



From talk to action

Paving the way for a circular economy in
the consumer goods and retail industry

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Introduction

Consumer goods are part of our daily lives. We use them in vast volumes and variety, often with avoidably short lifespans and a high impact on the planet's resources. While consumer goods and retail (C&R) companies increasingly promote eco-friendly initiatives, the sector's reliance on finite raw materials and fossil fuels to serve these consumer needs creates a contradiction.

Despite a growing emphasis on reducing environmental impact, short lifespan goods continue to be produced at scale, leading to substantial waste and resource use. This reliance also makes the sector increasingly vulnerable to supply chain disruptions, which can deepen potential environmental impacts and slow circularity progress.

Where regulatory measures, taxes, and incentives aim to accelerate the shift towards a circular economy, inconsistencies in the pace of adoption across the C&R sector highlight the complexities in aligning operational practices with circularity goals. Broad in nature, these complexities are borne from the dynamic tension between companies' own pledges, consumer expectations, and ever-shifting regulations.

While company pledges are well-intended, they typically lack the underlying infrastructure to deliver on their circular intentions.

Well-established and traditional processes tend to prevail in favor of margin and market demand, which can limit available funds and resources to invest in new circular initiatives and innovations.

At the same time, consumers are seeking more circular options as they become ever more aware of how their buying decisions affect the environment and our society, both present and future. In a recent global survey, 69 percent of consumers agreed that "we must consume less to preserve the environment for future generations", with 91 percent expressing an interest in buying more sustainable products.¹

For an industry pressured by both margin and volume, we believe the business case for a circular economy is urgent now more than ever before. With elements of best practices beginning to emerge in some sub-sectors, accelerating the transition to a circular economy is expected to come from harnessing collaboration to learn from those ahead — moving collectively at the speed of the fastest.

It is here that circularity can bring with it significant opportunities for C&R to reimagine the future.

The circular economy is an economic system that uses a systemic approach to maintain a circular flow of resources by recovering, retaining or adding to their value, all while contributing to sustainable development.²

¹ Healthy & Sustainable Living Report 2023. Globe Scan (October 26, 2023).

² Circular Economy - Vocabulary, principles and guidance for implementation. ISO 59004 (2024).



The six areas evaluated as part of our assessment are:



1 Ambition and strategy

Creating a comprehensive circular vision and strategy, defining clear objectives, and devising an implementation plan.



2 Goals and targets

Establishing measurable circular goals and targets, and tracking and communicating them to stakeholders.



3 Knowledge and resources

Allocating resources and developing skills to help accelerate circular practices alongside educating consumers.



4 Resource inflows

Assessing input resources and carefully selecting materials to facilitate circular design and operations.



5 Resource outflows

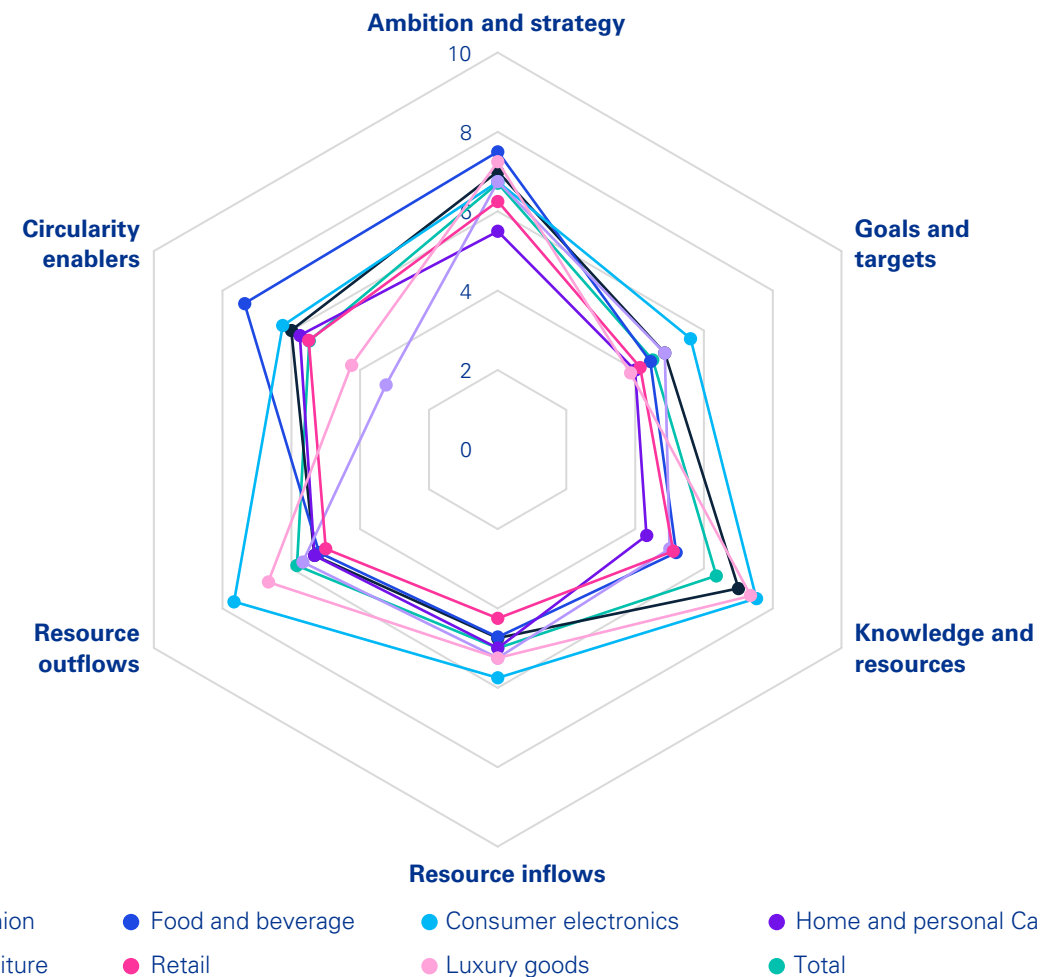
Monitoring outgoing products and resources to create closed or open loops that support circular business model implementation.



6 Circularity enablers

Developing solutions and fostering industry collaboration to enable systemic change.

KPMG's C&R circularity readiness assessment





Beyond linear: The urgent need for a circular economy

Despite a worldwide surge in commitments to achieve net zero and preserve natural resources, only 7.2 percent of the global economy operates on a circular model³ — a figure that has alarmingly declined in recent years. Conflating concerns, by 2060, the demands of urbanization, industrialization, and population growth are expected to increase the volume of reserves taken from the Earth by 60 percent⁴ in comparison to 2020 levels — a stark forecast adding greater urgency to the call for sustainable production and consumption. For consumer goods companies and retailers, the circular economy is no longer a nice to have — it's becoming business critical.

Assessing circular progress: KPMG's C&R circularity readiness assessment

The overall purpose of the circular economy is to eliminate waste by circulating products and materials at their highest value for as long as possible, all while regenerating natural systems. Shifting from established linear models to circular ones — while monitoring and reporting progress — is a major undertaking that should ripple out to every part of a company's operations.

A successful circular transition should be both strategic and systemic. The global landscape is experiencing a concerted effort towards enhancing circularity. While Europe is accelerating its transition to circularity through evolving policies and

regulations like the European Commission's (EC) Circular Economy Action Plan as part of the European Union (EU) Green Deal, similar initiatives are emerging worldwide.

In the Asia-Pacific region, China is introducing a Circular Economy plan, Australia is developing a National Circular Economy Roadmap, and Japan is enacting the Basic Act for Establishing a Sound Material-Cycle Society. India is emphasizing waste avoidance, while in the US, circular economy efforts are primarily driven at the state level. Additionally, the United Nations is working towards a Global Plastics Treaty to address plastic pollution and promote a circular economy for plastics.

While a long road ahead remains, the global community is taking steps to tackle climate change, biodiversity loss, and resource depletion through circularity.

As the various regulations and initiatives begin to aid the steps towards a circular future, consumer goods companies and retailers should work collaboratively to navigate an increasingly complex and evolving regulatory landscape. By ensuring transparency and accountability across supply and value chains, we believe companies can utilize regulations to guide collaborative efforts and scale up circular economy practices.

In this report, we seek to identify the key levers of progress towards circularity in the form of a readiness assessment, share examples of good practices and offer recommendations for accelerating circularity at scale.

About the lead authors



Isabelle Allen

Global Head of Consumer and Retail
KPMG International

E: isabelleallen@kpmg.com

Isabelle Allen is the Global Head of Consumer and Retail for KPMG International, bringing more than 30 years of international experience to the industry. In her role, she helps drive KPMG's global investments and thinking around the future of the sector, including global macroeconomic and geopolitical trends, embracing ESG, the use of innovative technologies, disruptive entrants and emerging consumer behaviors, working with 25,000-plus sector professionals and global alliance and ecosystem collaborators.



Arnoud Walrecht

Lead of Global Circular Economy
KPMG in the Netherlands

E: walrecht.arnoud@kpmg.nl

As the Lead of Global Circular Economy and a Partner at KPMG in the Netherlands, Arnoud is responsible for leading sustainability in circular economy engagements in the Netherlands and worldwide. Arnoud has extensive experience managing complex multi-stakeholder projects in an international context and has worked on many engagements related to the circular economy and sustainability more broadly.

³ The Circularity Gap Report 2024. Circle Economy Foundation (2024).

⁴ Global Resources Outlook 2024. United Nations Environment Programme (March 01, 2024).



KPMG's C&R circularity readiness assessment

This report highlights the progress made by C&R businesses in their transition to circularity. With a focus on six key circular economy areas, we present a readiness assessment, share examples of good practices and offer recommendations for accelerating circularity at scale across the sub-sectors of consumer electronics, fashion, food and beverage, furniture, home and personal care, luxury goods, and retail.

Key findings

At a glance, consumer electronics companies are leading the way in circularity due to their focus on material efficiency, driven by the use of scarce resources. The fashion, luxury goods, and food and beverage sub-sectors show progress but need to scale up pilot initiatives. Systemic change is crucial for all sub-sectors to establish resilient value chains.



1. Ambition and strategy:

In the fashion, food and beverage, and luxury goods sub-sectors, companies demonstrate strong ambition and strategic direction in circularity. Despite ambitious circularity goals, companies across all sub-sectors lack concrete roadmaps on how to achieve these goals.



2. Goals and targets:

Fashion companies lead in communicating clear, albeit limited, circularity goals. Across all sub-sectors, especially food and beverage and retail, packaging targets are common, driven by cross-sector initiatives. Companies have an opportunity to set more ambitious targets for circular business models, including increasing revenue generation from circular products and services.



3. Knowledge and resources:

Consumer electronics, fashion, and luxury goods companies show evidence of strong circular knowledge and resource allocation. Scaling up pilot programs for consumer engagement is crucial. Companies should leverage emotional connections to enhance product durability and incentivize take-back schemes. Quantifying the impact of circularity on climate goals is important.



4. Resource inflows:

The fashion, luxury goods, and consumer electronics sub-sectors are ahead in managing resource inflows due to wider labeling and product identification practices. Improved material management and real-time monitoring through updated procurement systems are crucial across sub-sectors.



5. Resource outflows:

Consumer electronics and luxury goods companies are making progress in utilizing digital technologies to track products and inform end-of-life management. Improving post-sale consumer support and leveraging digitalization can help address resource management inefficiencies.



6. Circularity enablers:

Cross-industry collaboration is important for sharing best practices and tackling challenges. In the fashion, luxury goods, home and personal care, and food and beverage sub-sectors, companies are partnering with competitors or start-ups to drive innovation in circular products and materials. Extended Producer Responsibility (EPR) programs are gaining traction, with the food and beverage and consumer electronics sub-sectors leading the way.

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Readiness assessment methodology

With incentives and barriers to achieving circularity varying significantly between retail and consumer sectors, ensuring direct comparisons is often a challenge. Acknowledging this, KPMG's C&R circularity readiness assessment employed a bespoke methodology involving a series of comprehensive literature reviews, framework development, company analysis, and expert interviews to provide an overview across the C&R sector.

