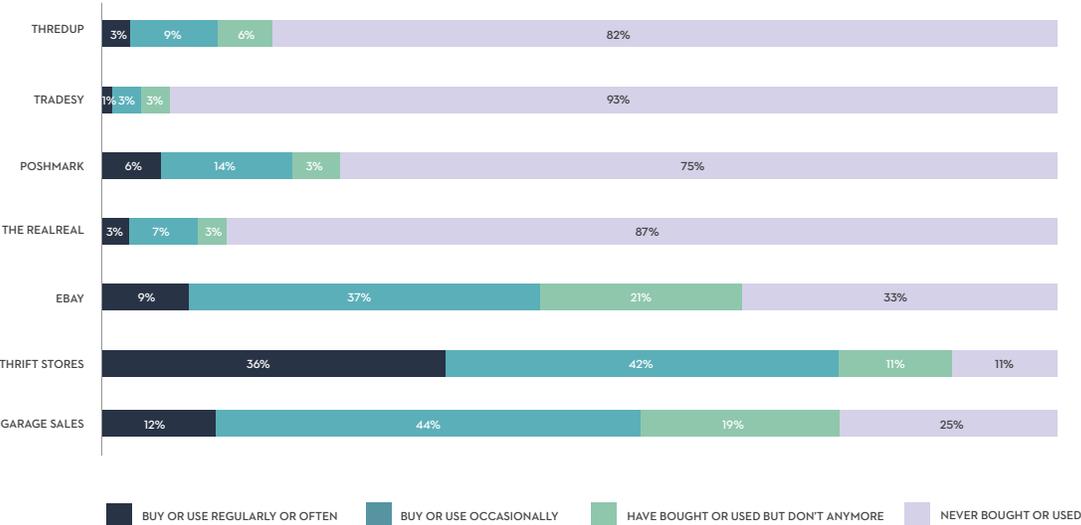


FINDING 3 – CIRCULAR IS A GROWTH MARKET

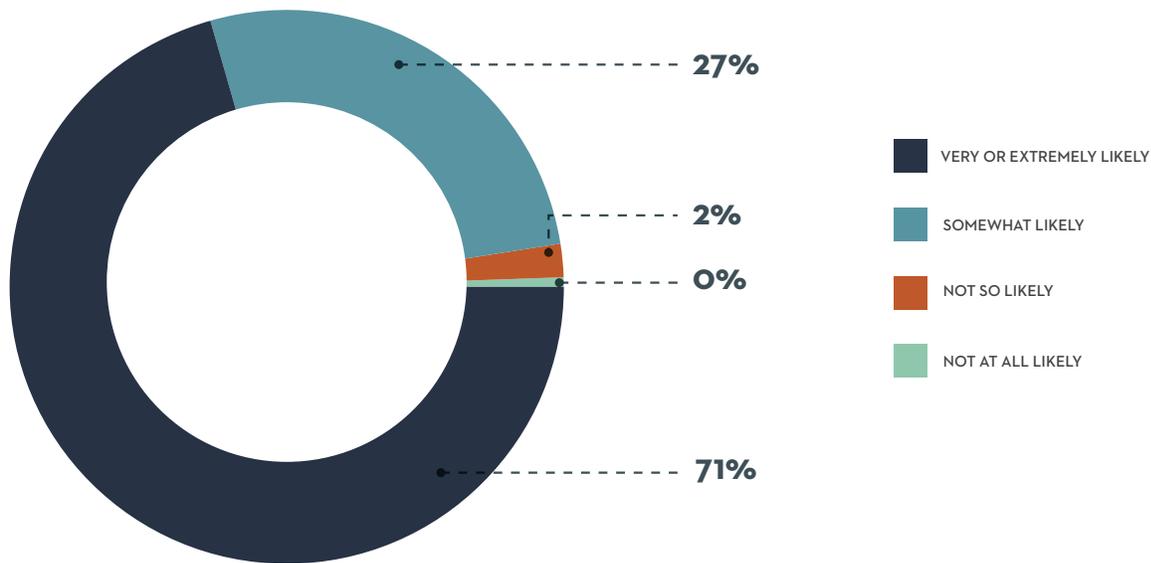
The market is growing. More consumers are willing to buy something that isn't new. According to a 2019 report from thredUP and retail analytics firm GlobalData, the secondhand apparel market was worth \$24 billion in the U.S. in 2018 versus \$35 billion for fast fashion. However, by 2028 the used fashion market is set to skyrocket in value to \$64 billion in the U.S., while fast fashion will only reach \$44 billion. "Compared to the overall apparel market, resales growth has been phenomenal. As the market uniquely meets consumers' preference for variety, value, and sustainability, we expect this high growth to continue," said Neil Saunders, managing director of GlobalData.

