

# The Kearney CFX 2024 report: Navigating material and product choices as key unlocks to circularity

Photo by Rachael Rinchiuso  
Kearney, Chicago



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## Taken as a whole, today’s global fashion industry still struggles to work in a circular manner.

The fourth edition of Kearney’s Circular Fashion Index (CFX) finds the majority of brands continuing to work within the confines of traditional linear models and making—at least from an ecological point of view—suboptimal choices at nearly every step in the process, from raw material selection to consumer education.

With notable exceptions, the industry tends to be long on conversation around circular thinking and economics and short on actual redesign and execution. This bias toward conversation over change is illustrated by the emphasis placed on debating material choices and how good or bad a particular choice may be for the environment, such as discussions around the use of cotton versus polyester in collections and which has a more negative impact based on emissions, land use, and so on. This sometimes apparently single-minded focus on material choices and their impact often conveniently overlooks the fact that there is still no clear consensus with respect to which material choices actually minimize environmental damage.

This isn’t to suggest these discussions are irrelevant. Obviously, they are crucial, but there needs to be a better end-to-end (E2E) understanding of the full economic and environmental impacts of a decision on materials, identifying the true trade-offs along the life cycle that optimize different categories of impact, and agreement on how to measure “success” and “failure” as opposed to the “spend-based” metrics many sustainability teams try to hit.

Most current assessments just look at a limited portion of a garment’s life cycle, leading to a variety of distorted conclusions that may in and of themselves be debatable. Unfortunately, while looking at the full life cycle—taking a cradle-to-grave perspective—is a far better approach, there are no industry standards available that could get the entire industry on the same page. And so the discussions continue, largely without resolution.

That isn’t to say that fact-based arguments aren’t possible.

Kearney PERLab experts recently conducted a life cycle assessment of how cotton and polyester perform in terms of environmental impacts. They showed that natural materials are not automatically better for the planet.

In a life cycle analysis done between cotton and polyester, PERLab found that the land and water usage for cotton during the raw material production phase is higher compared to that of polyester while the GHG emissions for polyester during the fiber production phase is higher than that of cotton, establishing the case that there is no clear winner of environmental impact across the life cycle of cotton and polyester (see figure 1 on page 2).

It’s crucial to remember this example is only one piece—and a relatively smaller piece at that—of a much larger puzzle that will only be solved when the industry as a whole embeds circularity principles in every aspect of a product’s life, from raw material sourcing and design to customer and consumer education and developing an economically viable and pragmatic system of redesign, repair, recover, recycle, reuse.

Sound impossible? Well, there are at least three ways to do this effectively.

**The fashion industry tends to be long on conversation around circular thinking and economics and short on actual redesign and execution.**

Figure 1

**Between cotton and polyester, there is no clear winner of environmental impact across the life cycle**

Life cycle assessment for 1kg of cotton and polyester

		Raw material production	Fiber production	Textile production	Use phase	End-of-life
<b>GHG (KgCO<sub>2</sub>e)</b> 	<b>Polyester</b>	Low impact	High impact	Low impact	Low impact	Low impact
	<b>Cotton</b>	High impact	Low impact	High impact	High impact	High impact
<b>Water use (m<sup>3</sup>)</b> 	<b>Polyester</b>	Low impact	Low impact	High impact	Low impact	Low impact
	<b>Cotton</b>	High impact	High impact	Low impact	High impact	High impact
<b>Land use (Pt)</b> 	<b>Polyester</b>	Low impact	Low impact	High impact	Low impact	High impact
	<b>Cotton</b>	High impact	High impact	Low impact	High impact	Low impact

● High impact    ● Low impact

Note: GHG is greenhouse gases.

Source: Kearney analysis

First, center around materials, beginning with using truly biodegradable materials, then selecting non-blended (mono) materials that are easier to reclaim at the end of the product life cycle, and finally concentrating on “eco-designed” products that are easy to disassemble. In other words, focus on using 100 percent of the same material whether from natural fibers such as cotton, silk, and leather, or synthetic fibers such as polyester and nylon. Once fibers are blended, reclaiming materials becomes far more difficult since today’s recycling industry can’t effectively separate them given the specialized processes and tools that recycling blended fibers requires. This is a significant issue today—both economically and environmentally—as many brands mix materials to achieve optimal costs or specific properties despite the fact that the infrastructure to separate and manage these materials doesn’t exist. The adoption of advanced recycling techniques will require building agreement between a wide variety of stakeholders including brands, retailers, regulators, and consumers.

Secondly, the actual manufacturing process of a product impacts how easy it is to reuse or recycle. Consider a blouse made of cotton. The choice of material makes it biodegradable, which is good. However, once you start adding other pieces to a garment, say coatings, linings, labels, embroidery, graphics, or decals, it becomes a much more complicated product to disassemble. One solution would be for brands to consider conscious modularity in product design. For example, a pair of sneakers designed by ACBC (Anything Can Be Changed) separates into two pieces for easy end-of-life decisions—a body made from 100 percent biodegradable materials that can be unzipped from a sole that is made from recyclable materials. (For more on this solution, please read the interview with Gio Giacobbe, ACBC’s CEO, in the Appendix.)

Third, product design should include recycled, upcycled, or downcycled materials wherever possible. In a circular world, reused products don't have to be used for the exact same purpose, so there are opportunities to downcycle or upcycle items. In this case, downcycling refers to the recycling of materials where the new product is of lower quality and functionality. The opposite is true of upcycling. Designing products with a clear path on how they can eventually have a second life shows true commitment to circularity. In instances where the products are designed to last, which is, for example, the case for most luxury items, brands should focus on providing easily accessible paths for repairing or recovering those products for resale in the same way Patagonia's Worn Wear program focuses on prolonging the life of their products. Rethinking the "care" strategy could help brands move from just being compliant with the basic customer needs to building a powerful loyalty tool and strengthening their market position.

The end and recovery of a product is truly at its beginning, when the product idea and business model are conceived.

Brands must move away from making siloed design decisions. In fashion at least, the whole has always been greater than the sum of its parts. That has not changed. Brands aren't just selling materials such as cotton or polyester. They are selling a completely designed product, therefore rethinking of traditional design approaches is at the core of creating a circular economy.