Identifying and selecting over 100 reports, articles, and publications on circular economy and C&R, the literature review process systematically analyzed content to identify key themes and concepts. Findings were synthesized to highlight trends, gaps, and opportunities — forming and developing a detailed framework focused on six key areas and related indicators:

1 Ambition and strategy

- Publicly declared circular vision and/or ambition
- Publicly communicated circular strategy or policy
- Recognition of circular economy as a company's material topic
- Roadmap or implementation plan for circular economy

2 Goals and targets

- Setting targets related to circular product design
- Setting targets related to circular resource inputs
- Setting targets related to packaging
- Setting targets related to operational waste
- Setting targets related to circular business models
- Setting targets related to revenues from circular products and services

3 Knowledge and resources

- Setting up a team dedicated to circular economy
- Allocating resources and developing the needed skills
- Educating consumers on circular economy
- Integrating circular economy with a decarbonization strategy

4 Resource inflows

- Monitoring material resource inflows
- Monitoring design of circular products and services
- Monitoring recyclable, reusable, or compostable packaging
- Utilizing digitalization for circular economy

5 Resource outflows

- Designing circular operations and production
- Implementing waste management strategies
- Implementing circular business models (e.g. repair, reuse, product-as-a-service, sharing, remanufacturing, take-back)

6 Circularity enablers

- Participating in sectoral initiatives for circular economy
- Forming partnerships with competitors
- Collaborating with start-ups
- Implementing EPR

This framework was cross-referenced with existing models and standards to help ensure its validity and comprehensiveness. From here, a range of five to eight companies per sub-sector were identified based on revenue and market share, with data on their circular economy practices gathered from reports, websites, press releases, and other public sources. Each of these companies was subsequently evaluated using the framework to assess performance in the identified six focus areas using a 0–10 point scoring system.

Complementing the literature review and company analysis, 20 industry leaders from various sub-sectors were selected to interview. Each expert helped to test and refine insights, offering fresh perspectives on the challenges, opportunities, and best practices in implementing circular economy principles within their sub-sector.

Combining insights from literature reviews, framework development, company analyses, and expert interviews, this thought leadership offers a comprehensive and evidence-based approach to understanding and promoting circular economy initiatives in the C&R sector. The findings highlight the potential for companies to drive innovation, increase customer loyalty, and share best practices among sub-sectors aligned with the key focus areas.

Throughout the report, we explore these six circular economy areas in greater detail, delving into key insights and discussing the implications for businesses interested in advancing circular economy principles within C&R.



Why these six assessment areas?

A circular economy aims to keep products, components, and materials at their highest utility and value always — minimizing waste and negative environmental impacts. Each assessment area was chosen for its close alignment to the core principles of a circular economy:

1 Ambition and strategy

Developing a clear vision and strategy is crucial for transitioning to a circular economy. Companies should rethink business models, design products for circularity, and collaborate across the value chain.

2 Goals and targets

Setting measurable circular goals and tracking progress is an essential component for driving change. Communicating these targets to stakeholders can help increase transparency and accountability.

3 Knowledge and resources

Investing in skills and educating employees and consumers is one of the keys to accelerating the adoption of circular practices. Allocating sufficient resources enables companies to implement circular solutions.

4 Resource inflows

Selecting input materials that are renewable, recyclable or biodegradable is a fundamental aspect of circular design. This facilitates keeping product and materials in use for longer.

5 Resource outflows

Monitoring outgoing products and resources allows companies to create closed-loop systems where waste becomes a resource. Open-loop recycling, where materials are used in different products, is also an important part of the circular economy.

6 Circularity enablers

Developing innovative solutions and collaborating with industry partners are necessary components for driving systemic change. Enabling technologies, new business models, and policy frameworks such as EPR can help accelerate the transition to a circular economy.

Assessing sub-sectors across these six areas provides a comprehensive view of their circular economy performance. It helps identify strengths, weaknesses, and opportunities for improvement — supporting the transition to a more circular and regenerative economic model.





Laying the foundations of a circular transition

Ambition and strategy

| Framework question | Average across sub-sectors | Range |
|---|----------------------------|------------|
| Publicly declared circular vision and/or ambition | 8.35 | 7.00-9.44 |
| Recognition of circular economy as a company's material topic | 7.46 | 4.00-10.00 |
| Publicly communicated circular strategy or policy | 6.33 | 4.00-8.33 |
| Roadmap or implementation plan for circular economy | 4.71 | 3.00-6.00 |
| Average lever score per sub-sector | 6.71 | 5.50-7.50 |

Ambition and strategy



An industry with high circular aspirations

Encouragingly, most companies across all selected C&R sub-sectors have declared a circular ambition, which sets a path for sustainable product design, procurement, manufacturing, packaging, and marketing and sales — a lengthy process that we believe needs to be put in motion today. Most businesses also have strategies for upstream sourcing, resource efficiency, and end-of-life management. To effectively translate these ambitions into actionable strategies, companies are formulating circular policies and communication strategies.

Within the **food and beverage** sub-sector, there's a strong emphasis on circular strategies across the value chain, including regenerative sourcing practices and packaging solutions. As an example, **Unilever** is committed to making 100 percent of its plastic packaging reusable, recyclable, or compostable by 2030 for rigids and 2035 for flexibles. The company is taking various actions such as developing alternative materials, alternative formats and alternative business models.⁵

Similarly, **fashion** companies are redefining their visions to prioritize durability, recyclability, and waste reduction, challenging the prevailing trends of fast fashion. Collaborative efforts — such as initiatives led by the **Ellen MacArthur Foundation's** 'Vision of a Circular economy for Fashion'⁶ — are pivotal in reshaping the industry's approach towards circularity.

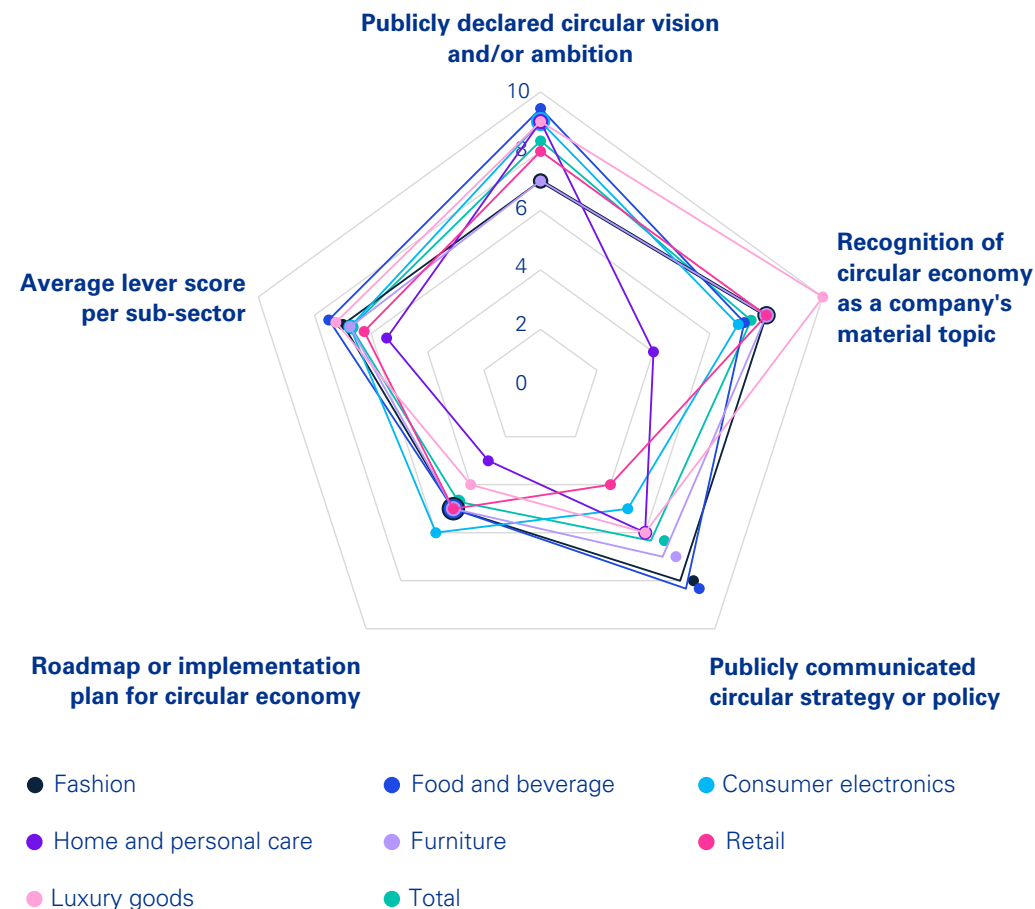
With a specific focus solely on **consumer electronics** within the sub-sector, companies are publicly declaring circular ambitions centered around efficient critical materials use, waste reduction, and recycling of electronic waste. This sub-sector is witnessing a rise in the introduction of carbon-neutral products and commitments to carbon neutrality across product lines.

Businesses in the **home and personal care** sub-sector are developing circular strategies and policies to phase out hard-to-recycle packaging and shifting to bio-based ingredients, with clear roadmaps to guide their efforts.

The fashion and food and beverage sub-sectors are leading the way in this indicator with clearly stated ambitions and strategies.

In the **furniture** sub-sector, companies are attempting to enhance resource efficiency and instill circular design principles. **Luxury goods** companies are making a concerted effort towards circularity by using fewer virgin resources and shifting to bio-based or recycled along with extending product life through a growing pre-owned/vintage market. Finally, in the **retail** sub-sector, companies are prioritizing waste reduction and packaging reuse.

Ambition and strategy



⁵ Towards a circular economy for plastics. Unilever (2024).

⁶ Our vision of a circular economy for fashion. Ellen Macarthur Foundation (2024).



KPMG's viewpoint

Bridging the gap between ambition and action

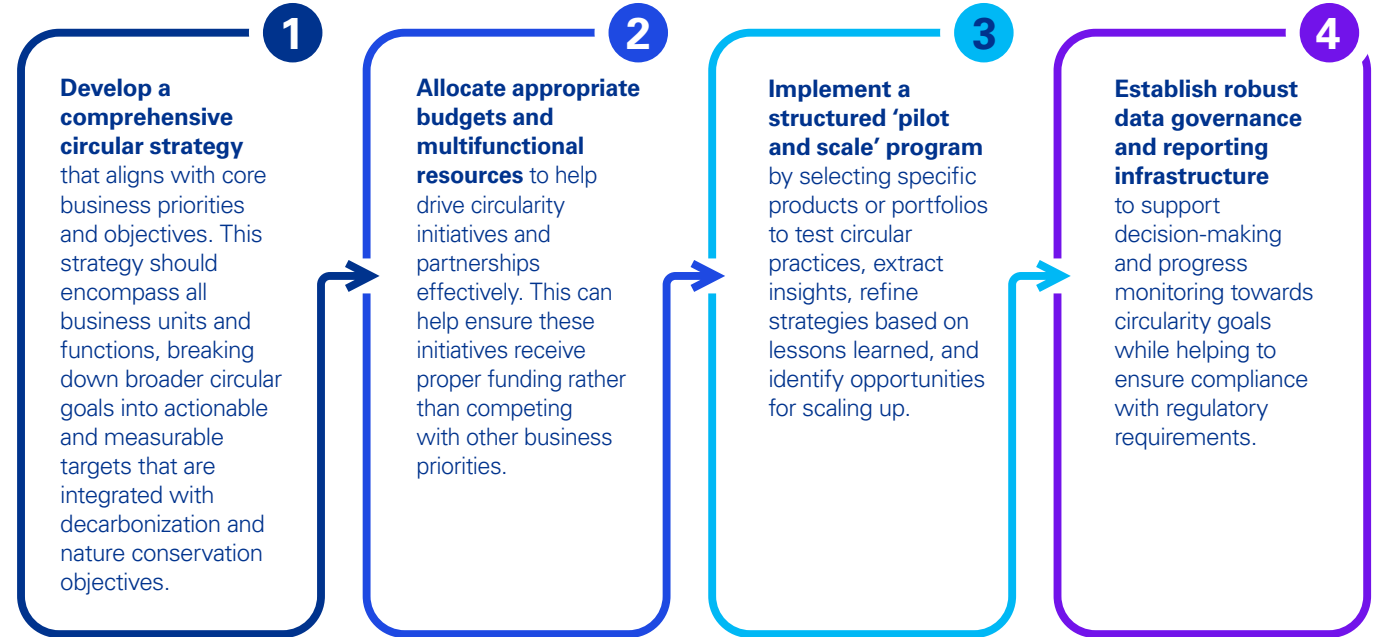
Although aspirations for circular economy initiatives are high among C&R companies, our assessment indicates a low maturity of concrete roadmaps and implementation plans. Setting ambitions and visions is a great start, but these should be translated into actionable steps, which can impact all organizational business units — as well as major stakeholders. Companies like **Walmart** are helping lead the way by transparently reporting progress on their circular roadmap, with key metrics typically published annually.⁷

Snapshot

The EU Sustainable Consumption Pledge

The EU Sustainable Consumption Pledge is an initiative by the EC that encourages companies to voluntarily commit to supporting sustainable production and consumption beyond what is legally required. Global sporting goods company **Decathlon** has signed the Pledge and stated its ambition to extend the lifespan of products through repair and buy-back, in addition to providing rental services for some products. The company has dedicated a web space for workshop services, which also provides repair tips that customers can undertake themselves. To make it attractive for customers, repair costs will be at least 30 percent lower than the price of a new product, with repair services expected to generate 10 percent of the company's EU turnover.⁸

To help bridge the gap between ambition and action, companies can take several crucial steps:



⁷ Waste: Circular Economy. Walmart (June 2, 2023).