The market has expanded beyond the traditional thrift and secondhand shoppers. Brands have a choice to make. Consumers indicate that familiarity with the brand is very important to them when considering buying something that isn't new. These are loyal consumers who have existing relationships with products, yet they have to rely on third-party platforms to find the brand they love. This is a lost opportunity for brands. The window to recapture these loyal consumers before they develop relationships with other platforms is open now because although third-party platforms have made some inroads, data shows there is an interested market that hasn't yet been converted.

Please select the statement that best describes how frequently you purchase from the following:



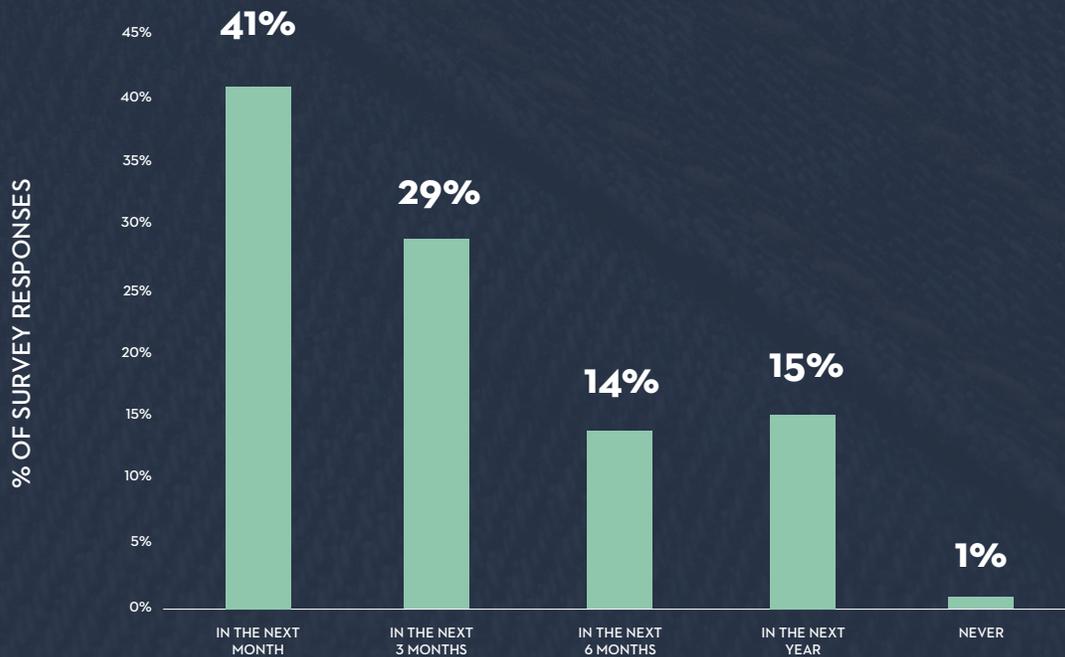
How likely are you to replace buying something new with buying it used or renewed?