Of course, the industry isn't in complete control of its fate, or even its practices. Regulators in both the EU and US are currently working on extended producer responsibility (EPR) as a tool to promote—or better said, mandate—circularity but many implementation aspects still need to be addressed: another crucial chapter of the "road to circularity."

## The Circular Fashion Index: four years later

The fourth edition of Kearney's Circular Fashion Index (CFX) is both expanded and evolved.

We have expanded our scope by nearly 20 percent over last year to include a total of 235 global brands. With the addition of Japan this year our analysis now spans 18 countries and includes five key categories: fashion, sports, outdoor (previously analyzed alongside the sports category), underwear and lingerie, and footwear (see figure 2 on page 4).

In terms of evolution, CFX 2024 introduces a refined price segmentation for the fashion category—distinguishing between luxury, premium/affordable luxury, mass market, and fast fashion brands.





As in past years, our CFX score methodology for assessing a brand's circularity efforts is based on seven critical dimensions. Brands' circularity is evaluated from two perspectives: their impact on new product sales to consumers (primary market) and their impact on the secondary market, which includes used product sales and recycling. This year, as part of assessing brands' primary market levers, we've expanded our approach from focusing on recycled material share to including integration of circular design principles such as the balanced use of environmentally friendly materials and the avoidance of harmful chemicals (see figure 3 on page 4).

In order to ensure a holistic assessment of sustainability efforts, each dimension is weighted, with significant emphasis on primary market factors, particularly the adoption of circular design principles, as well as repair and maintenance services. These scores are then combined to create an overall score ranging from 1 to 10, with 1 being the lowest and 10 being the highest.

Figure 2

**We have expanded our scope by nearly 20 percent over last year to include a total of 235 global brands**

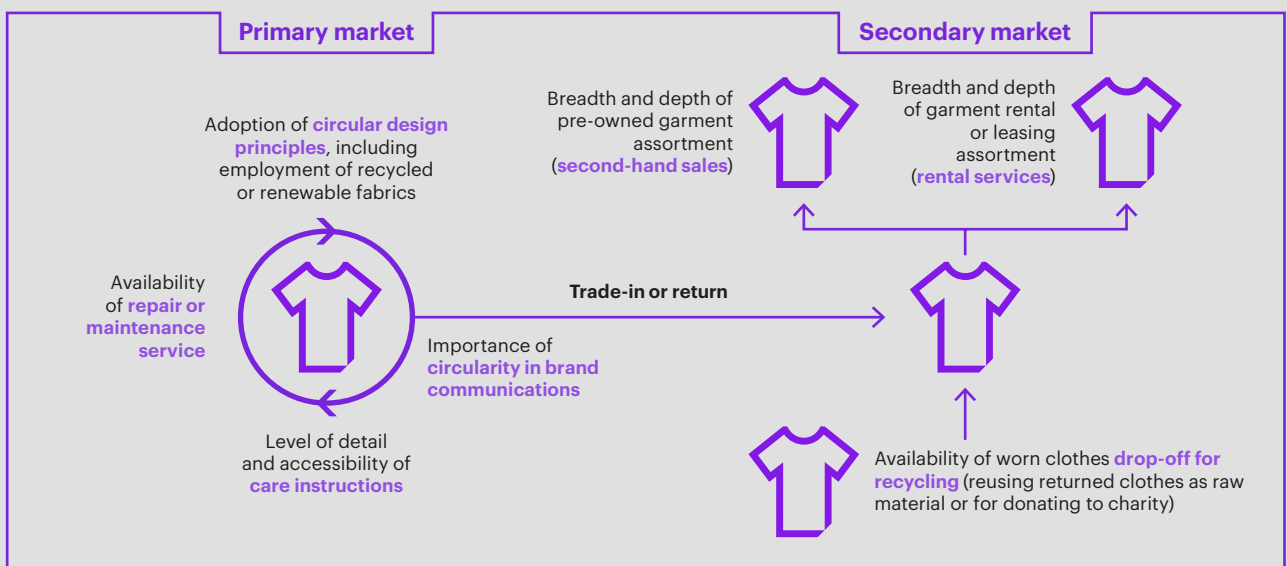
Panel composition of the CFX 2024

			
<b>235</b> Fashion brands	<b>18</b> Countries	<b>5</b> Categories (fashion, underwear/lingerie, sports, outdoor, footwear)	<b>4</b> Segments (luxury, premium/affordable luxury, mass market, fast fashion)

Source: Kearney analysis

Figure 3

**The Circular Fashion Index measures fashion brands' efforts to extend the life cycle of their products and materials based on seven dimensions**