⁸ DECATHLON signs the European union's Sustainable Consumption Pledge. Decathlon (2024)



Establishing measurable goals and targets for effective tracking and stakeholder communications

Goals and targets

| Framework question | Total | Range |
|---|-------------|-----------|
| Setting targets related to circular resource inputs | 5.43 | 5.00–6.00 |
| Setting targets related to circular product design | 5.56 | 3.89–9.00 |
| Setting targets related to packaging | 6.46 | 5.00–7.22 |
| Setting targets related to operational waste | 5.67 | 3.00–7.00 |
| Setting targets related to circular business models | 3.54 | 2.00–6.00 |
| Setting targets related to revenues from circular products and services | 0.73 | 0.00–2.00 |
| Average lever score per sub-sector | 4.56 | 3.67–5.67 |

Goals and targets



Circularity targets are already established with limited scope

Of all the areas in the report, 'goals and targets' received the lowest score, suggesting uncertainty about what companies across sub-sectors want to achieve and how best to go about it. Companies in the **consumer electronics** sub-sector appear to have some of the most comprehensive circularity targets, including reducing the use of virgin plastics and sourcing more recycled materials, while helping to minimize hazardous chemical discharge from electronic waste.

Some companies are going even further, exploring new revenue opportunities in the process. **Back Market** — a European marketplace dedicated to the sale of refurbished tech devices — helped avoid 382,642 tons of carbon emissions in 2023 by selling refurbished electronics in collaboration with its partner sellers. In 2024, the company introduced its 'Back Carbon' program, enabling partner sellers to monetize the certified carbon credits generated — using the proceeds to further scale refurbishment activities, hone their technical capabilities, and increase both their collecting and testing capacity for electronic devices.⁹

With wood being a major component of many **furniture** products, it's little surprise that companies in this sub-sector frequently set targets on

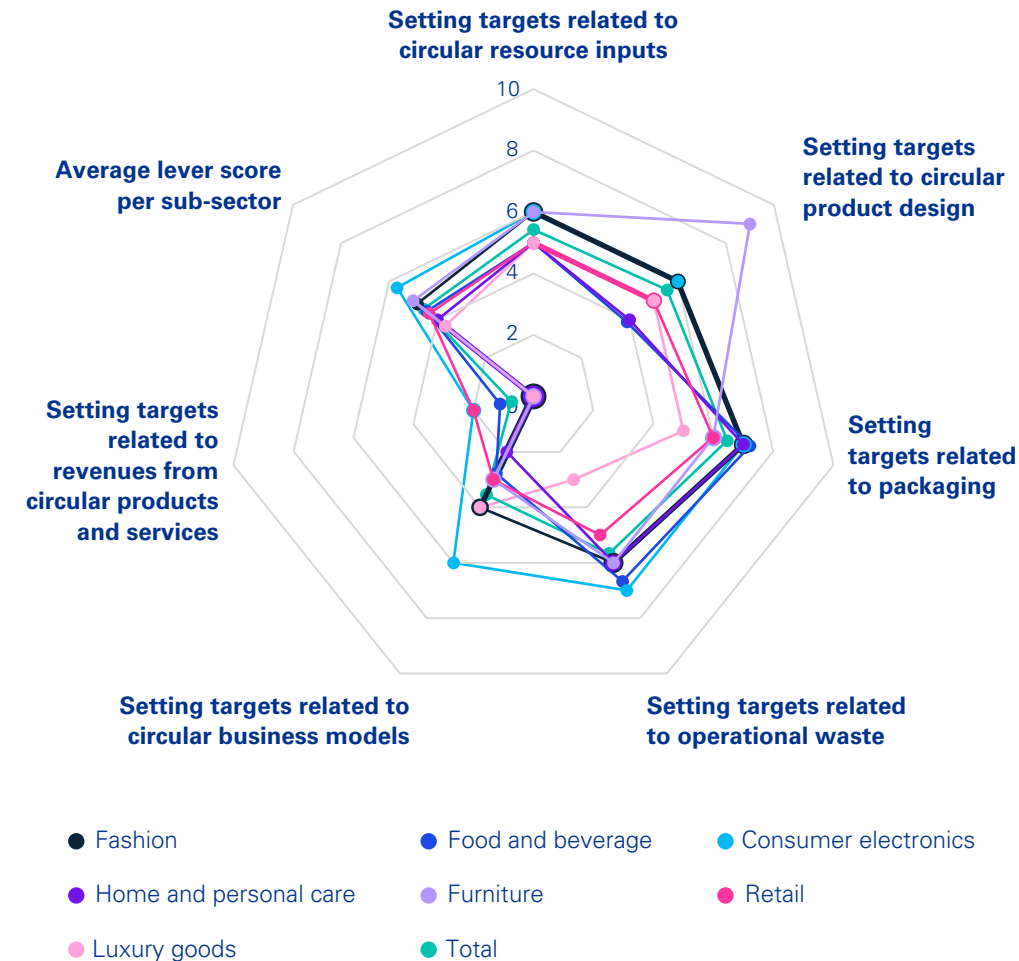
acquiring wood from Forest Stewardship Council (FSC)-certified sources — as well as incorporating circular design principles — to help ensure that every product can be reused, refurbished, remanufactured, and recycled. Some are exploring new business models such as selling furniture 'as-a-service' — including leasing and pay-per-use — and expanding second-hand markets.

Companies in the **home and personal care** sub-sector are setting targets for packaging, circular resource inputs and operational waste reduction — although there is room for improvement in circular product design and business model innovation, such as refill models and take-back schemes.

Across the C&R plastic, plastic is still widely used in packaging. However, this versatile and durable material faces enormous scrutiny due to its contribution to environmental pollution and contamination of the food chain with microplastics release. Many companies have set targets to reduce plastics and/or increase and improve recycling.

In doing so, more than 250 global businesses covering one-fifth of the world's plastic packaging joined 'The Global Commitment', a voluntary effort led by the **Ellen McArthur Foundation and the United Nations Environment Programme** with the aim to ensure that 100 percent of plastic packaging is reusable, recyclable or compostable by 2025.

Goals and targets



⁹ Interview with Back Market, March 2024.



In a 2023 stock take, progress was noted in stabilizing the use of virgin plastic and doubling recycled content. However, the goal of a 'future without plastic' remains far off, calling for robust policy action alongside more voluntary producers and efforts to accelerate action.¹⁰

Unsurprisingly, the topic is a high priority for **food and beverage** businesses seeking to adopt more recyclable, reusable or compostable packaging.

Retailers are also setting targets related to circular packaging, aiming to reduce plastic usage and increase the recyclability of packaging materials. Efforts include selling products in bulk and transitioning to recycled plastic packaging. While challenges remain in defining what recyclability means in practice and at scale across different geographies and the industry at large, some companies are testing their own targets.

French retailer **Carrefour**, for example, plans to have all packaging for their own brand items capable of being reused, recycled, or turned into compost. The retailer also aims to significantly reduce packaging as a whole, with 30 percent of its packaging made from recycled plastic by 2025. In other areas, Carrefour is exploring bulk product selling to further reduce packaging needs, which could save as much as US\$150 million per year by 2026.¹¹

The consumer electronics sub-sector remains ahead in the 'goals and targets' indicator, with luxury goods requiring a priority focus.

Across the **fashion** sub-sector, companies are striving to phase out virgin polyester and introduce recycled sources to reduce emissions and waste. However, they face competition for recycled materials with the bottles industry and an ongoing challenge from microplastic pollution. Textile needs to be prioritized.

Luxury goods firms are increasingly committing to circularity targets, particularly in packaging and waste reduction, but need to make up ground by developing targets for circular business models at scale.

KPMG's viewpoint

Integrating circular targets into business strategies

Ambitious, achievable — and transparent — targets are the critical cornerstone of a circular transition strategy. KPMG's research reveals that only a minority of C&R companies have set revenue targets for circular products and services. By linking circularity targets to financial performance and revenue, companies can better integrate circularity goals into business strategy — rather than treating circular economy as separate initiatives, often competing with linear new products.

Key targets could include cost savings from resource efficiency and waste prevention, revenue from new business models, or innovation incentives for improved circular product designs. Financial metrics highlight circularity progress and hold organizations accountable to investors, customers, and regulatory bodies for their commitments.



¹⁰ Our vision of a circular economy for fashion. Ellen MacArthur Foundation (2024).

¹¹ CSR commitments to improve Biodiversity. Carrefour (2024).



Steps companies can take to embed targets into their business plans and strategies include:

1

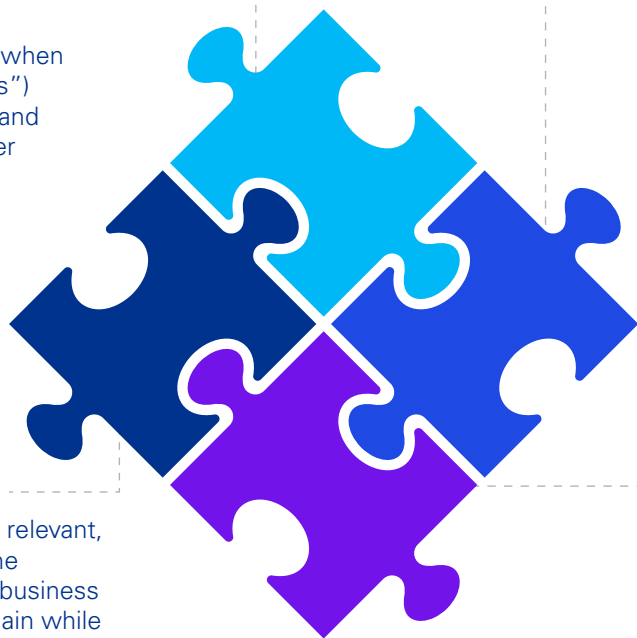
Clearly define what circularity means

to avoid greenwashing risks (e.g. when using terms like "circular products") and clearly communicate targets and performance based on stakeholder expectations and requirements (e.g. on ESRS E5).¹²

2

Formulate 'SMART' targets

(specific, measurable, achievable, relevant, and time-bound) that help drive the adoption of circular products and business models across the entire value chain while considering unique product characteristics and complexities.



3

Integrate circular economy targets with climate and business objectives

by understanding the carbon footprint, quantifying the emission reduction potential of circular economy interventions across the value chain, and integrating circular key performance indicators (KPIs) into climate action plans and business objectives.

4

Measure and communicate

by considering the entire value chain and using frameworks such as the Circular Transition Indicators (CTI) to determine emission hotspots where circular strategies can have the biggest impact.



¹² European Sustainability Reporting Standards (ESRS) E5 is the draft standard that specifically focuses on resource use and circular economy.



Allocating resources and developing skills to help accelerate circular practices and consumer education

Knowledge and resources

| Framework question | Total | Range |
|--|-------------|------------|
| Setting up a team dedicated to circular economy | 7.54 | 6.00–9.00 |
| Allocating resources and developing the needed skills | 5.62 | 0.00–9.00 |
| Educating consumers on circular economy | 5.92 | 4.00–10.00 |
| Integrating circular economy with decarbonization strategy | 4.21 | 3.00–5.00 |
| Average lever score per sub-sector | 5.82 | 4.25–7.50 |



Building knowledge and capabilities in circularity is on the rise

When it comes to allocating and upskilling resources to drive circularity initiatives, companies in the **consumer electronics** sub-sector achieved the highest maturity score, with **luxury goods** not far behind.

Food and beverage companies are looking after the value chain — investing in skills training programs for smallholder farmers, recycling collectors, and small retailers. They are also investing in marketing campaigns to educate customers about circular initiatives, particularly to prevent food waste at home.

In the **fashion** sub-sector, there is a realization that circularity needs to be connected in terms of operations, strategy, and sustainability teams (e.g. those working on decarbonization and nature). Companies are training employees on circular economy principles and providing guidance on circular design. For example, **H&M** developed a 'Circulator' guide to help its teams design more circular products by navigating material and design decisions, with components scored for environmental impact, durability, and recyclability.¹³ Additionally, through consumer education, businesses are starting to encourage customers to recycle clothes through take-back initiatives, which rewards sustainable behavior.