FINDING 4 - THE WINDOW IS OPEN FOR BRANDS

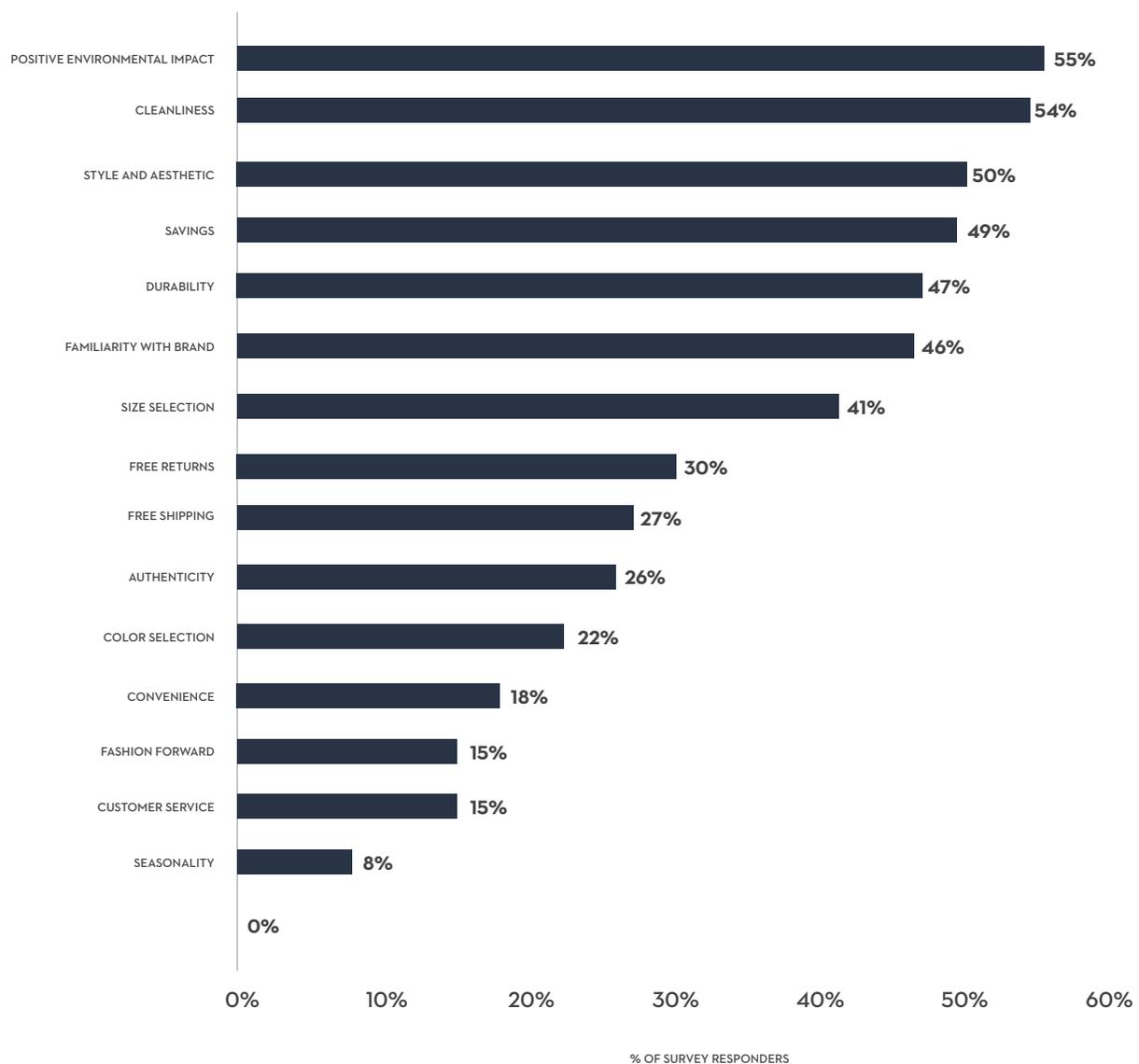
Brands need to act quickly. Customers are ready to change and it's important to capture them before they habituate to other companies such as eBay, thredUP, Tradesy, The RealReal, Poshmark and others. The trust and credibility brands have invested to establish the initial customer relationship can be leveraged to develop the second sale. By adopting circular, brands can create a holistic experience and own the customer from the first sale through the take back and resale process.

Do you anticipate trying or buying something used or renewed?



The new circular customer wants a different experience than the stereotypical thrift or secondhand shopper. To capture the larger market of circular consumers, brands have to provide an elevated experience, a reliable quality standard, a comprehensive inventory, a reasonable discount, and real evidence of environmental impact. Brands are at a distinct advantage to meet these customer needs by owning all of the original product information, being able to create familiarity in messaging and connected shopping experiences, and ensuring product authenticity.

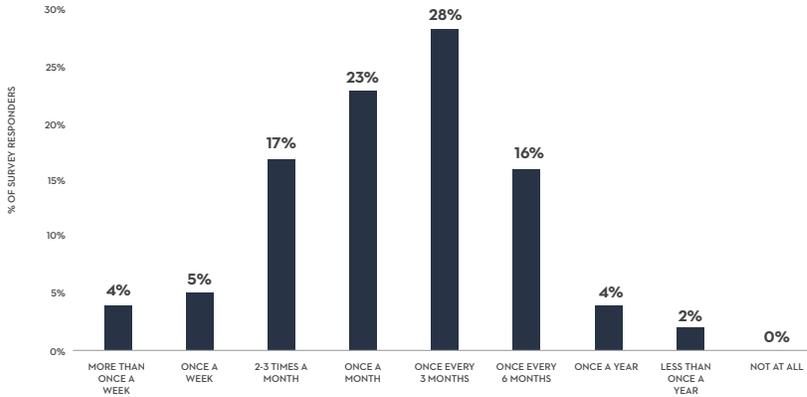
When you're considering purchasing something that isn't new, which of these factors are MOST important to you?
(Please select all that apply.)



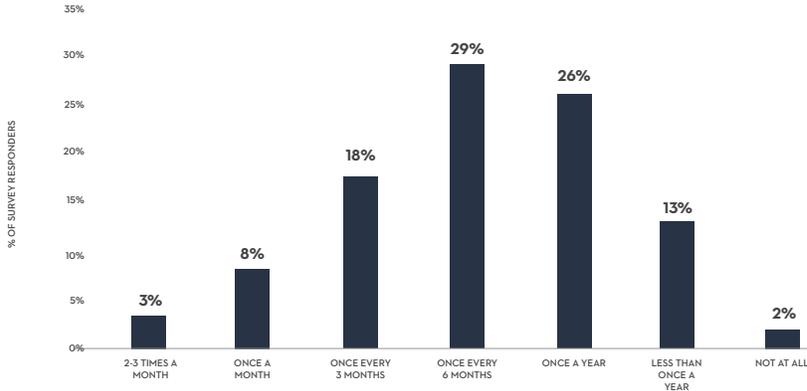
FINDING 5 – CIRCULAR SHOPPERS KEEP THINGS MOVING

Customers inclined to circular are active shoppers who manage their closets. They aren't just thinking about what they acquire, they are also making decisions about what to do with things when they are finished with them. There is a big opportunity to engage them at the end of their life cycle relationship with one product and to introduce them to both new and renewed options for their next purchase. Circular sales open up a whole new avenue for reengaging lapsed customers at the end of the life cycle. It is also an opportunity to retain a lifetime relationship with a customer through the sale of every single product.