Source: Kearney analysis

# The Circular Fashion Index 2024 results

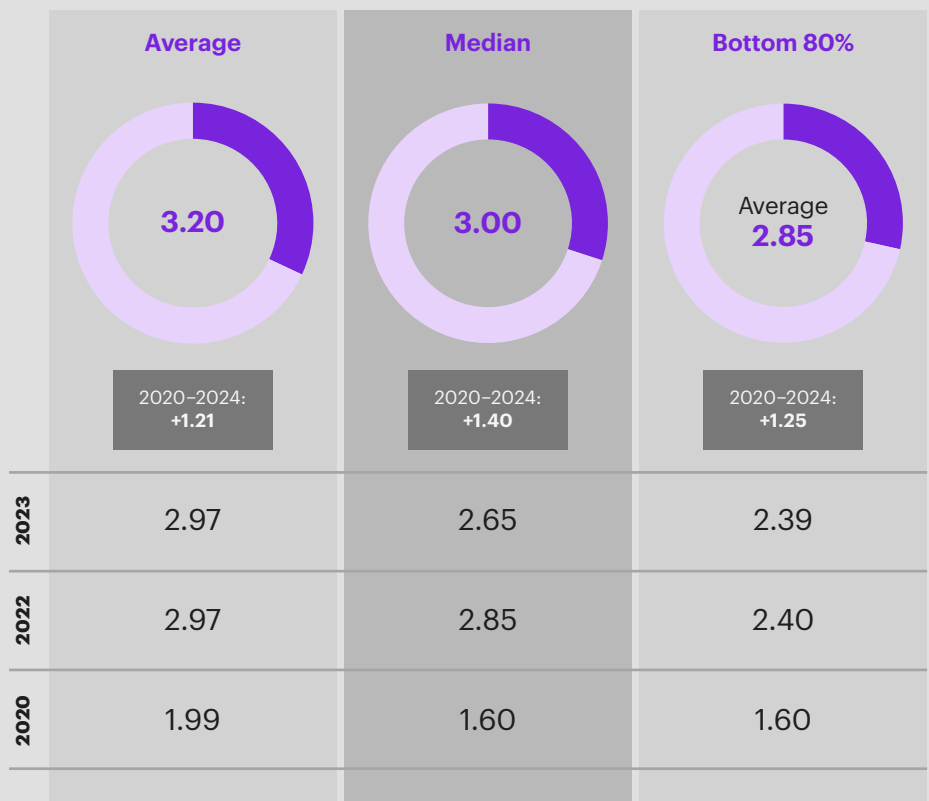
The 235 fashion brands we analyzed this year achieved an average score of 3.20 out of 10, an increase of >0.2 points compared to 2023 results (see figure 4). This was primarily driven by a slight improvement in primary market levers, while secondary levers remain flat (see figure 5 on page 6). While this may not seem significant, it represents an improvement of about 8 percent. If the industry could maintain, what at first blush may seem a modest improvement rate, this number will double in less than a decade.

Progress in the primary market is driven by overall accessibility of care instructions and more emphasis on circularity and durability in brand communications. There’s also a gradual increase of about 0.3 points in the adoption of circular design principles, including the use of renewable materials driven by footwear and fashion brands—most notably luxury and mass market players—investing in primary market levers.

Compared to our inaugural 2020 report, this year’s results show an encouraging average improvement of 1.2 points. While this gradual upward trend signals a growing recognition of the importance of circularity in the industry, it also underscores the continued need for significant efforts to fully embrace circular practices.

Figure 4  
**Circularity efforts in the fashion industry have progressed in recent years, but there is still work to be done**

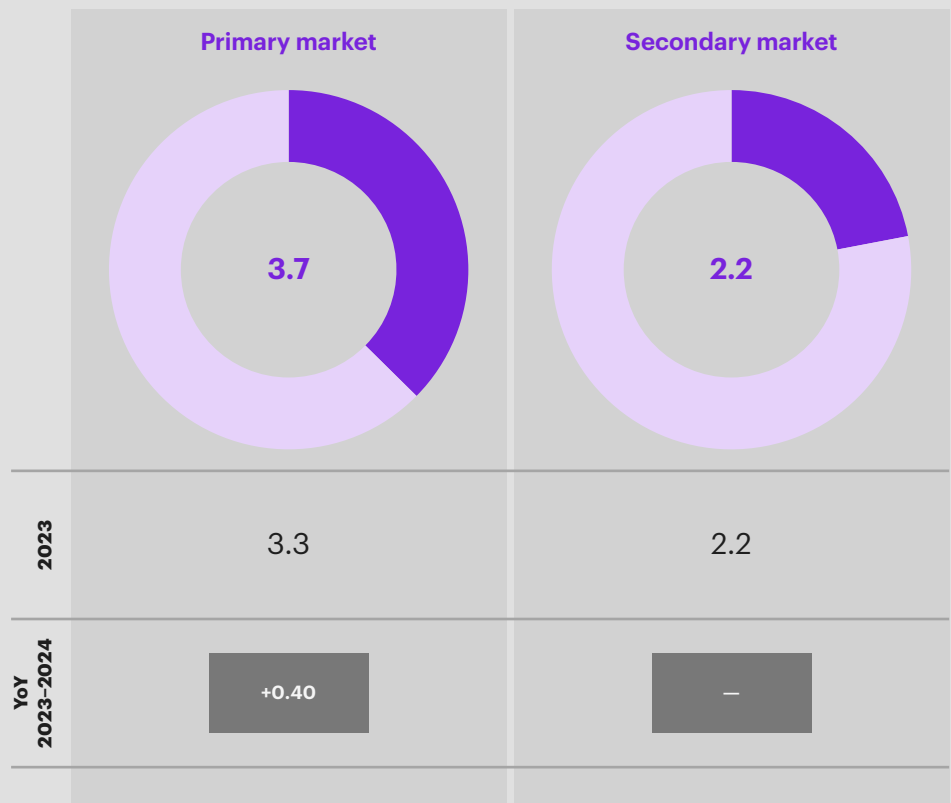
Overall results of the CFX 2024 ranking



Source: Kearney analysis

Figure 5

**Brands' circularity efforts improved slightly last year in primary market levers but remained flat in secondary levers**



Source: Kearney analysis

Consistent with our findings from 2023, most brands are still in the early stages of activating circularity levers. In fact, the evidence suggests only a limited number of brands are extensively activating them. That said, there is a discernible trend of moderate improvement over previous editions. This is particularly true in terms of activating primary market dimensions such as material composition and care instructions. Brands' circularity strategies mainly revolve around consumer-facing materials and communication efforts that emphasize circularity and reuse. Many brands have expanded their consumer-facing communications, with a growing number integrating dedicated sustainability sections into their e-commerce sites. A glaring gap remains when it comes to providing the repair and maintenance services crucial to extending the life of a garment.

When it comes to the secondary market, brands are exploring the potential of pre-owned business models but continue to struggle with the complexities of developing rental services. While some partnerships with specialized players have been discontinued, brands are still experimenting with a range of options including proprietary e-commerce platforms.

We continue to see moderate progress in the acceptance of used clothing returns for recycling. European brand interest in such programs has been boosted by a European Union (EU) proposal calling for extended producer responsibility for the textile industry (see figure 6 on page 7). Despite this progress, significant challenges remain on the ongoing journey toward holistic circularity in the fashion industry. For an in-depth look at how one organization is trying to revolutionize the collection of used clothes and shoes, please refer to the Appendix to read Brian Ehrig's interview with Buddy Teaster, who since 2012 has served as president and CEO of Soles4Souls, America's largest not-for-profit shoe and apparel social enterprise.