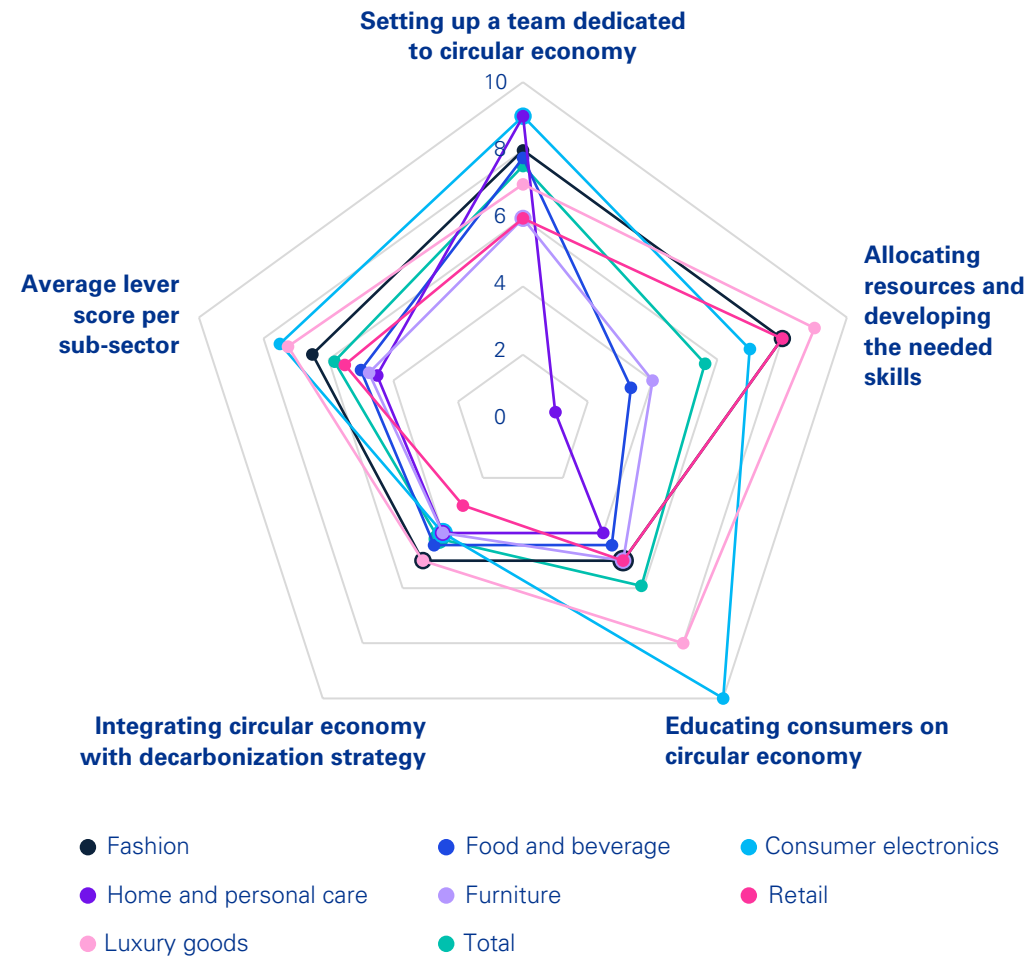
Suppliers in the **consumer electronics** sub-sector are receiving training on zero waste. Companies are conducting in-depth research on material recycling and recovery, with a view to improve resource circularity life cycle. Consumer education is a further priority, including incentives to recycle electronic waste rather than keeping it in house, along with comprehensive information on buy-back programs available in store and online.

Consumer electronics took pole position in the 'knowledge and resources' indicator, followed by **luxury goods** and **fashion**.

A closer look at the **home and personal care** sub-sector reveals a need for more training programs to educate employees, suppliers, and customers on circularity's positive impact — including circular initiatives and waste management. Labeling should provide clear recycling instructions, preferably market specific, to educate consumers.

Furniture companies provide training on product design and packaging, but generally lack dedicated teams implementing circular economy programs across their operations and value chains. Consumer education initiatives include end-of-life use through furniture repair, reconditioning, and recycling.

Knowledge and resources



¹³ Circulator. H&M Group (2024).



This is augmented by assembly/disassembly or self-repair tutorials and easy access to spare parts. Providing assembly/disassembly or self-repair content alongside easy access to spare parts is also further enhancing circularity efforts.

Turning to the **luxury goods** sub-sector, companies are building skills in circular design, with a strong emphasis on craftsmanship. Consumer education efforts involve acting against product obsolescence by offering free repair services with extended warranty periods, and QR codes on products providing comprehensive product and care information.

Finally, several **retail** companies have dedicated circular economy teams, while many offer employees' sustainability-related training programs. Consumer education initiatives include providing harmonized labels with disposal instructions such as 'How2Recycle'.

KPMG's viewpoint

Circular education across the organization and value chain

Across C&R, there is a tendency to delegate circular economy responsibilities to sustainability teams. However, circularity is a complex, holistic business transformation requiring a coordinated, organization-wide effort across procurement, supply chain, R&D, manufacturing, marketing, and packaging.

Individuals across all functions should have clear responsibilities and targets, calling for broad upskilling to help improve understanding, foster collaboration, and work collectively towards the same circularity goals. It is important that dedicated circularity teams exist here, separate from their sustainability counterparts.

C&R companies have an opportunity to use their marketing expertise to create strong circular brands and increase circular awareness among employees, suppliers, and consumers. Training employees and suppliers can be challenging due to the complex, technical nature of circularity, alongside the need to change established ways of thinking. Consumer education is in an early phase and focused mainly on providing 'green' labels and certifications, which can be confusing given their volume and variety.





Snapshot

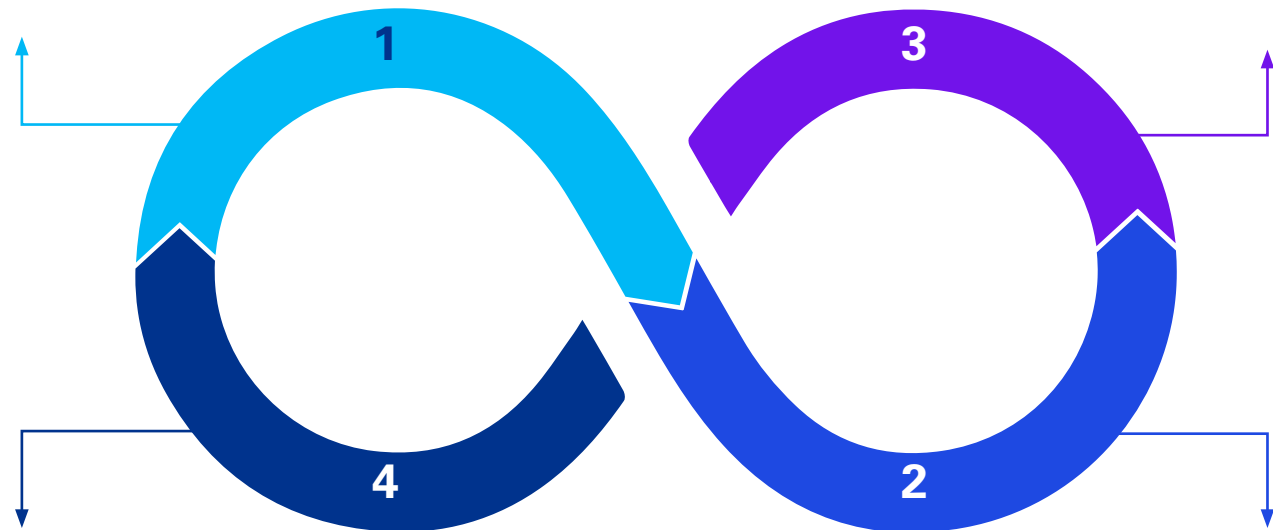
A catalyst for circular transformation

Established in 2013, the Kering group's Material Innovation Lab (MIL) serves as both a repository of sustainable fabrics and a center for circularity — working with suppliers, fostering traceability, and sourcing sustainable materials. The Lab addresses specific requests from design teams and holds training sessions on circularity, with involvement in industry-wide entities such as Textile Exchange, Cradle to Cradle Products Innovation Institute, and the Ellen MacArthur Foundation.¹⁴

Recommendations for improving circular training and awareness include:

Empowering employees by building specific skills as well as a broader understanding of circularity across strategic, technical, and governance aspects. Interactive classroom sessions, workshops, and brainstorming sessions can make learning effective.

Engaging key suppliers in the circular journey through a well-defined strategy to implement awareness programs, provide incentives, set clear contractual obligations to adhere to circular requirements, and collaborate closely to design circular products.



Working cross-functionally by bringing together representatives from key departments like R&D, procurement, manufacturing, logistics, marketing, and sustainability to align on objectives and define a common ground for knowledge sharing and collaboration.

Educating consumers to understand how their actions impact the environment. Tell engaging stories about circularity, positioning it as 'the norm', and use social media, in-store displays, and community outreach with added incentives to help push home the circularity message.

¹⁴ MIL: a laboratory for more sustainable materials. Kering (2024).



Assessing inputs and shifting to circular materials

Resource inflows

| Framework question | Total | Range |
|---|-------------|-----------|
| Monitoring material resource inflows | 5.63 | 4.44–7.00 |
| Monitoring design of circular products and services | 5.21 | 4.00–7.00 |
| Monitoring recyclable, reusable, or compostable packaging | 5.43 | 5.00–7.00 |
| Utilizing digitalization for circular economy | 3.71 | 2.00–5.00 |
| Average lever score per sub-sector | 5.00 | 4.25–5.75 |

Resource inflows



A slow but growing use of circular inputs

In some C&R sub-sectors, companies are beginning to monitor the materials they use in production, but significant gaps remain, especially for supplier-related data. With a host of new initiatives for designing circular products and selecting circular materials — with a focus on durability, disassembly, upgradability, material health, and recyclability — the most highly ranked sub-sectors for assessing circular resource inflows are **consumer electronics, luxury goods, and furniture**.

Consumer electronics companies have embraced recycled metals and plastics for a variety of products such as printers, smartphones, and cloud computing services and platforms, while an increase in replaceable components is making devices more repairable.

An increase in circular inflows in the **furniture** sub-sector involves wood sourced from responsibly managed forests and recycled materials. Some companies are also pushing ahead with circular design, incorporating removable upholstery, easy disassembly, and reduced packaging size and weight.

Circular **home and personal care** initiatives include bio-based and natural ingredients, along with reusable, recyclable or compostable packaging, moving towards paper-based materials.

* Cyclon is a trademark of On Holding AG

¹⁵ Run. Recycle. Repeat. On (2024).

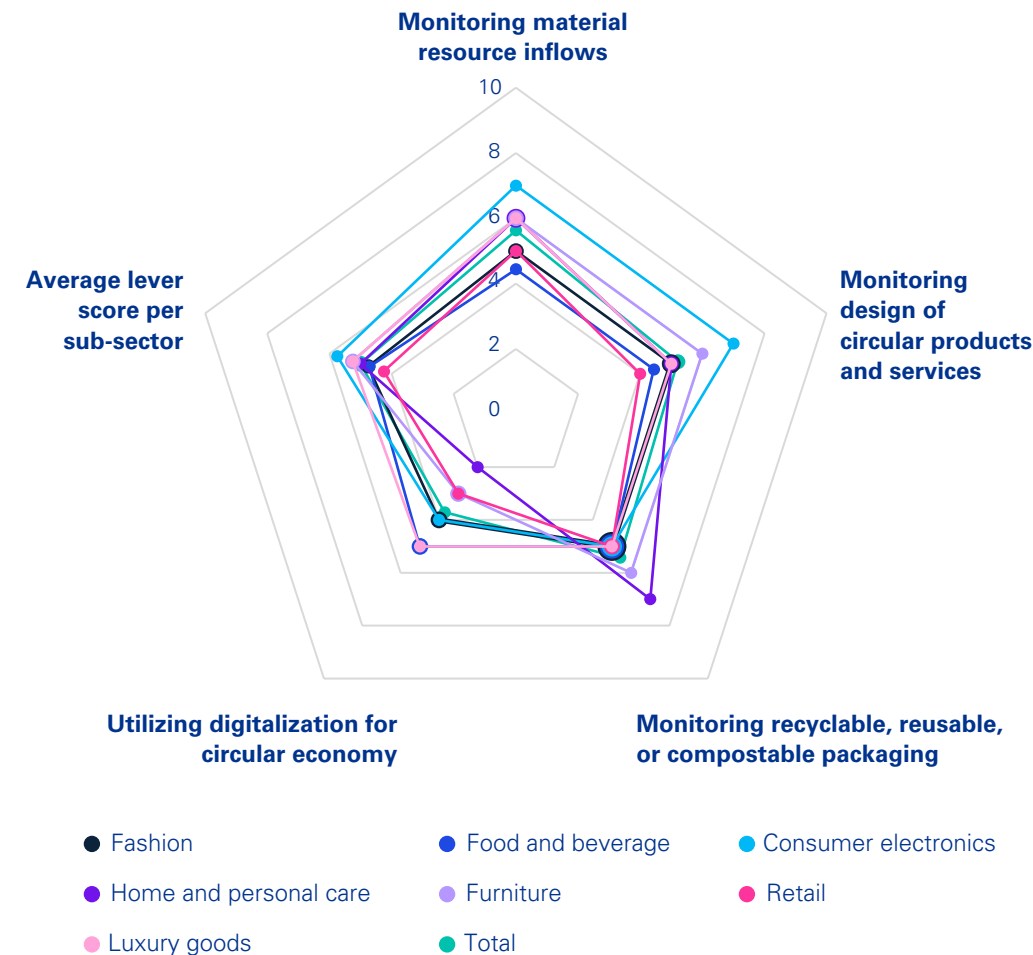
In the **fashion** sub-sector, there's a growing use of recycled polyester in clothing items, often sourced from plastic bottles. This highlights the urgent need to advance textile-to-textile recycling processes and consider other raw materials. As an example, the Swiss performance sportswear brand **On** has introduced a new recyclable shoe through a subscription model, known as Cyclon™*, where consumers can replace worn out shoes with a new pair — sending the previous pair back, to be recycled. The company also sells t-shirts with over 90 percent bio-based content, designed to be returned and recycled into new shoe parts.¹⁵

Most of the companies in the **food and beverage** and **retail** sub-sectors are committed to circular packaging materials and regenerative agriculture. They are increasingly using recycled plastic, and designing packaging to be reused, recycled, or composted.