About how often do you shop for clothes?



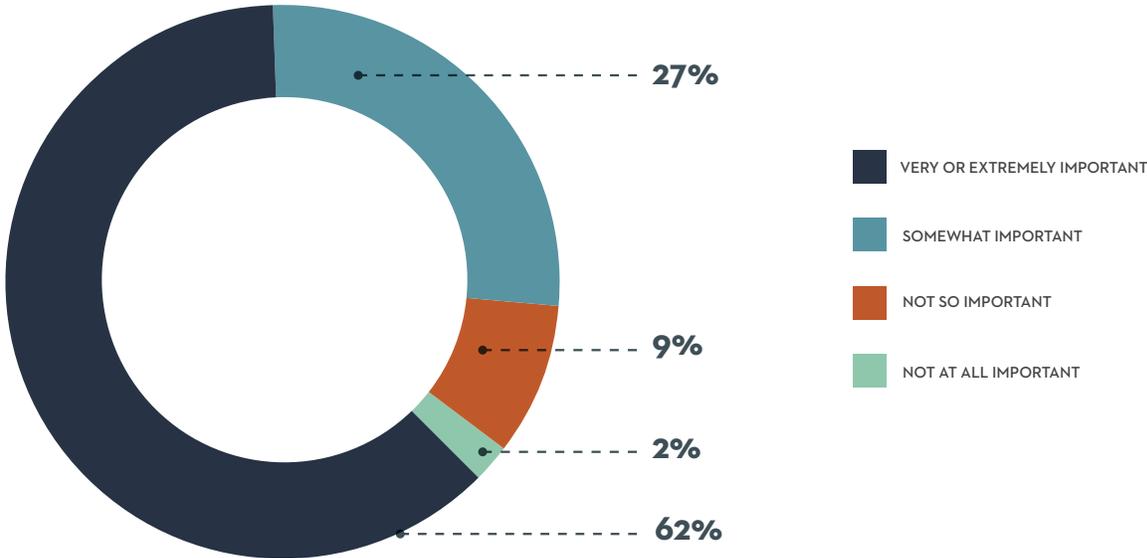
About how often do you clean out your closet (get rid of clothing)?



FINDING 6 - CUSTOMERS WANT TAKE BACK

Part of serving the circular consumer involves supporting their ability to responsibly end their use of products. The demand for brands to provide take back options is heating up.

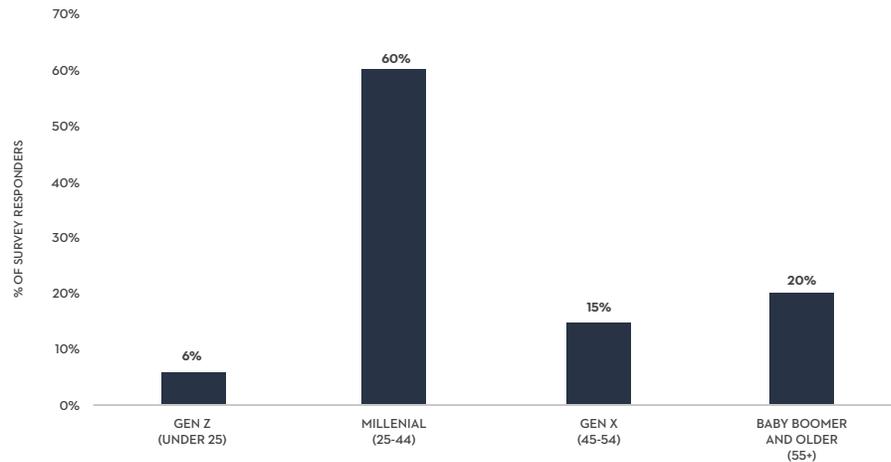
How important is it to you that brands provide take-back options?



FINDING 7 - YOUNGER CONSUMERS EXPECT MORE OPTIONS

Millennial and Gen Z shoppers want circular options. A 2015 Nielsen [report](#) found that 73% of millennials are willing to pay more for sustainable goods. A 2019 First Insight report called “The State of Consumer Spending: Gen Z Shoppers Demand Sustainable Retail” notes that 62% of Generation Z prefer to buy from sustainable brands.