Figure 6

**Brands have significantly improved their performances throughout the years, although none of the seven circularity levers is activated extensively**

		Level of lever activation		
		Limited (<3)	Moderate (3-7)	Extensive (>8)
Primary market	The adoption level of circular design principles (former share of garments made of recycled, recyclable, or sustainably sourced fabrics)	23%	74%	3%
	The importance of circularity in brand communications	32%	60%	8%
	The level of detail and accessibility of care instructions	24%	70%	6%
	The availability of repair or maintenance service	68%	28%	4%
Secondary market	The breadth and depth of pre-owned garment assortment	69%	26%	5%
	The breadth and depth of garment rental or leasing assortment	91%	8%	2%
	The availability of worn clothes drop-off for recycling	57%	40%	4%

Note: percentages may not resolve due to rounding.

Source: Kearney analysis

## Top performers

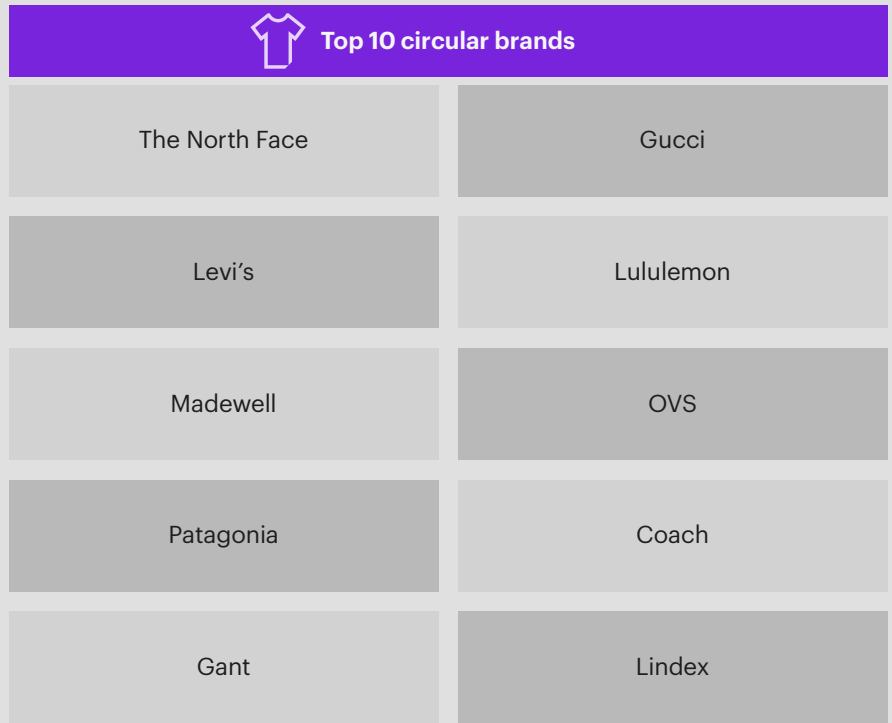
Notably, the top 10 performing circular fashion brands, with the exception of Gant, remained largely consistent with the 2023 rankings (see figure 7 on page 8). Gant’s entry was driven by significant performance improvements, particularly its extended adoption of circular design principles and expansion of rental services.

The top 10 brands, along with selected other category leaders, have implemented most of the best practices identified across the seven dimensions of our analysis (see figure 8 on page 8).

**The top 10 brands have implemented most of the best practices identified across the seven dimensions of our analysis.**

Figure 7

**The top 10 circular brands are consistent with 2023 with the exception of Gant, which joins for the first time**



Note: Order of brands shown does not indicate ranking.

Source: Kearney analysis

Figure 8

**A number of brands have implemented most of the best practices**

Kearney  
CFX 2024



Source: Kearney analysis

## Strongest improvements

It's important to note that other brands are not sitting on their hands. Coach, Uniqlo, and fast fashion brand Zara are among those that have improved the most since last year.

### Coach

Coach strengthened its performance in both circularity communication and the use of recycled materials with the launch of the Coachtopia sub-brand in 2023.

Coachtopia is a beta-collaborative innovation lab founded to accelerate the brand's transition toward a circular economy by rapidly prototyping new products, processes, and ideas. It is an inclusive community of designers, thinkers, makers, and consumers known as Coachtopians, which include artists, designers, activists, makers, creatives, and entrepreneurs.

Coachtopia aims to minimize the use of new, virgin materials and focus on the use of alternative materials made from recycled waste or repurposed materials, while designing products that last longer and can be disassembled and regenerated at the end of their life.

Coach has built a content hub of educational blogs around circularity on its Coach/Coachtopia site. As with its Made Circular principles and docuseries, part of Coach's mission is to advance a deeper understanding of circularity, share the learnings developed on its journey, and spark conversations that will hopefully lead to broader change.

Coach is also investing in building next-generation skills and capabilities through programs such as its year-long Coachtopia Circular Design Scholarship, operated in partnership with the Coach Foundation and the Coachtopia Catalyst Fund, which donates 1 percent of its revenues in partnership with 1 Percent for the Planet, an international organization whose members contribute at least 1 percent of their annual revenue to environmental causes to protect the environment.

Coachtopia's Beta Community is a global and growing network of diverse and inspiring Generation Z individuals who are feeding their opinions and ideas into Coachtopia products, messages, and concepts, a collaboration Coach hopes will become a robust platform for change. To date, the CFDA x Coach Dream It Real Circular Design Scholarship has been awarded to 15 students passionate about making fashion more circular who have been invited to participate in a "Coachtopia Waste Contest."

### Uniqlo

Uniqlo's first foray into the pre-owned segment was a pop-up store in Harajuku, Japan in late 2023. What began as a trial run has now evolved into the Furugi Project, which is planned to gradually expand to selected Uniqlo stores on a larger scale. This initiative offers an assortment of repurposed or completely new clothing options, signaling Uniqlo's commitment to sustainable practices in fashion.