For **luxury goods** firms, the aim is complete traceability of raw materials such as precious metals, leather, and textiles. This involves standards and targets for suppliers, audits, digital traceability, and supplier checks to confirm ethical and sustainable sourcing and animal welfare practices.

Consumer electronics companies are furthest ahead in the 'resource inflows' indicator, with furniture and home and personal care closing the gap.

Resource inflows





KPMG's viewpoint

Towards circularity by design

Although C&R companies are increasing circular inflows — such as renewable, recyclable, and recycled materials — there is significant potential to achieve circularity by design for products and packaging.

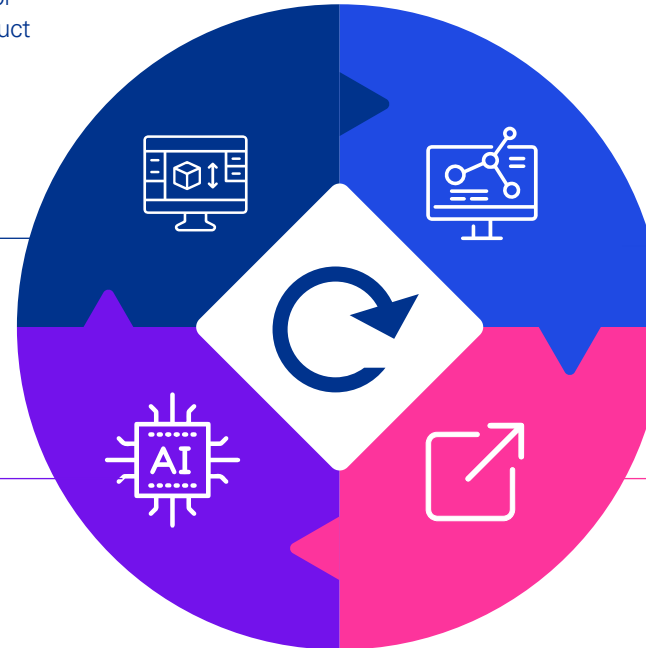
Here are some steps to help accelerate these capabilities:

Reduce inputs in design

by eliminating unnecessary and hazardous materials, non-renewable inputs — and identifying areas where packaging can be reduced or eliminated without impacting product integrity or quality.

Gather detailed inflow data

by leveraging procurement platforms and supplier information to access information on recycled content, product origin and country of production, and use product life cycle management (PLM) systems to track material information throughout the product's life cycle, alongside potentially including disassembly instructions for end-of-life.



Harness digital technologies

exploring artificial intelligence (AI) to help optimize material usage, implementing blockchain technology to enhance supply chain transparency and traceability to align with circular design principles.

Start small and scale gradually

by redesigning products and replacing materials, starting with one product category at a time, evaluating performance and scaling accordingly.



Monitoring outgoing products and resources to support circular business implementation

Resource outflows

| Framework question | Total | Range |
|---|-------------|------------|
| Designing circular operations and production | 5.71 | 5.00–7.00 |
| Implementing circular business models (e.g. repair, reuse, product-as-a-service, sharing, remanufacturing, take-back) | 6.21 | 4.44–10.00 |
| Implementing waste management strategies | 5.59 | 5.00–6.11 |
| Average lever score per sub-sector | 5.84 | 5.00–7.67 |



Increasing the focus on product life extension

Waste reduction is often an obvious starting point on the circularity journey, but forward-thinking C&R companies are seeking additional ways to reduce their environmental impact. Circular business models prioritize resource efficiency and longevity while helping to increase revenues and reduce emissions at the same time.

In the **consumer electronics** sub-sector, companies are offering repair services, take-back, and large-scale recycling programs to recover raw materials. Servitization is on the rise, encouraging shared usage and rental, with products designed to be reused and refurbished.

With higher residual value for end-of-life materials already driving circular business models, **consumer electronics companies continue to lead the way in the 'resource outflows' indicator.**

Furniture businesses are working with supply chain partners to reduce waste. They are also offering maintenance and repair, after-sales parts, piloting take-back along with service agreements

for continued product use and end-of-life support. Some businesses are setting up dedicated circular stores and website pages offering second-hand or refurbished products to extend product lifespans.

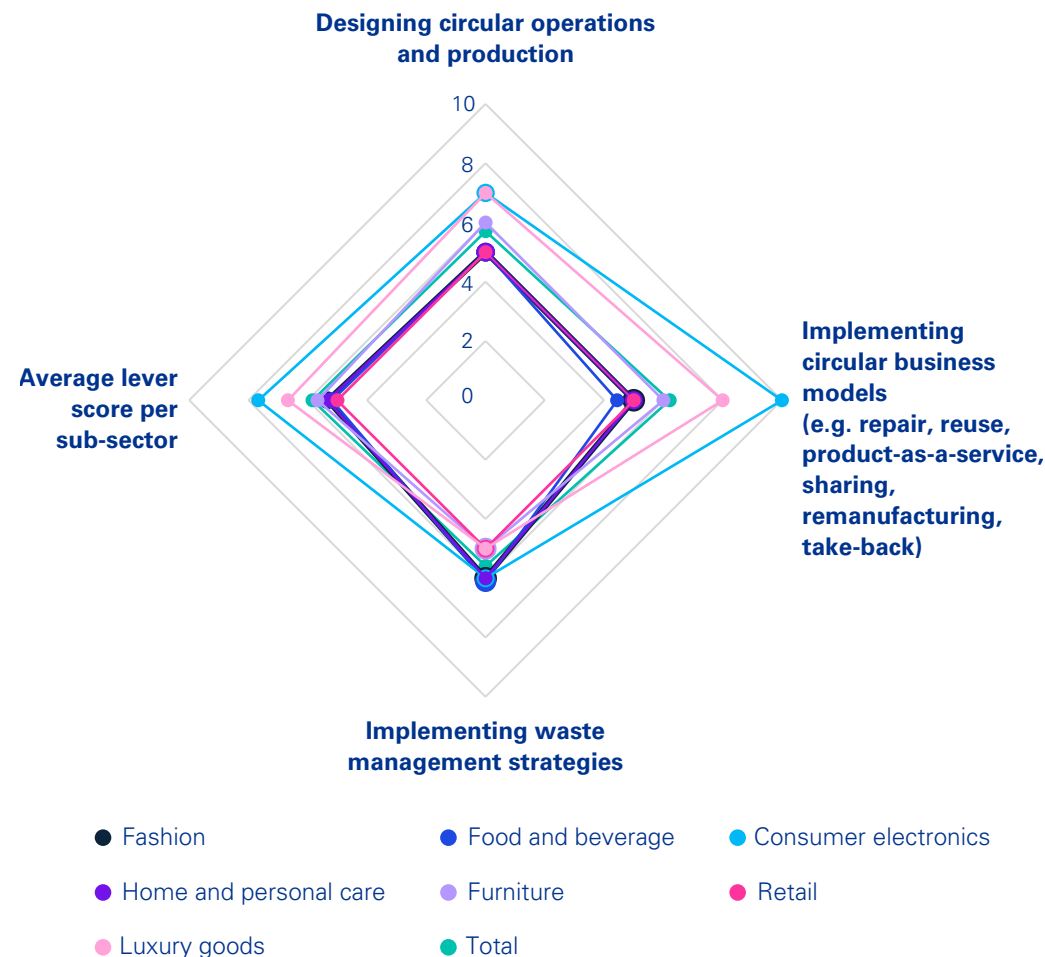
For example, office furniture specialist **Haworth** can include a take-back solution as part of the initial purchase agreement for new Haworth products — which even extends to used furniture from other manufacturers. Haworth can also offer relocation of furniture to new offices and move products within a client's premises, as well as cleaning, repairing, refurbishing, remanufacturing, and recycling services, adapted to their clients.¹⁶

Turning to the **luxury goods** sub-sector, companies are setting up platforms to resell unused fabrics and reuse and recycle textile materials from manufacturing offcuts. Other circular practices include repair and maintenance for products designed for longevity.

Food and beverage companies are reducing food waste during harvesting and transformation phases, increasing reusable packaging and introducing refill services for existing packaging.

Home and personal care companies often face challenges when it comes to collection and recycling in traditional plants due to non-recyclable materials, poor disassembly of makeup palettes and small dimensions of items that often hinder the recycling phase.

Resource outflows





Rental and resale are becoming more popular in **fashion**, as businesses partner with third-party collectors, sorters, and recyclers to meet the needs of a growing consumer awareness of sustainability.

The **retail** sector, on the other hand, is concentrating on reducing waste and selling products in bulk, increasingly offering customers refillable or reusable solutions.

KPMG's viewpoint

Establishing a circular outflow infrastructure

Despite a range of initiatives already in play, there remains significant scope for further progress in extending product life and eliminating waste — a complex challenge requiring coordination across design, manufacturing, sales, packaging, logistics and end-of-life.

Snapshot

Breathing new life into discarded products

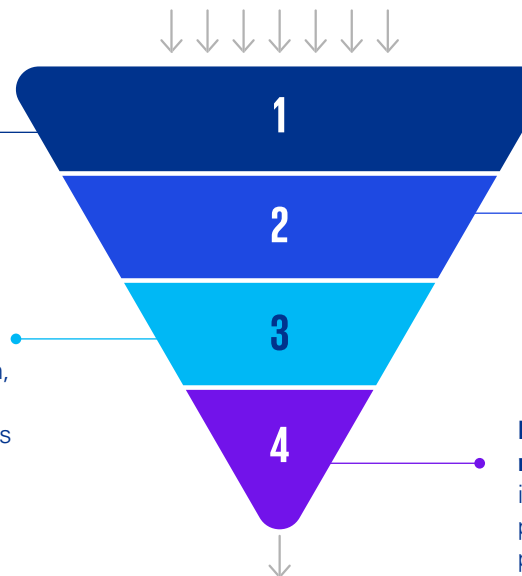
Nestlé Nespresso has integrated circularity into its brand and image, making capsule recycling convenient for consumers worldwide by managing its own capsule take-back and recycling program. Its capsules use a minimum of 80 percent recycled aluminum, with home-compostable capsules being introduced across a selection of its range. Nespresso is focused on building more modular coffee machines to improve product life by making repairs easier, while its 'RELOVE' program focuses on selling refurbished machines to further reduce its waste and carbon footprint.¹⁶

¹⁶ RELOVE | Refurbished Coffee Machines. Nestlé Nespresso (2024).

Here are some potential approaches:

Explore circular business models centered around servitization and subscription models. This involves shifting from a traditional ownership model to one where products are leased, rented or shared to lengthen product lives.

Work with suppliers on reverse logistics infrastructure to help improve processes for product return, refurbishment, and recycling by efficiently handling collected products and materials, minimizing waste, and maximizing resource recovery. Companies should work closely with their supply chains.



Actively participate in second-hand markets through 'pre-owned' outlets and digital platforms, companies to help provide an 'assurance' of product quality.

Engage customers in efficient returns management, creating incentives for returns of unwanted products by streamlining the return process and offering convenient shipping options and loyalty points, for example. This can both reduce waste and enable organizations to access valuable reserves of materials that can be recycled into new products, helping to meet companies' targets.