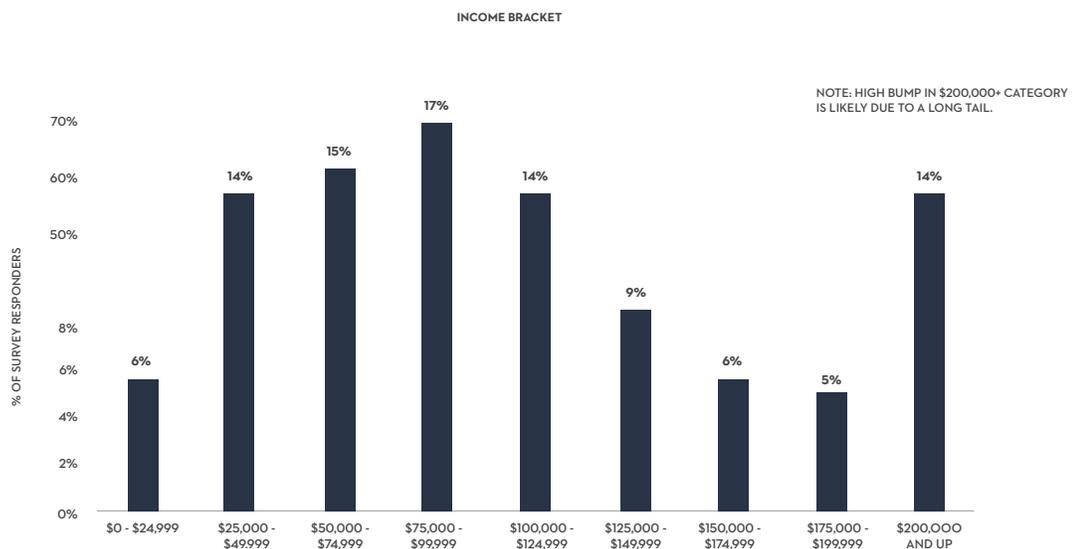
Age Group



FINDING 8 – CIRCULAR CUSTOMERS SPAN FINANCIAL BRACKETS

Circular consumers can be found in every financial bracket. It would be a mistake to confuse the circular customer with a discount customer. Instead, consider the circular customer as driven by what they value, namely brand connection, quality standards, price logic, shopping experience, and measurable positive impact.

What is your approximate average household income?



CIRCULAR IMPACT

It's not enough to say that circular is the future of business. It's not enough to claim that circular is good and right for people and the planet. There has to be evidence that objectively tracks real environmental impact. Anything short of that is just a deeper shade of green washing.

From the beginning, The Renewal Workshop invested in tracking certain metrics as part of the Renewal Process and has provided in-depth reports to each brand partner twice a year on the total shared, and brand-specific, impact contributions. As part of this process, we've always been transparent about how the environmental impact metrics are calculated and what the combined cumulative impacts are.

ENVIRONMENTAL

Raw data



Green House Gas Emissions
GHG (KG/Co2)

283,951



Water
(L/KG)

346,591,849



Toxins
(kg 1,4-DB eq)

131,062



Energy
(MJ/kg)

5,017,407



Waste
(lbs)

284,799

Or the equivalent of:



The energy of
37,437 light bulbs per year



The carbon of
31,952 gallons of gas



The water of
138 Olympic swimming pools



288,992 lbs of toxic chemicals



284,799 lbs of textile waste diverted from landfill

In 2018, we set a goal to divert one million pounds of apparel and textile waste from landfill by 2025. Thanks to the efforts of our brand partners and the customers who are driving this new circular market forward, we are on track to hit the goal. So far, we have diverted **284,799 pounds** of textile waste from landfill.

LCA IMPACT OF THE ORIGINAL PRODUCT

The Renewal Workshop partnered with the firm Brown & Wilmanns Environmental to conduct a life cycle assessment (LCA) for the major textile fibers we see in the apparel received from our brand partners. The purpose of conducting this research was to gather a general idea of the impact of what is being renewed through the lens of energy consumption, global warming potential, water consumption, and toxicity.

The materials measured and used as factors for LCA impact are: cotton, organic cotton, polyester, recycled polyester, nylon 6, hemp, rayon, spandex, acrylic, silk, tencel, and wool. We acknowledge that this is not a comprehensive list, and while these materials account for about 80% of what we process, we make some assumptions to determine

scores for materials that are not covered in this list. For those products, and for products where the material is unknown, we created an “other” score, which uses an average of the score of cotton and polyester. We chose these two contents because they represent edges of the impact spectrum and include a natural and a synthetic fiber.

The overall “fiber rank” is based on each fiber’s performance across four different environmental impact categories: energy demand, global warming potential, water consumption, and human toxicity.