### Zara

Zara launched its new platform called Pre-Owned to help consumers extend the life of their clothes with a complete range of services, with important improvements in all dimensions of the secondary market, as well as in promotion and communication. Until last year the service had only been available in the United Kingdom and France, but on December 5, 2023, the retailer announced it would expand Pre-Owned to Spain, Germany, Austria, Belgium, Croatia, Slovakia, Slovenia, Finland, Greece, Ireland, Italy, Luxembourg, Netherlands, and Portugal. Zara has committed to have Pre-Owned operational in all its strategic markets in 2025.

The initiative, promoted through all the brands' official channels, is designed to support consumers at every stage of the garment's life. Focused first and foremost on ensuring the longevity of its garments, the initiative offers repair services and a complete set of information to make items last longer. The platform also provides a safe space for consumers to trade in unwanted Zara garments. Finally, Zara Pre-Owned helps consumers dispose of their used clothing in a safe way by offering a drop-off service for used clothing of any brand, in partnership with nonprofit organizations that either reuse or recycle them.

## Spotlight on footwear

This year, given its growing emphasis on circularity, we are dedicating a comprehensive section to the footwear segment which now includes 32 brands, a significant increase from the 11 brands in the 2023 edition. In line with overall trends, while these brands tend to perform better on primary market dimensions, they still face challenges in implementing circular business models. We are focusing on five top category performers that represent key best practices in the sector.

### Allbirds

Allbirds excels in primary market dimensions, particularly in providing detailed care instructions across multiple website pages. In 2022, the brand launched Allbirds ReRun™ in partnership with Trove, a company that specializes in circular commerce. Allbirds ReRun™ provides an e-commerce marketplace where consumers can “shop slightly imperfect and gently used products, extending their life and lowering our impact on the planet.” The shoes are offered at a discounted price.

The site comes as part of the company’s “re-commerce” program, itself closely tied to Allbirds’ Flight Plan, a list of environmental commitments designed to achieve the company’s goal “to double the lifetime of its products by the end of 2025.”

### Timberland

Timberland® stands out for its strong commitment to used and end-of-life services, highlighted by its Timberloop™ program, a dedicated re-commerce

platform and in-store take-back initiatives. In addition, the brand has increased its use of recycled or sustainably sourced materials, including sustainably grown rubber, recycled PET, bio-based EVA, and organic cotton. Introduced in January 2022, the Timberloop™ platform allows consumers to return Timberland® products when they are worn out. Through the Timberloop™ Takeback program, customers can return old Timberland® footwear, clothing, and accessories in all US retail and outlet stores. From there the products are evaluated and then either disassembled—for as many parts as possible to be reused, recycled/upcycled into new products—or refurbished for sale on a dedicated web site. Participating customers receive a 20 percent off discount code that can be immediately used on in-store purchases. Timberland’s® goal is to have 100 percent of its products designed for full circularity by 2030.

### Brooks Running

With the July 2023 launch of its Brooks ReStart program, Brooks Running made significant strides by “offering new homes for lightly used shoes before they’ve run their last mile!” Brooks ReStart offers lower-priced footwear offered in “like new,” “great,” or “good” condition. Prices on ReStart items begin at 35 percent off the suggested retail price. The brand’s consumer-facing communication strategy emphasizes circularity and longevity, with a dedicated section on sustainable consumption on its e-commerce platform and comprehensive care advice for consumers. The ReStart website explains the company’s goal this way: “To reduce the impact that our running gear has on the planet, we’ve created our sustainable consumption strategy in support of the United Nations Sustainable Development Goal #12: Responsible Consumption & Production.” Like Allbirds, Brooks Running is also partnering with Trove to run the program.

## Golden Goose

Golden Goose continued to expand its newly launched store concept called Forward Store, where the brand promotes circular initiatives of repair (in-store and soon online repair services), remake, resell (collection of used Golden Goose shoes), and recycle (drop-off services for old shoes). The first Forward Store opened in Milan in 2022, designed around four “pillar” activities—repair, remake, resell, and recycle. The Forward Stores are part of Golden Goose’s wider Forward Agenda, which it calls its “sustainable vision” for the coming years—“trying, evolving, and learning.”

## Ugg

Ugg, the premium American footwear brand, excels in primary market levers with a focus on sustainably certified and recycled raw materials. The brand emphasizes quality and longevity in its communication strategy, encouraging consumers to extend the life of their Uggs through DIY repair kits and the UGGRenew restoration program, which gives old shoes a new look through careful cleaning and outsole replacement.

## CFX scores by country

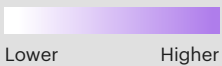
In the CFX 2024 analysis, more than 80 percent of the brands studied come from key fashion markets such as the United States, France, Italy, India, DACH (the three Central European nations with German-speaking majorities—Germany, Switzerland, and Austria), and the UK.

While Indian brands’ scores lag significantly behind their counterparts, brands from other countries show relatively consistent performance, with average scores ranging from 3.0 to 3.7 (see figure 9). These results both underscore the long road ahead for global fashion brands’ adoption of circular practices and highlight the tangible progress made over the past year.

Japanese, French, and DACH brands emerged as the leaders in CFX scores, with the United States following closely behind.

Figure 9  
**CFX scores show moderate improvements across geographies**

Degree of improvement



Average (1-10)	2024	2024 vs. 2023
US	3.5	+0.1
France	3.6	+0.1
Italy	3.0	+0.1
India	1.8	+0.3
Germany	3.6	+0.5
UK	3.0	+0.6
Japan	3.7	+0.5
Others	3.0	—

Source: Kearney analysis

Despite Japanese, French, and German brands having the highest average CFX scores, none secured positions in the top 10. In contrast, despite not being in the top three in average score, the US dominates the top 10 with six brands, including Patagonia, Levi's, The North Face, Madewell, and Coach. Other brands are evenly distributed across the quartiles. American brands excel in secondary market levers, especially second-hand channels and drop-off options for recycling.

Nearly half of the French brands score in the top quartile, including prominent names such as Louis Vuitton, Okaidi, SMCP Group brands, Hermès, Chanel, and others. French brands stand out for their use of recycled content, with 50 percent in the top quartile. Leading brands typically incorporate approximately 50 percent recycled content into their offerings.