Working together to achieve systemic change

Circularity enablers

| Framework question | Total | Range |
|--|-------------|-----------|
| Forming partnerships with competitors | 4.95 | 3.00–6.67 |
| Collaborating with start-ups | 4.73 | 2.00–7.00 |
| Participating in sectoral initiatives for circular economy | 8.21 | 5.00–9.44 |
| Implementing EPR | 4.03 | 1.00–8.00 |
| Average lever score per sub-sector | 5.48 | 3.25–7.36 |



Collaborating on shared need for packaging and logistics in C&R

Whether increasing recycled content in products, recovering materials at the end-of-life, extending life through repairs and refurbishment, or setting up a reverse logistics and recycling infrastructure, collaboration and partnerships are vital in developing value-adding circular solutions in the C&R sector. By working with supply chain partners, competitors, specialized start-ups, recyclers, and consumers, C&R companies can share good practices, spread costs and risks across the value chain, and bring others along the circularity journey. In our view, for true circularity to prevail, systemic change is required. It is here that collaboration can become critical in shaping its redesign.

The highest-ranking sub-sector for circularity enablers is **food and beverage**, where companies are engaging with both competitors and start-ups to boost recycling infrastructure, create more sustainable packaging, and join cross-sectoral initiatives. Environmental NGO **Deltterra** has teamed up with leading CPG companies to tackle plastic waste and develop circular economies in the Global South, with an initial plan to transform waste management and recycling systems in Indonesia, Argentina, and Brazil. The partners have collectively committed US\$6 million for this purpose.¹⁷

Food and beverage and consumer electronics companies are collaborating in EPR strategies, where producers contribute to the costs of managing and

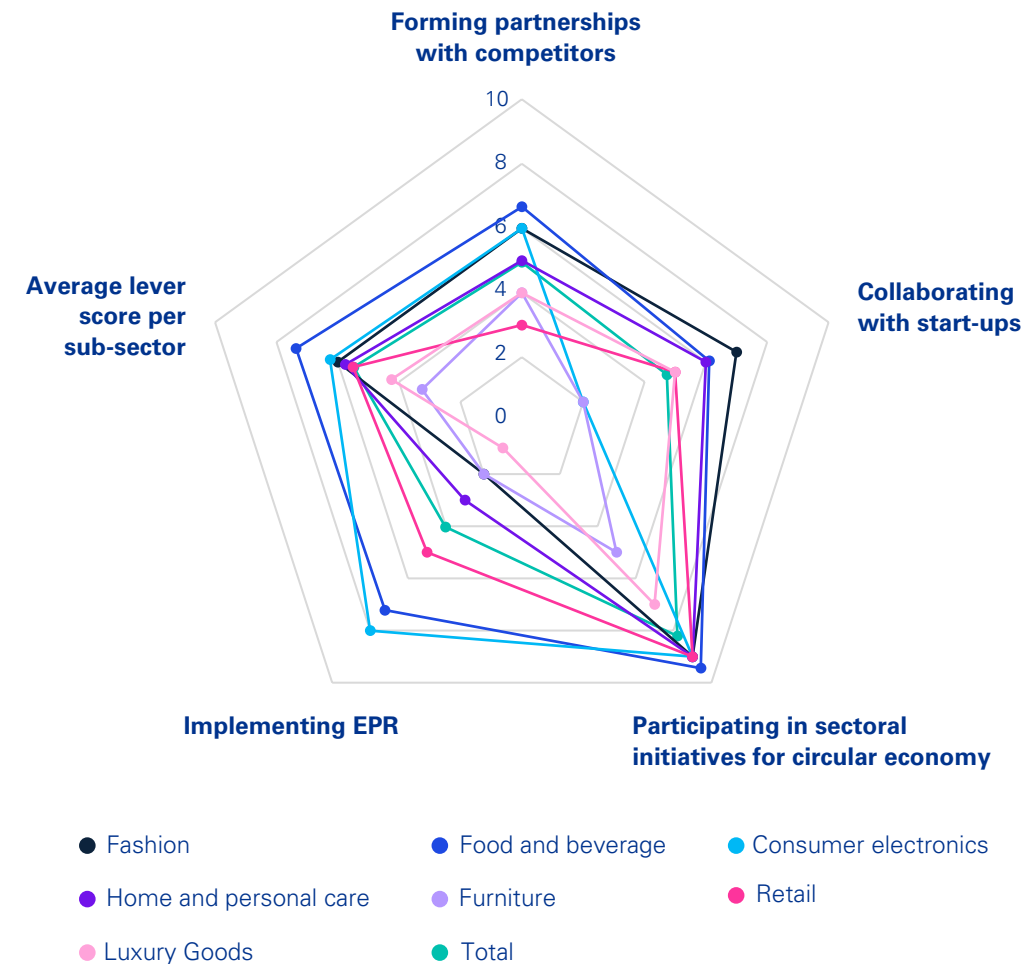
recycling waste (including packaging) from their products. **Consumer electronics** companies are forming partnerships and using digitization to support circular economy practices, such as device refurbishment, battery recycling (in-store, at collection points, and by mail), recycling credits towards new purchases, packaging upcycling, and products designed for easy repair — which increasingly includes self-repair.

Companies in the **home and personal care** sub-sector are commonly investing in circular packaging solutions. By standardizing packaging and jointly promoting circularity, they can help drive industry-wide improvements, such as setting up common take-back schemes for cosmetics. Prominent French cosmetic companies have established a consortium to explore the feasibility of a deposit packaging return system for beauty products, with a pilot set to launch by the end of 2024.¹⁸

The **fashion** sub-sector is a leader in partnerships that drive innovation, explore sustainable materials, and bring in rental, repair and resale models. By incorporating digital tools, fashion brands can improve production efficiency, monitor inventory, reduce waste and unsold goods, and enhance supply chain transparency.

Retail companies are collaborating with other C&R companies and joining sectoral initiatives to address common challenges, such as plastic packaging recyclability and finding ways to prevent unsold goods and returns from becoming waste through repurposing or discounted sales.

Circularity enablers



¹⁷ Amcor, Mars, and P&G enter partnership with Deltterra to scale up circular plastics solutions in Global South. Packaging Europe (May 25, 2023).

¹⁸ French cosmetic companies join forces to test packaging return scheme. Cosmetics Design Europe (January 30, 2024).



The **furniture sub-sector** requires significant focus to improve in the 'circularity enablers' indicator.

In the **furniture** sub-sector, there is a need for more joint circular innovation initiatives. Collaboration here can help to create more resilient supply chains and promote circular product design, in line with the upcoming EU Deforestation Regulation. Companies are strengthening recycling infrastructure and enhancing end-of-life product management, mainly in the form of take-back support.

Finally, **luxury goods** companies are collaborating with industry peers and start-ups to drive circular innovation. Through blockchain consortiums and partnerships with eco-design and upcycling start-ups, they are developing circular products and making supply chains more transparent.

KPMG's viewpoint

Collective initiatives can help deliver change faster than individual efforts

In an industry characterized by widespread use of common materials and the same suppliers, collaboration can help accelerate circularity. The high costs, long payback periods and complexity of circular business models make it hard to achieve first-mover advantage, which can increase the attractiveness of collaboration as a route to circularity.



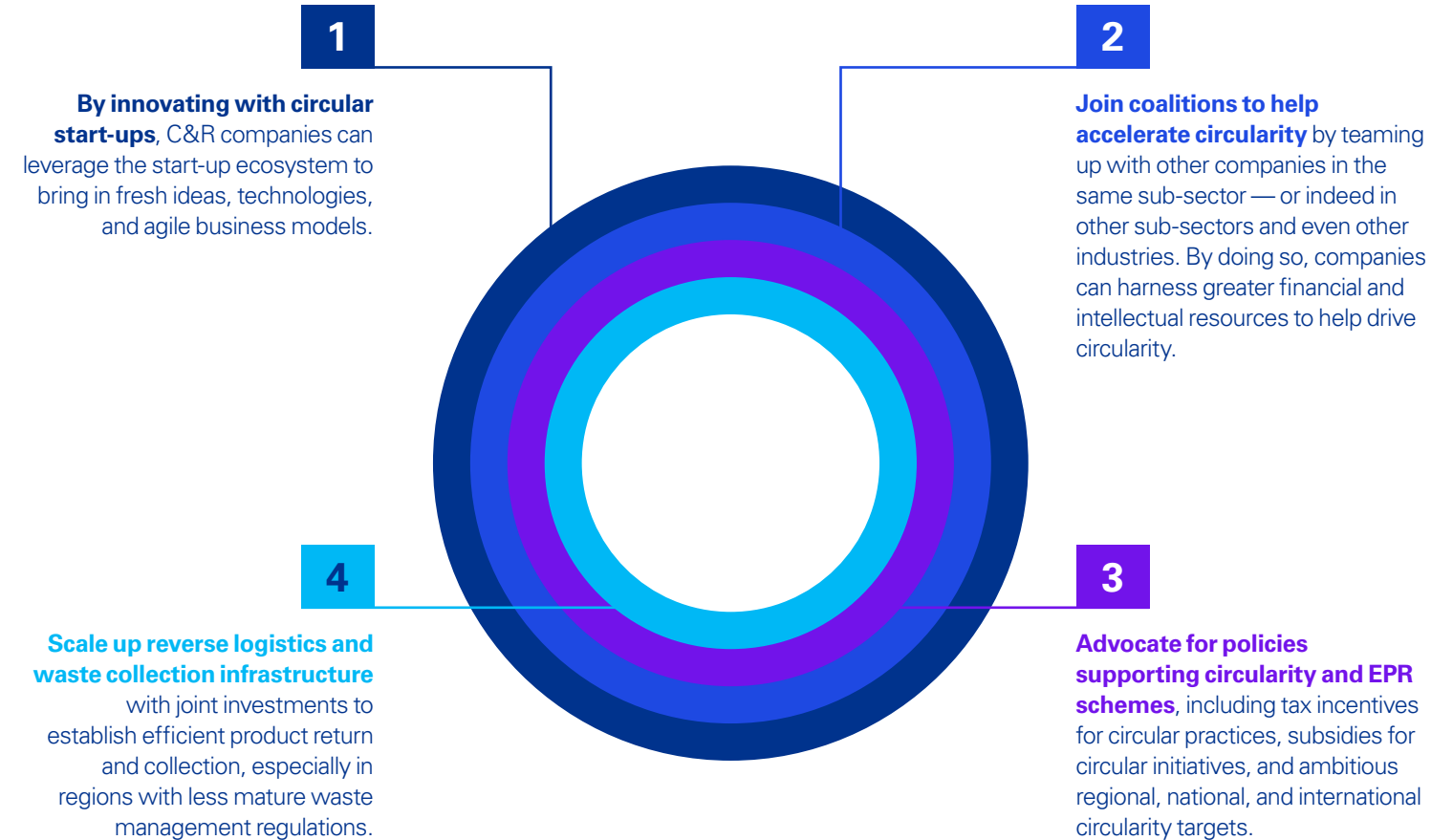


Snapshot

UN Treaty to end plastic pollution

In March 2022, the UN Environment Assembly took a momentous step to address plastic pollution by establishing legally binding goals in the adoption of a resolution to develop a Global Plastics Treaty. Global food and beverage producers and other consumer goods companies, including Nestlé, Unilever, PepsiCo, Coca-Cola, Procter & Gamble, and Mondelez joined and endorsed this initiative, which encourages countries to establish and operate EPR systems among other circular economy measures to ensure safe and sustainable plastics management across international supply chains.¹⁹

Here are some recommendations to drive collaboration:



¹⁹ Nations sign up to end global scourge of plastic pollution. United Nations (March 02, 2022).



Conclusions and key recommendations



KPMG's C&R circular economy readiness assessment shows promising pockets of progress across each of the six areas. However, significant work remains for C&R companies operating within the identified sub-sectors — in our view, the road is long to reach the large-scale transformation needed to make the industry truly circular.

This should come as little surprise. In a world of linear models devoted to growth based on selling new products, expecting overnight change from manufacturers or consumers is unrealistic. We believe that circularity demands a fundamental shift in thinking — a complete reimagining of business models to operate within circular frameworks while maintaining profitable growth.

The business case for a circular economy

The transition to a circular economy presents a compelling business case that extends beyond environmental benefits. By embracing circular principles, organizations can unlock significant value and position themselves for long-term success in the face of mounting climate and biodiversity challenges. To do so, the following should be closely considered:

Reducing carbon emissions and waste management costs

A circular approach can help reduce reliance on virgin materials and fossil fuels, leading to lower greenhouse gas emissions throughout the value chain. This not only helps organizations meet their climate and nature commitments, but can also generate cost savings by minimizing waste management expenses. As regulatory pressure and carbon pricing mechanisms continue to intensify, the financial incentives for circular practices are expected to grow only stronger.

Mitigating risks and enhancing supply chain resilience

The linear 'take-make-waste' model exposes organizations to various risks, from supply chain disruptions and resource scarcity to price volatility. The circular economy, however, promotes the use of



renewable, reusable, and recyclable materials capable of significantly enhancing supply chain resilience and business continuity. By diversifying material sources and reducing dependencies on finite resources, C&R companies can better withstand external shocks and maintain operational stability.