LCA METHODOLOGY

Data for The Renewal Workshop estimates of environmental savings are derived primarily from the ecoinvent v3.4 database and modeled using OpenLCA life cycle assessment software.² Global warming potential, water consumption, and human toxicity were all calculated using the ReCiPe 2016 midpoint (H) methodology, while energy demand was calculated using the Cumulative Energy Demand methodology. More information on both life cycle impact assessment methodologies can be found here:

coinvent.org/files/201007_hischier_weidema_implementation_of_lcia_methods.pdf

² Wernet, G., Bauer, C., Steubing, B., Reinhard, J., Moreno-Ruiz, E., and Weidema, B., 2016. The ecoinvent database version 3 (part I): overview and methodology. *The International Journal of Life Cycle Assessment*, [online] 21(9), pp.1218–1230. Available at: <<http://link.springer.com/10.1007/s11367-016-1087-8>>

Additional information for several materials was obtained from LCA studies published in peer-reviewed journals to supplement the information from the commercial databases. LCA is a method of evaluating impacts to the environment and humanity. It identifies all significant inputs and outputs associated with the processes related to the portion of a product's life cycle, that is within the scope of study, and then applying appropriate factors to calculate impacts on the environment and human health.

There are many different categories that can be used to evaluate the environmental impact of a given product using LCA, such as ocean acidification, ozone depletion, and global warming potential. A widespread problem in the reporting and interpretation of LCA results is that one product will show a lower impact in one category (e.g. toxicity) but a higher impact in another (e.g. water consumption). This has often led to companies cherry-picking results and only advertising the impact categories that their product performs well in. To mitigate this issue, The Renewal Workshop compared each

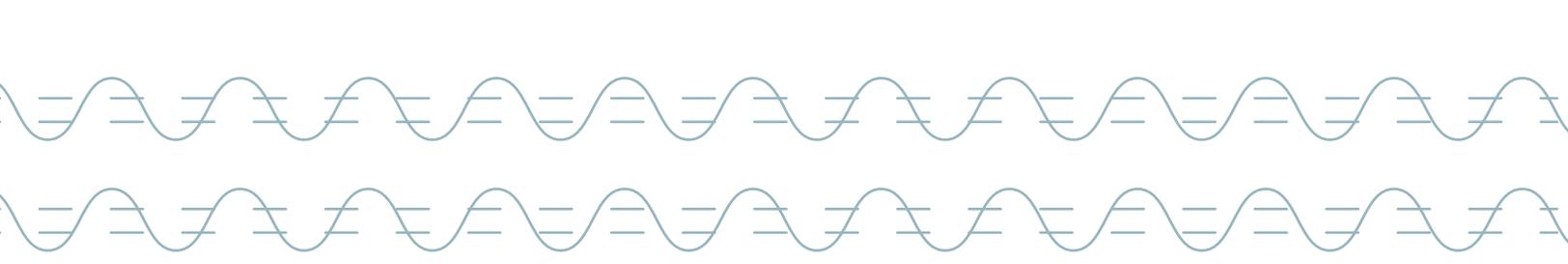
IT'S NOT ENOUGH TO CLAIM THAT CIRCULAR IS GOOD AND RIGHT FOR PEOPLE AND THE PLANET. THERE HAS TO BE EVIDENCE THAT OBJECTIVELY TRACKS REAL ENVIRONMENTAL IMPACT.

fiber across four different impact categories and developed an overall "fiber rank." To do this, every fiber was first ranked from 1-12 in each impact category based on the LCA results. The ranks were then combined, with

equal weight given to each impact category, to develop an overall score from 1-12. This allows for a more complete picture of a fiber's impact. For example, organic cotton showed the lowest impact (ranked #1) in both energy depletion

and global warming potential but performed poorly (ranked #8) in water consumption. This resulted in an overall rank of #2 among the fibers evaluated.

The life cycle elements for the textiles that The Renewal Workshop evaluated begin with the origin of the materials, such as growing and harvesting a crop or extracting fossil fuel resources. They then include all the processing required to turn those materials into dyed and finished textiles. In LCA terms, this is considered a cradle-to-gate study. It does not include any further aspects of the life cycle, such as cutting and sewing, distribution, consumer use and care, and end-of-life disposal, reuse, and/or recycling. This



is because the goal is to compare potential textile-related savings from repair and reuse, rather than purchasing new garments.

The ecoinvent database incorporates information collected from factories, farms, extractors, producers, and a wide range of other industrial and commercial activities associated with supply chains. That data is then checked by both public and private sources. Ecoinvent maintains and updates the database on a continuous cycle to incorporate new scientific information, data, technologies, efficiencies, and methodologies. These “characterization factors” for calculating the impacts of various inputs, such as energy, water, and chemicals, and outputs including products, by-products, and pollution emissions, are updated as new scientific information is identified. Similarly, the software for managing data and the life cycle impact assessment methodologies used to calculate impacts for a particular category are regularly maintained and updated.

The basic design of a life cycle assessment using the OpenLCA software involves four main steps: firstly, a plan is developed that

incorporates all the processes and sub-processes involved in the scope of the study (e.g., from source materials to a dyed and finished textile); secondly, the plan is populated with the appropriate data (e.g., process data for cotton, polyester, nylon, silk, etc.); then the impacts that will be calculated are identified; and finally the software program is used to calculate the identified impacts.