The DACH region registered an improvement of 0.5 points compared to the 2023 CFX, primarily due to an increase in the use of recycled and sustainably sourced fabrics. In 2024, more than 30 percent of DACH brands achieved a top quartile ranking, with names such as Adidas, Hugo Boss, Mammut, and ON. The remaining brands are evenly distributed across the quartiles.

**Japanese, French, and DACH brands emerged as the leaders in CFX scores, with the United States following closely behind.**

Italy's standout performers include OVS and Gucci, with Moncler and Golden Goose joining them in the top quartile. There was a modest improvement of 0.1 points year-on-year, driven by improved circular communication and increased investments in end-of-life collection services. Italian brands show a notable focus on primary market levers such as recycled materials and maintenance services but rank lower on secondary market levers.

The UK saw an increase of 0.6 points in CFX scores compared to 2023, largely due to consistent improvements in primary market levers. Burberry, Barbour, Alexander McQueen, and Dr. Martens emerged as top performers, representing four UK brands in the top quartile. Despite progress in primary market initiatives, UK brands excel in secondary market levers, particularly in end-of-life solutions and pre-owned models.

Although Indian brands showed some improvement with a +0.3-point increase from the 2023 CFX, the majority still fall in the bottom 25th percentile. Initial progress has been made on primary market levers, including circularity communication and accessibility of care instructions. However, Indian brands generally score below the global average in all categories except care instructions, where they exceed the global average.

Japanese brands dominate globally, with one-third of all brands in the top quartile, leveraging primary market strengths such as repair and maintenance services and drop-off options for pre-owned clothing.

Of the other countries surveyed, Sweden showed the strongest performance, with Lindex securing a place in the top 10, followed by COS and Ganni. Additionally, Canada stood out with Lululemon Athletica in the top 10.

## CFX scores by category

The 235 brands analyzed are evenly distributed across the five categories we looked at. The fashion category results are shown based on price segmentation. Similar to the country-specific results, these categories show an alignment with average scores ranging from 2.8 to 3.4. In particular, outdoor brands stand out with an impressive average score of 5.4, while fast fashion and underwear/lingerie brands score the lowest (see figure 10).

In 2024, outdoor brands continue to maintain their strong performance due to improvements in care and repair services and an increased emphasis on circularity in brand communications. In sharp contrast, sports brands show minimal to no improvements to the past years.


Fashion ranks in the middle of the field with an average of 3.2. In fashion, the mass market segment shows the highest score, followed by luxury and premium/affordable luxury. The premium segment and the fast fashion and mass market categories showed notable progress.

The majority of luxury brands have positioned themselves in the top percentiles, with repair and maintenance service a key strength across all dimensions. Year-over-year improvements are primarily due to increased adoption of circular design principles and the use of renewable or sustainably sourced materials.

Premium/affordable luxury and mass market segments both rank highest within fashion in 2024, with modest improvements in primary market levers. Premium brands are characterized by a circular approach and increased investment in end-to-end solutions, while mass market brands excel at providing comprehensive care and repair instructions.

Due to the inherent nature of their products, fast fashion and lingerie/underwear brands receive the lowest scores, although they are gradually catching up with the rest of the panel. While primary market levers such as second-hand or rental services pose challenges for these segments or are impractical, there is increasing investment in used clothing collection as part of end-of-life solutions.

Figure 10  
**Outdoor is the best-performing segment on CFX 2024, driven by care and repair offerings and drop-off solutions**

Degree of improvement  
  
 Lower Higher

Average (1-10)		2024	2024 vs. 2023
Fashion	Luxury	3.2	+0.2
	Premium/affordable luxury	3.4	+0.4
	Mass market	3.4	+0.3
	Fast fashion	2.8	+0.3
	Total fashion	3.2	+0.3
Sports		3.2	—
Outdoor		5.4	+0.1
Footwear		3.0	+0.1
Underwear/lingerie		2.8	+0.1

Source: Kearney analysis

# Conclusion

Our 2024 research shows that despite improvements made over the past year, widespread adoption of effective circular economic practices in the fashion industry remains far from the norm. Of the 235 brands analyzed, only 25 scored at least 5 out of 10 on our Index. Only the top four scored above 7 out of 10—one more than last year—a performance level insufficient to significantly begin to mitigate the industry’s environmental impact.

Today, circularity efforts are driven primarily by the need to protect brands’ license to operate and respond to changing consumer interests. However, regulatory developments in the EU and US are quickly becoming key change drivers, pushing brands to increase their circularity and sustainability efforts regardless of consumer behavior. New regulations such as the EU Corporate Sustainability Reporting Directive and the US SEC Climate Disclosure require greater transparency and accountability. Extended producer responsibility (EPR) and eco-design for sustainable product regulations are also emerging to enforce circularity (see figure 11).