Unlocking new revenue streams and competitive advantages

Circular business models often unlock new revenue streams through product-as-a-service offerings, remanufacturing, and the sale of secondary raw materials. These innovative approaches can help provide a competitive edge by differentiating the organization, improving customer loyalty, and tapping into growing consumer demand for sustainable solutions.

We expect the drive towards circularity will increasingly be propelled by evolving regulations. As compliance requirements continue to tighten and expand, they also present strategic opportunities to enhance performance by fostering transparency and monitoring progress more effectively.

Moreover, C&R companies possess tremendous power to influence what people buy, how they consume, and how they dispose of products and packaging. As companies assess how they can rapidly shift gears towards a circular economy, they should consider how to accelerate and scale up action across the six key areas:



Define a circular ambition and strategy by incorporating circular economy within business operations. Allocate a circular economy budget and mobilize a multifunctional team beginning with pilot programs and rapidly scaling up — all while collecting data for greater transparency and compliance, and to share successes across the organization.



Establish and communicate ambitious yet achievable circular targets across the entire value chain, that are linked to financial performance, holding organizations and top management accountable to investors, customers, and regulators. Target metrics should be based on those already widely adopted, such as the CTI.



Allocate resources and develop technical and governance skills to raise awareness among employees, suppliers and consumers, and work jointly with teams dedicated to decarbonization and nature.



Assess resource inflows to enable circular design, making both products and packaging circular, removing and simplifying materials and components, and helping to improve traceability.



Monitor resource outflows and scale up circular business models, establishing innovative business models based on servitization and reuse, with reverse logistics enabling products to be repaired, refurbished, resold or recycled to extend product life.



Collaborate with industry peers and value chain partners including certain competitors on specific initiatives where there is potential for shared benefits, such as joint research and development, industry standards development, or addressing common challenges like reducing plastic waste, sourcing recycled materials, or investing in recycling infrastructure.



Sub-sector key recommendations: Capturing specific opportunities





How each sub-sector is defined



Consumer electronics

The consumer electronics segment involves devices and equipment intended for everyday use, typically in private homes. This includes a wide range of products from small phones to large home appliances.



Fashion

The fashion segment encompasses the design, production, marketing, and retailing of clothing, footwear, and accessories. This industry is driven by trends and encompasses a wide range of styles, from high-end couture to mass-market apparel.



Food and beverage

The food and beverage segment involves the production, processing, packaging, distribution, and retailing of food items and drinks. This industry includes everything from raw agricultural products to finished, ready-to-eat foods and beverages, including their packaging.



Furniture

The furniture segment includes the design, manufacturing, distribution, and retailing of furniture for homes, offices, and other spaces. This industry covers a wide range of products, from functional to decorative pieces.



Home and personal care

The home and personal care segment includes products designed for personal hygiene and grooming as well as household cleaning and maintenance. This industry focuses on items that enhance personal well-being and maintain home cleanliness.



Luxury goods

The luxury goods segment comprises high-end products that are often characterized by superior quality, exclusivity, and high price points. These items are typically associated with prestige and status.



Retail

The retail segment refers to the sale of goods and services directly to consumers for personal or household consumption. This sub-sector includes physical stores, online shops, and omnichannel retailers.



Consumer electronics

| Indication area | Ambition and strategy | Knowledge and resources | Goals and targets | Resource inflows | Resource outflows | Circularity enablers |
|-----------------------------|-----------------------|-------------------------|-------------------|------------------|-------------------|----------------------|
| Sub-sector score | 6.75 | 7.50 | 5.67 | 5.75 | 7.67 | 6.25 |
| Report average score | 6.71 | 5.82 | 4.56 | 5.00 | 5.84 | 5.48 |

Overall circularity readiness score: 6.75

Ranking first in the 'knowledge and resources', 'goals and targets', 'resource inflows', and 'resource outflows' indicators, the consumer electronics sub-sector also took pole position in the assessment's overall circularity readiness score. Showing a high level of circular maturity, consumer electronics companies show a strong willingness to onboard both their own internal operations and those of their suppliers into the circular economy through dedicated training and initiatives.

Despite this, most efforts to date have been pilot programs limited to specific geographical areas and product categories; efforts should be scaled up to achieve long-lasting impact. In addition, our analysis uncovered a number of other key areas for consumer electronics companies to focus on and advance further, including:

Translating circular ambitions into defined implementation roadmaps

Consumer electronics companies have dedicated circularity ambitions and are able to communicate their strategic visions well. However, while declarations of circular ambitions centered around critical materials use, waste reduction, and recycling of electronic

waste build public confidence, most companies within the sub-sector still lack clear plans on how to achieve these goals.

In order to do so, consumer electronics companies should begin to define circularity implementation roadmaps and integrate ambitions into their business strategy by considering how circularity targets link into financial performance and revenue. As a result, companies can mitigate circular economy initiatives being viewed as separate entities, which often compete with linear products.

Provide specific circularity targets and regular reporting

With a focus on reducing the use of virgin plastics and sourcing more recycled materials, the consumer electronics sub-sector appears to have the most comprehensive circularity targets. However, more granular targeting of specific goals with clear performance metrics — such as material reuse rates and recycling efficiency for electronic products — can help establish robust metrics and reporting frameworks for future progress tracking and analysis.

By developing reporting frameworks that align with established sustainability reporting standards and ensuring that reports are published on a regular basis, improved accessibility for stakeholders and consumers can translate into increased transparency and heightened engagement.

Advancing product design for durability and recyclability

The consumer electronics sub-sector has embraced recycled metals and plastics for a range of product types, from printers and smartphones to cloud computing services. While an increase in replaceable components also makes an increasing number of devices more repairable, enhanced collaboration between manufacturers and retailers can further efforts through the standardization of components across products to simplify repairs and recycling, enabled by easier disassembly.

While many companies are already involved in EPR strategies, we believe more can be done to explore innovations in modular product design and material selection. For the former, expanding the development of products with modular components can make devices easier to replace, upgrade or recycle. For the latter, reducing the use of hazardous materials can simplify recycling processes and help improve recycling efficiency in practice and at scale.

The **consumer electronics** sub-sector's lowest score was in the 'ambition and strategy' indicator, where it ranked joint fourth with the furniture sub-sector (6.75).

Consumer electronics achieved the highest overall circularity readiness score of all seven sub-sectors in the assessment (6.75).



Fashion

| Indication area | Ambition and strategy | Knowledge and resources | Goals and targets | Resource inflows | Resource outflows | Circularity enablers |
|-----------------------------|-----------------------|-------------------------|-------------------|------------------|-------------------|----------------------|
| Sub-sector score | 7.00 | 6.50 | 4.83 | 4.75 | 5.33 | 6.00 |
| Report average score | 6.71 | 5.82 | 4.56 | 5.00 | 5.84 | 5.48 |

Overall circularity readiness score: 5.82

Scoring high on 'ambition and strategy' and 'goals and targets' within the readiness assessment, the fashion sub-sector has made strong progress with its circular ambitions and collaboration initiatives. Confident in its circular knowledge and resource allocation — with a willingness to onboard both internal and supplier operations into the circular economy — it continues to share good practices and champion collaboration to advance the circular economy.

However, our assessment highlights further potential in establishing new (and increasing existing) targets, implementing initiatives on a broader scale, and enhancing circular inflows and circular business models. To do so, key actions to support achieving this include:

Improving transparency

To become circular, circular design with material safety, durability, reparability, and value-preserving recyclability is a top priority;

doing so without impacting aesthetics and functionality remains key. Transparency can be improved with clear communications for products and materials — specifically around the use of labels and verifying environmental marketing claims prior to use. Traceability can also be improved with Digital Product Passports (DPPs), enabling the design of 'waste' out of the system by providing information on a product's composition and end-of-life options.

Increasing circularity of raw materials

As polyester and cotton remain primary raw materials used in the sub-sector, efforts to promote circular inflows should focus on these components. While the use of blended fabrics presents a significant challenge in effective textile recycling due to the inherent difficulties in separating materials, considering optimal material composition and recyclability earlier in the design process can enable more sustainable supply chains. Sustainability here should be bolstered by participating in ERP schemes, with insights shared from the already implementing food and beverage and consumer electronics sub-sectors.

Tackling overproduction through circular business models

As fashion companies increasingly partner with third-party collectors, sorters, and recyclers to meet increasing consumer sustainability demands, rental and resale markets continue to experience significant growth. Combined with widening repair options via both in-store and postal channels, this presents a double opportunity for fashion companies. First, by introducing demand-driven production to help reduce excess inventory. Secondly, by introducing circular models. It is within these underexploited value creation opportunities that improved designs for longer-lasting products and a reduction in overproduction can emerge.

Fashion scored third highest in the 'ambition and strategy' indicator (7.00), with **luxury goods** in second (7.25) and **food and beverage** taking the top spot (7.50).

The **fashion** sub-sector's lowest readiness score was in the 'resource inflows' indicator, where it placed fifth across the seven sub-sectors (4.75).



Food and beverage

| Indication area | Ambition and strategy | Knowledge and resources | Goals and targets | Resource inflows | Resource outflows | Circularity enablers |
|-----------------------------|-----------------------|-------------------------|-------------------|------------------|-------------------|----------------------|
| Sub-sector score | 7.50 | 5.00 | 4.40 | 4.72 | 5.19 | 7.36 |
| Report average score | 6.71 | 5.82 | 4.56 | 5.00 | 5.84 | 5.48 |

Overall circularity readiness score: 5.73

Taking top spots in the 'ambition and strategy' and 'circularity enablers' indicators within the readiness assessment, the food and beverage sub-sector has showcased success through significant value chain collaborations, particularly around plastics packaging, with companies remaining ambitious in their circular visions for the sub-sector.

While collaboration and a clear communication of vision will likely continue to drive solutions and enable systemic change, our assessment identifies areas for improvement in the 'resource inflows' indicator, among others, where the sub-sector scored low. Recommendations to evolve circular readiness for the sub-sector include:

Focusing circular targets on agricultural losses and food waste

As the sub-sector relies solely on agricultural commodities, encouraging regenerative agricultural practices is an obvious priority for food and beverage companies to target — specifically in preserving soil and water health, and reducing emissions and pollution. It is a priority that many of the sub-sector's companies acknowledged when surveyed, noting a move to engage both farmers and suppliers on the topic.

Reducing food waste also remains a significant challenge for the sub-sector; while some producers handle surplus stock through charitable donations, these good intentions do little to address the root causes of excess production and waste. Digital technology presents an opportunity to manage better supply and demand as well as improve wider supply chain management. 'SMART' targets based on an accurate understanding of inflows, outflows, relations, and dependencies should guide dedicated food waste reduction strategies. Educating consumers through waste reduction awareness initiatives should also play a part.

In parallel with food waste, packaging waste and single-use plastic continue to drive considerable concern. With products typically outliving the packaging they arrive in, packaging waste finds its way onto landfills or into the environment at speed. Food and beverage companies should rethink packaging through design innovation to help increase bio-based and biodegradable resources, alongside reducing unnecessary packaging through bulk sale, refill and reuse options.

At a macro level, collaboration is needed between suppliers, distributors, retailers, and consumers to create a closed-loop system that can collect, sort, and process packaging materials.

Educating consumers to close the loop

With intensive and direct interaction through a high volume of products, consumers play a crucial role in helping to close the loop in the food and beverage sub-sector. However, despite efforts by companies to produce more sustainable products and packaging, consumers remain unclear on how to engage, generally reverting to traditional waste disposal methods.

To overcome this, companies should provide clear and concise information via labels, in-store signage, and online resources to educate consumers on how to leverage recycling and composting as alternative routes to dispose of packaging. Where possible, information should also be market-specific, accounting for available local recycling infrastructure. Providing incentives for consumers to return packaging through discounts and loyalty point schemes is another opportunity to inject circular inflow into production.

The **food and beverage** sub-sector's standout score was in the 'circularity enablers' indicator, where it noted a score of 7.36 — 1.11 higher than the second place sub-sector, consumer electronics (6.25).

Food and beverage scored second lowest in the 'resource inflows' indicator (4.72). The only sub-sector that scored lower was retail (4.25).



Furniture

| Indication area | Ambition and strategy | Knowledge and resources | Goals and targets | Resource inflows | Resource outflows | Circularity enablers |
|-----------------------------|-----------------------|-------------------------|-------------------|------------------|-------------------|----------------------|
| Sub-sector score | 6.75 | 4.75 | 5.00 | 5.25 | 5.67 | 3.25 |
| Report average score | 6.71 | 5.82 | 4.56 | 5.00 | 5.84 | 5.48 |

Overall circularity readiness score: 5.13

Finding its highest score in the 'knowledge and resources' indicator where it placed joint second, the furniture sub-sector ranks low in most indicator areas and overall circular maturity. While furniture companies are attempting to enhance resource efficiencies, instill circular design principles, and explore new 'as-a-service' business models to encourage recycling, refurbishment, and reuse, circular maturity remains stifled due to lacking and limited targets, alongside poor cross-industry collaboration.