For the textile project, global average data was used for each fiber type if available in one of the databases. If not, either regional data was used or data from peer-reviewed sources was identified and incorporated into the modeling. Where necessary, the data for different processes was adjusted to follow a standardized reference unit (known as the functional unit or how much of the product is represented by the data, e.g., 1 kg) and system boundaries.

More information about the ecoinvent database is available [here](#):

OPEN FOR DEBATE

Measuring impact is only the first step. How businesses act on the data is where systemic change happens. Sustainability Development Goal 12, created by the United Nations, calls for businesses to reexamine the consumption model. Impact data can be used by businesses to replace linear consumption, production, and accounting processes with circular ones. This can be done by reducing consumption of new resources to manufacture new products and instead making production and distribution investments into what has already been made.

As an industry, we are still in the early days of determining the right displacement rate to apply for the reuse of products. The Renewal Workshop is working with different industry stakeholders to develop a shared methodology that includes both environmental factors and business modeling to create a reliable benchmark.

In 2012, WRAP undertook research related to garments in consumer closets and proposed a 30% displacement rate. At The Renewal Workshop everything we receive has been deemed unsellable by the brand and was either going to be donated overseas, put in landfill, or incinerated. Therefore, in order for the brand to make revenue, it would have had to make the product again. Applying this logic, The Renewal Workshop calculates our displacement as the actual impact of the item we renewed. By renewing an item, we are extending the already embedded value and avoiding the need for a new item to be made to convert that sale. Based on that, we apply a 100% displacement for products we receive from brands that are renewed and resold.

This is where our business is today. It will change over time as we expand our sources of products, especially as we process consumer take backs, a model where applying a 100% displacement rate does not make sense. Ultimately, our goal is to work across the industry, aligning on approaches that can be used to help businesses calculate the impact of circular in both environmental and financial terms. We will continue to update and share our impact methodology as well as the raw and displacement data over time.

THE U.N. SUSTAINABLE DEVELOPMENT GOALS

The 17 Sustainable Development Goals (SDG) created in 2016 by the United Nations are an urgent call to action for all countries. They are ambitious and take into consideration a variety of objectives including the end of poverty, the improvement of health and education, the reduction of inequality, climate change and working to preserve the planet while encouraging economic growth.

Circular is an opportunity for the apparel and textile industry to make a significant contribution to SDG 12, which is, “Ensure sustainable consumption and production patterns.” Specifically, companies can adopt practices and measure improvements for action item 12.5:

“By 2030, member countries would have substantially reduced waste generation through prevention, reduction, recycling, and reuse.” The SDG goes on to report:

- **In 2017, worldwide material consumption reached 92.1 billion tons, up from 87 billion in 2015 and a 254% increase from 27 billion in 1970, with the rate of extraction accelerating every year since 2000.** This reflects the increased demand for natural resources that has defined the past decades, resulting in undue burden on environmental resources. Without urgent and concerted political action, it is projected that global resource extraction could grow to 190 billion tons by 2060.
- Material footprint per capita has increased considerably as well: in 1990 some 8.1 tons of natural resources were used to satisfy a person’s need, while in 2015, almost 12 tons of resources were extracted per person.”

In order to have a sustainable planet we have to live within its means. The overreliance on the “consumption for growth” model that has characterized the apparel and textile industry needs to shift. Instead of waiting for external forces, this is the moment to make a commitment to further SDG 12 in 2020.



CIRCULAR RESOURCES

World Business Council for Sustainable Development's "CEO Guide to the Circular Economy"

http://docs.wbcsd.org/2017/06/CEO_Guide_to_CE.pdf

Fashion For Good's report "The Future of Circular Fashion"

https://fashionforgood.com/our_news/driving-circular-business-models-in-fashion/

IDEO's "Circular Design Guide"

<https://www.circulardesignguide.com/>

The World Resources Institute article "The Elephant in the Boardroom"

<https://www.wri.org/publication/elephant-in-the-boardroom>

The Ellen MacArthur Foundation's paper "Towards a Circular Economy"

<https://www.ellenmacarthurfoundation.org/publications/towards-a-circular-economy-business-rationale-for-an-accelerated-transition>

PRACTITIONERS OF CIRCULAR

Cradle to Cradle

The Cradle to Cradle Products Innovation Institute is dedicated to powering innovation for the circular economy through products that have a positive impact on people and planet.

<https://www.c2ccertified.org/>

Ellen MacArthur Foundation

The Ellen MacArthur Foundation works to inspire a generation to re-think, re-design, and build a positive future circular economy.

<https://www.ellenmacarthurfoundation.org/>

Sustainable Apparel Coalition

The Sustainable Apparel Coalition's vision is of an apparel, footwear, and textiles industry that doesn't cause any unnecessary environmental harm and has a positive impact on the people and communities associated with its activities.

<https://www.apparelcoalition.org>

Closed Loop Partners

Closed Loop Partners is a New York-based investment firm comprised of venture capital, growth equity, private equity, and project finance as well as an innovation center focused on building the circular economy.