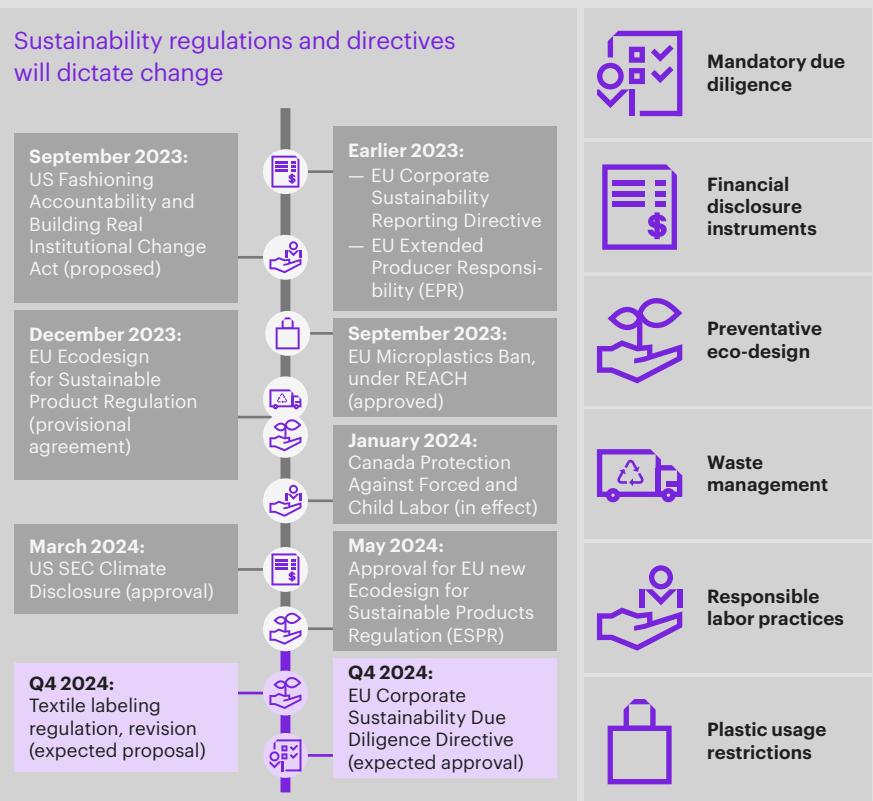
While conversations about circularity and sustainable materials abound, the gulf separating discussion and debate from action and change is still too broad, underscoring the need for a comprehensive, end-to-end understanding of material impacts and industry-wide standards for life cycle assessment. In order to create a truly circular economy we must first embrace innovative approaches such as biodegradable and mono-materials, modular designs, and the use of recycled or upcycled materials. The fashion industry must also enhance care services to maintain, repair, and recover products, thereby extending their life cycle.

It’s time for brands to move beyond isolated circularity initiatives and focus on the holistic E2E impact of their products across all stages of their lives. Embracing these changes will not only meet regulatory requirements, but also position brands as leaders in sustainability.

The future of fashion depends on our collective commitment to find effective solutions to cost- and design-related circularity trade-offs. Let’s take action now to drive meaningful, sustainable change before more draconian, less-effective change is forced on us.

Figure 11  
**Growing regulatory momentum will force brands to ramp up sustainability efforts, regardless of impact on consumer behavior**

Non-exhaustive



Sources: EU Commission, SEC, UN, Government of Canada, New York State Senate; Kearney analysis

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# Appendix

## Interview with Buddy Teaster, CEO, Soles4Souls

### Let's start off by talking about your organization. What is Soles4Souls?

Think about Soles4Souls as a way to create opportunity through shoes and clothes. This year, we'll collect about 5.5 million pairs of shoes, 4.5 million pieces of apparel, one million pieces of other product (accessories, belts, purses, backpacks), and it's evenly mixed between new and used.

### How does charity have a role in the circular economy?

There are three important aspects. One that people don't talk about much is that where our clothing and shoes actually ends up matters to people who typically don't have access to high-quality used clothes, and certainly not new clothes. The circularity piece is a really important part of how they get shoes and clothes. This doesn't have to be done by a charity, but I think being explicit about having a charitable reason to be in those communities allows us to do that in a different way than if we were for-profit.

On the collection and operational side, it's the same thing. We don't have the same financial incentives. Our main metric is around economic impact and that allows us to think about collection, processing, and distribution in a very different way. This complements corporate initiatives, which have to balance financial and ESG pressures from the public, shareholders, and so on.



**Buddy Teaster**  
CEO, Soles4Souls

### Can you expand a little bit on economic impact?

It's idiosyncratic to us. We came up with the metric and it's been validated by a third party. We wanted something more sophisticated than saying just how much stuff came in and went out. So, we went through the process of figuring out what's the value to the people who receive or buy the product from us. That gives us a better way to say if it matters to the people that we're serving and if are we on track to really make a difference over the long term. We set a goal of a billion dollars of impact by 2030. That goal gives us a lot to aspire to as well as guardrails to make decisions.

### What are some of the ways that brands can enable drop off for charity?

Zappos has been one of our longest-term partners. You can go to [Zappos for Good](#), put a label on a package with clothes and shoes in it, take it to a UPS store, and Zappos will pay for the shipping up to 50 pounds per box. It has resulted in thousands of pairs of shoes and clothes every year, and their customers love it. Then our longest bricks-and-mortar partnership is with DSW. You can drop off shoes in all 500+ of their stores. If you're a loyalty member you get points in the program for dropping them off, and you can use points to buy shoes or turn that into additional charitable contributions. DSW has seen some very positive trends in terms of increased foot traffic to stores and in connecting with their most loyal customers. They're collecting more than 100,000 pairs of shoes per month in the US and Canada.

We believe people want to do the right thing when it comes to donation, but it must be easy. When a customer can say "Wait a minute? I know where to go. I'm there on a regular basis. I can just drop off in the box, and I get a little perk?" That's about as compelling as it gets.

### **What are some of the benefits that brands receive?**

Your CFX report shows there's a lot of talk and not a lot of action. This is something that I think brands can demonstrate to their customers, "Hey we're not just talking about recycled content or what we're doing in the factory." This is a visible step. The other piece we're working with our brand partners to do more is bringing those stories back. Tell the stories of what happened in Guatemala (for example) and who was affected by that. For a lot of our brand partners we're also doing travel programs. So again, instead of just pictures and video, you get a group of everything from store associates to C-level. They come and spend a week on the ground. They see and talk to the people who have a job, who have small businesses, and then they go back and talk to their teams about why this matters.

### **Can you talk about the societal benefits of product donation?**

Something like 85 to 90 percent of clothes and shoes end up in the trash. There's no social benefit to that. It could be turned into opportunity for people. The Soles4Souls model allows for that, but so does Goodwill and others. There are lots of ways to keep this product in circulation that most people don't take advantage of because it's not convenient.

So that's the easiest one to talk about, but I also think if people can start to connect their habits with donation and who it goes to, it becomes a bit of a flywheel. If they can see the benefit, they will do more of it.

### **What insights can you share on footwear vs. apparel?**

Footwear and apparel are all lumped together but they are not the same. There are a lot more near-term or even, now, solutions to repurposing and recycling apparel that are nonexistent for shoes. The economics are very different. If you just look at the resale market, there are not many shoes. The first conversation has to be about the whole category, but as we get into a little bit deeper, they can't be lumped together. I don't know what to do about that yet.