<https://www.closedlooppartners.com/>

Circular Economy Practitioner Guide

The Practitioner Guide is designed to help companies accelerate their transition towards the circular economy.

<https://www.ceguide.org/>

Global Fashion Agenda

Global Fashion Agenda (GFA) provides a leadership forum for industry collaboration on sustainability. The mission of the non-profit organization is to mobilize the fashion industry to take immediate action on sustainability. Its advocacy centers on industry collaboration and public-private cooperation. The GFA considers brands and retailers the core of securing comprehensive change and increasing the industry's sustainability performance across the value chain.

<https://www.globalfashionagenda.com>

Circle Economy

The Circle Economy is a not-for-profit organization with a mission to accelerate the practical and scalable implementation of the circle economy.

<https://www.circle-economy.com/>

Accelerating Circular

Accelerating Circular is a collaborative industry project developed to accelerate the textile industry's move from linear to circular.

<https://www.acceleratingcircularity.org/>

Fashion for Good

Fashion for Good is a platform for sustainable fashion innovation. Its mission is to bring together the entire ecosystem to make fashion a force for good.

<https://fashionforgood.com/>

BOOKS

Cradle to Cradle: Remaking The Way We Make Things by Michael Braungart and William McDonough

<https://mcdonough.com/writings/cradle-cradle-remaking-way-make-things/>

PODCASTS OR OTHER MEDIA BASED RESOURCES

GreenBiz - Circular Economy articles

<https://www.greenbiz.com/topics/circular-economy>

REPORTS

thredUP "Resale Report"

<https://www.thredup.com/resale>

WRAP "European Clothing Action Plan - Driving Circular Fashion and Textiles" report

<https://www.wrap.org.uk/ecapsummaryreport>

Global Fashion Agenda "Pulse of the Fashion Industry"

https://globalfashionagenda.com/wp-content/uploads/2017/05/Pulse-of-the-Fashion-Industry_2017.pdf

ABOUT THE RENEWAL WORKSHOP

The Renewal Workshop is the leading provider of circular solutions for apparel and textile brands. We are organized around the idea that businesses have multiple responsibilities for generating positive, lasting value. Our purpose is to reduce waste and restore value, to create jobs and treat people fairly, to serve customers kindly, and to work with partners cooperatively by helping linear businesses become circular.

We have two Renewal factories: our original location in Cascade Locks, Oregon, and our new European factory in Amsterdam. Both offer apparel and textile renewal, sales channel management for renewed products, circular mapping, data collection, and textile recycling R&D. Our proprietary Renewal Process takes damaged apparel and textiles and turns them into renewed products, upcycling materials or feedstock for recycling. The Renewal Workshop operates a zero-waste circular system that recovers the full value out of what has already been created as a way of serving our customers, partners, and planet.

Our business is founded on six core values:



Self-determination

We are confident in our beliefs, in our ideas, and in our vision. We lead in our own style and set our own course in how we treat people, the environment, the brand, and the business. We hold most strongly to who we are and what we are trying to accomplish.



Service

We see service as a way of being and behaving. We think of others first, from our brand partners to our customers to the environment. We exist to be of service to the bigger picture, solving problems to create a more positive world.



Systems Thinking

Systems expertise is in our DNA. We use processes and systems as tools to free ourselves from inefficiency and to solve big problems. Good systems do not restrict innovation and collaboration, they cultivate them.



Sensibility

We look for simple solutions to complex problems. We value common sense. We believe in the wisdom of nature, looking to evolve, adapt, and learn constantly from our changing environment.



Presence

We manage our time by being present to what is here right now, remaining in the moment, and giving ourselves time to absorb and process. We allow things to happen in flow.



Love and Light

We encourage each other to follow whatever personal path brings us joy. We dwell in the positive and live lightly without being dragged down by burden. We recognize that living true to oneself is freedom.



For more, reach out to hello@renewalworkshop.com.

We want to thank each of our colleagues for their contributions to Leading Circular.
We remain grateful to the brand partners with whom we have worked with along the way.



MARA HOFFMAN



OUTERKNOWN



POTTERY BARN



RAMBLERS
← WAY →



TIMBUK2



VUORI



We couldn't do any of this work without the TRW team. Thank you for your dedication to bringing our company purpose to life.

This report is dedicated to the memory of Jana Gay, one of our first employees and early architects of our circular systems. Much of the work in this report was made possible because of Jana's unwavering dedication, hard work, and love for making the world better. We remain grateful for all the ways she did that during her life and through her legacy

CIRCULAR IS OUR GENERATION'S BUSINESS
REVOLUTION; IT IS OUR CHANCE TO HAND
THE FUTURE A REGENERATIVE ECONOMY.

We invite you to join us

For more information on going circular, visit us at
renewalworkshop.com/gocircular or email us at
hello@renewalworkshop.com



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