### **Why is footwear harder?**

It tends to be a lot more different materials, so the sorting and the mechanical breaking apart is a big deal. There are more chemicals and dyes, and just how a shoe is made makes it a lot harder to take apart.

### **What is a practical challenge we might not fully appreciate?**

The biggest cost for us is in shipping and logistics. A brand can have all the good intentions and as soon as we say to them, "You have to ship it to us," the conversation is often over, no matter what their sustainability goals are. We have regional warehouses for collection and we're trying to be more efficient with where product is shipped, but it still gets to be a big cost. Most companies aren't committed to this extra cost. This is especially hard with shoes because they're so much heavier than clothes.

**“We set a goal of a billion dollars of impact by 2030. That goal gives us a lot to aspire to as well as guardrails to make decisions.”**

## Interview with Gio Giacobbe, CEO at ACBC

Among other things, the CFX's Fourth Edition looks at materials and what choices brands need to make around using different materials, especially when considering the entire life cycle of products from product design and development, through consumer usage, and on to the post-consumer stage.

A recent Kearney PERLab study compared 100 percent singular cotton, silk, wool, and polyester materials. Using a life cycle analysis (LCA) approach, PERLab found there's no clear winner when you look at overall sustainability performance. Some materials like silk and wool perform considerably worse in terms of CO<sub>2</sub> emissions and land and water usage. But for others, it all depends on which dimension you are assessing. For example, cotton and polyester have similar CO<sub>2</sub> emissions, but polyester performs better in terms of land usage and water usage in the consumption phase. Using LCA logic, the study also compares materials in their end-of-life stage, looking at "landfill versus recycling" options. Now, we know the fashion industry hardly ever implements mono-materiality. So, how does the decision to blend up front affect sustainability impact of materials, especially at the end-of-life?

When we compare cotton, polyester, silk, and wool we discover silk is the worst ever in terms of CO<sub>2</sub> emissions compared to the other fabrics. Cotton and polyester have the same impact. Generally, there is a comparison between leather and polyester because most of the time polyester is a substitute of leather rather than a substitute of cotton.

I agree that a small percentages of fashion products on the market are made by single material, and this obviously affects the recyclability of products. If you have products made of a blend of natural and synthetic fibers, at the product's end-of-life the two materials cannot be separated, making it impossible to start any recycling process.



**Gio Giacobbe**  
CEO, ACBC

Fashion brands blend natural and synthetic fibers to have a more resistant yarn. Mixed fibers ensure a more durable product, but they are almost impossible to recycle. We could say the fashion industry wrestles with the trade-off between durability and recyclability.

It is clear that decisions made during the design phase determine the future of the products at end-of-life. "Mono-materiality"—designing product made 100 percent of one singular raw material—is the best eco-designing choice. A product wholly made of a synthetic fiber, can be recycled, while a product entirely made of a natural fiber is technically biodegradable.

There are three big pillars in sustainable fashion which I'll address in order of more sustainable solutions. Number one is biodegradability, designing products made 100 percent by a natural fiber that can be biodegraded once in the landfill. Number two is mono-materiality or designing products made entirely by singular synthetic fibers which enables the recycling processes. Number three is eco-design, designing products by parts that can be easily disassembled to activate recycling or renewal processes.

Finally, brands need to build good end-of-life programs which recognize and address downcycling options for products that do not follow at least one of the three big pillars. Downcycling options are important to identify because fibers—especially natural fibers—progressively degrade at each step of recycling. This means you cannot continuously recycle a natural fiber. Moreover, the yarn made of recycled material needs to be blended with a virgin material. As a result, if the brand is able to recycle 100 percent of the material, it won't be able to use all the recycled material.

### **What are the major obstacles for fashion brands to follow sustainable fashion principles?**

Fashion brands face a plurality of trade-offs when dealing with sustainability. Among the most prominent ones are those related to making cost-effective and design-proof choices. While the former also applies to many other industries, the latter is specific to the fashion industry. For example, ACBC's first patent was the "Zip shoes," a pair of shoes in which the outsole and the upper are separated and detachable by a zip, and the insole can be extracted. The design allows for each of the three parts to be disassembled and substituted. However, a zip is not always the best design option.

### **Taking into consideration the seven CFX dimensions, in your view, which are the most important for the luxury segment? Why?**

To retain their claim on quality that lasts for generations, luxury brands should follow the path of the watch industry and focus on repair and maintenance services. This also promotes the growth of the second-hand luxury segment market which is clearly expanding. At the moment, the fashion industry's repair and maintenance services are not comparable to the watch industry. This is directly linked to the way products are designed. Watches are relatively easy to be repaired because their components can be easily disassembled and substituted. This process is much more complicated in the case of the fashion industry. Consider a luxury bag for example. Since it is mainly made using one big piece of leather, its components are not clearly distinguishable. At this point post-sales services are influenced by eco-design choices. If, from the beginning, a luxury product is designed in a way that ensures its disassembly, you can develop better repair and maintenance services and extend the item's lifespan.

**“To retain their claim on quality that lasts for generations, luxury brands should follow the path of the watch industry and focus on repair and maintenance services.”**

## About PERLab

Product Excellence and Renewal Lab (PERLab) is Kearney's global dedicated practice for "everything product." We help our clients make products that consumers fall in love with. Our design-driven approach to gross margin transformation offers end-to-end capabilities to support growth at every point in a product's life cycle. Our experts in product design, product development, sustainability, user experience, industrial design, consumer insights, fabric and materials, IoT, product engineering, packaging design, and manufacturing excellence help organizations disrupt markets and leapfrog the competition. With studios in Chicago, Stuttgart, Bengaluru, Hamburg, and Shanghai, PERLab has clients that range from Fortune 500 companies to private equity portfolio firms. With a team of management consultants, designers, and technologists, PERLab boasts of a global team of seasoned operators with the trifecta of expertise needed to build great products.

## About Kearney

Kearney is a leading global management consulting firm. For nearly 100 years, we have been a trusted advisor to C-suites, government bodies, and nonprofit organizations. Our people make us who we are. Driven to be the difference between a big idea and making it happen, we work alongside our clients to regenerate their businesses to create a future that works for everyone.

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