For companies within the furniture sub-sector, existing training on product design and packaging should also be bolstered by deploying dedicated teams focused on implementing circular economy programs across their operations and value chains. Key focus areas for the sub-sector to consider include:

Due diligence in sourcing sustainable raw materials

With forest wood being a major material in a wide variety of furniture products, companies in the sub-sector are making efforts to reduce the impact on scarce forest reserves by increasing the use of reclaimed wood and recycled materials. Setting regular targets on

acquiring wood from FSC-certified sources helps demonstrate both a commitment to ethical sourcing and transparency around helping replenish forest reserves.

However, it is imperative for furniture companies to deepen their due diligence, helping to ensure the verification of material origins and the evaluation of suppliers' environmental and social practices. This commitment can become ever-more essential in nurturing a thriving forest ecosystem.

Testing new production and sales models

The sub-sector has always concerned itself with a focus on long-lasting materials to ensure the durability of a product's purpose. As fast furniture continues to grow in fashion and popularity, so too does potential turnover. Furniture producers can realize this opportunity by introducing modular designs to maintain and extend a product's lifetime — this can allow for ease of product upgrades, and increasing resale and reuse options over traditional disposal.

In a similar context, the emergence of resale platforms has boosted the market for second-hand furniture, including the introduction of in-store areas dedicated to pre-owned items. Here, demand-driven production can reduce supply chain pressures while helping to increase circularity.

Boosting circularity through sectoral coalitions

Taking pole position in the 'knowledge and resources' indicator, the consumer electronics sub-sector is further along in its journey of providing circular training and knowledge-sharing initiatives; practices that can be leveraged by companies in the furniture sub-sector are not far behind. By fostering partnerships with stakeholders across the value chain, knowledge exchange can be facilitated and collective efforts streamlined to achieve common objectives with better efficiency.

In a similar way, furniture producers should collaborate to prioritize EPR programs, deepening commitments to managing and recycling end-of-life furniture. Taking a lead from the more advanced consumer electronics and food and beverage sub-sectors here can both help accelerate knowledge sharing and circularity impacts.

The **furniture** sub-sector scored highest in the 'knowledge and resources' indicator, where it placed joint second with the fashion sub-sector (4.86). The consumer electronics sub-sector took first place (5.43).

Furniture had the second lowest overall circularity readiness score (5.13) across the seven sub-sectors, placing higher than the home and personal care sub-sector (4.99)



Home and personal care

| Indication area | Ambition and strategy | Knowledge and resources | Goals and targets | Resource inflows | Resource outflows | Circularity enablers |
|-----------------------------|-----------------------|-------------------------|-------------------|------------------|-------------------|----------------------|
| Sub-sector score | 5.50 | 5.00 | 4.40 | 5.00 | 5.33 | 5.75 |
| Report average score | 6.71 | 5.82 | 4.56 | 5.00 | 5.84 | 5.48 |

Overall circularity readiness score: 4.99

Scoring the lowest of all sub-sectors in the ‘ambition and strategy’, ‘goals and targets’, and ‘circularity enablers’ indicators, the home and personal care category also scored lowest on overall circularity readiness. This is reflective of the intricate supply chains characterized by a wide array of products provided by the sub-sector, necessitating the employment of multiple distribution channels to handle globally spanning resource requirements.

While scores were generally low, the sub-sector showed promise in the ‘resource inflows’ indicator, ranking fourth after a joint second place for the furniture and luxury goods sub-sectors. The assessment identified the need for more focus in setting circular targets, consumer education, and circular business models, with the following recommendations:

Simplifying packaging to improve circularity

The sub-sector is driving a number of circular initiatives focused on the increased use of bio-based and natural ingredients, alongside a move towards more paper-based materials and reusable, recyclable or compostable packaging. This was noted by the surveyed home and personal care companies indicating that they were commonly

investing in circular packaging solutions. By standardizing packaging and collaborating to promote circularity, companies in this sub-sector can begin to align and drive industry-wide improvements.

In a similar context, an increased focus on designing packaging to improve recycling potential through the use of single materials, easily separable packaging parts, and materials that are universally treated by recyclers is expected to play a crucial role in improving the sub-sector’s circular capability.

Increasing take-back to cut plastic usage

Despite initiatives to limit packaging and increase the use of refill stations for some product types, the use of individually packed, single-use items remains prevalent across the sub-sector. Take-back programs should be scaled and become widespread for a significant impact to be realized.

At the same time, take-back programs should be supported by more robust collection systems and recycling infrastructure in order to effectively cut plastic usage. This requires collaboration between manufacturers, retailers, and consumers to help ensure the seamless return and recycling of packaging materials used for cleaning, hygiene and beauty. Home and personal care companies should explore establishing consortiums to help accelerate new packaging return systems for specific product types.

Changing consumer behavior to improve circular practices

In addition to the above, the success of take-back programs requires considerable consumer awareness, education, and behavioral change to encourage participation and promote responsible disposal practices. Supporting campaigns and activities should be positioned across both physical and online retail.

Bolstering this, incentivizing participation through rewards and discount schemes for refill models can motivate consumers to adopt more circular practices and guide conscious shopping habits by bringing their own containers. In our view, combining both behavior-changing initiatives and incentives with seamless and user-friendly processes for returning packaging materials — via online and in-store channels — will be essential for home and personal care companies in ensuring the widespread participation of consumers to these programs.

The **home and personal care** sub-sector ranked highest in the ‘resource inflows’ indicator (5.00), coming in behind the luxury goods and furniture sub-sectors in joint second (5.25) and consumer electronics in first (5.75).

Home and personal care ranked the lowest of all seven sub-sectors on overall circularity readiness, with a score of 4.99 against an average of 5.65, with luxury goods scoring highest at 5.88.



Luxury goods

| Indication area | Ambition and strategy | Knowledge and resources | Goals and targets | Resource inflows | Resource outflows | Circularity enablers |
|-----------------------------|-----------------------|-------------------------|-------------------|------------------|-------------------|----------------------|
| Sub-sector score | 7.25 | 3.67 | 7.25 | 5.25 | 6.67 | 4.25 |
| Report average score | 6.71 | 5.82 | 4.56 | 5.00 | 5.84 | 5.48 |

Overall circularity readiness score: 5.88

Consistently ranking in the top three for the majority of indicator areas, barring 'circularity enablers' and 'knowledge and resources' — and scoring the lowest of all sub-sectors in the latter — the luxury goods sub-sector placed second highest in the assessment's overall circularity readiness score.

However, while it clearly performs well in setting ambitions and supporting circular business models, also given the intrinsic durability of the sub-sector, improvements can still be made in target setting and collaborating for circularity, as well as circular design. To do so, companies in this sub-sector should focus on:

The responsible and ethical supply of raw materials

Luxury goods manufacturers aim to verify that materials, particularly precious metals, not only come from sustainable sources, but are mined and processed with minimal pollution, environmental and social disruption, all while upholding humane labor standards.

The integration of digital technology plays a pivotal role here by enhancing supply chain transparency and product traceability to enable

better tracking of materials from origin to final product. While luxury goods companies are already deploying the use of QR codes on some products to provide comprehensive supply chain and raw material source information, companies should look to deepen their use of such technology to include the tracking of human labor resources associated with raw materials extraction.

Longevity and repairability as brand attributes

Prevalent in the luxury goods sub-sector is a notable transition in consumer mindset from viewing items as merely 'second-hand' to valuing them as 'vintage'. This shift has significantly boosted the demand for pre-owned luxury goods, revealing the development of a strong growth market with considerable future potential. From retaining spare parts for extended periods and expanding repair services — including the introduction of extended warranties and self-repair options — luxury brands are adopting numerous strategies to prolong product lifespans.

In addition to this, on-demand manufacturing can enhance a sense of exclusivity, allowing brands to cater for individual preferences and offer personalized experiences to discerning customers. In doing so, luxury goods companies can champion sustainability and longevity in their own brand values, aligning well with shifting consumer values.

Integrating circular targets into business strategies

Luxury goods companies are generally committing to circularity targets, especially those relating to packaging and waste reduction. However, while companies in the sub-sector are increasingly acknowledging the revenue potential of second-hand items and the wider pre-owned market, our assessment revealed a notable absence of specified targets aimed at capitalizing on this growing market segment.

In our view, as the second-hand luxury goods market continues to expand and gain consumer traction, it will become imperative for luxury brands to establish clear revenue targets for these products and services. This integration of targets can help ensure an alignment with evolving consumer preference and market trends, while also securing the stream as an indispensable component of the overall business strategy.

The **luxury goods** sub-sector ranked second in the 'ambition and strategy' (7.25), 'goals and targets' (8.00), and 'resource inflows' (5.25) indicators.

Luxury goods ranked lowest in the 'knowledge and resources' indicator, where it came in last with a score of 3.86.



Retail

| Indication area | Ambition and strategy | Knowledge and resources | Goals and targets | Resource inflows | Resource outflows | Circularity enablers |
|-----------------------------|-----------------------|-------------------------|-------------------|------------------|-------------------|----------------------|
| Sub-sector score | 6.25 | 5.50 | 4.33 | 4.25 | 5.00 | 5.50 |
| Report average score | 6.71 | 5.82 | 4.56 | 5.00 | 5.84 | 5.48 |

Overall circularity readiness score: 5.25

Ranking in the lower half across the majority of indicator areas, the retail sub-sector's highest score came from its 'goals and targets' assessment, with its lowest score coming from its 'resource inflows' assessment. The sub-sector's overall circularity readiness score placed it fifth across the seven sub-sectors.

Despite this, the retail sub-sector has made commendable progress in advancing ambitious strategies and engaging in collaborative efforts to promote circularity — notably by joining sectoral initiatives to address common challenges in plastic packaging recyclability and exploring ways to prevent unsold goods and returns from becoming waste through repurposing or discounted sales. Our analysis identified ample opportunities for enhancement, including:

Designing and promoting more circular products

As highlighted in the assessment, many retail companies are committed to circular packaging materials and regenerative agriculture for their owned brand labels — increasingly using recycled plastic and designing packaging to be reused, recycled or composted. However, retail companies should follow the lead of producers in reassessing

their product offerings to prioritize sustainability, including products that are not under their direct production control.

By selecting products that are renewable, repairable, and upgradable, and scrutinizing every stage of the product life cycle — from extraction and manufacturing to distribution and disposal — retail companies can better identify avenues for waste reduction and product longevity among their supplier base.

Empowering consumers to make informed choices

Building awareness and educating consumers are critical catalysts for closing the loop; in a sea of 'eco' labels, consumer inertia often stems from confusion and a lack of understanding. While several retail companies have formed dedicated circularity teams and offer employees' sustainability-related training programs, we believe more investment is needed on the consumer side online and in store.

Scaling initiatives such as harmonized labels with 'How2Recycle' disposal instructions serves as a low-barrier entry point for retail companies to assist consumers in navigating through conflicting and unclear messaging. Forming collaboration with the food and beverage and home and personal care sub-sectors — as well as cooperation with competitors to standardize labeling practices — can be essential for driving industry-wide progress.

Improving waste reduction through new business models

Retail companies acknowledge their role in extending product lifetimes and are increasingly introducing new business models focused on usage — including rental, sharing, repairing, and recycling — to meet consumer trends and explore new revenue opportunities.

Additionally, the proliferation of resale platforms by brands, retailers, and third parties is already capitalizing on the growing interest in second-hand markets. By embracing digitalization to help optimize resource use and employing predictive technology to more accurately forecast demand, avoid unwanted stock, and reduce excess inventory, retailers can redirect existing products into second-hand markets and further wider waste reduction efforts.

The **retail** sub-sector's highest assessment score came from the 'goals and targets' indicator, where it ranked fourth (6.33) ahead of the home and personal care, furniture, and food and beverage sub-sectors.

Retail ranked lowest of all sub-sectors in the 'knowledge and resources' indicator, with a score of 3.86 — 0.65 below the indicator average.



Key contributors



Nicolas Jourdain

Director, Advisory, Circular Economy, EMA & Global Markets
KPMG in Switzerland
E: njourdain@kpmg.com

Nicolas specializes in sustainability transformation, with a focus on net-zero decarbonization and circular economy transition. He has more than 20 years of experience in consulting, business transformation and change management across various sectors and industries. He has worked in large organizations at the board level to manage cross-functional business imperatives and enable wide-ranging performance improvements, including operations, manufacturing, supply chain, procurement, corporate finance, IT, strategy, marketing and sustainability.



Kristel Boyes

Director ESG,
EMA Consumer and Retail
KPMG in the Netherlands
E: kboyes@kpmg.com

Kristel is the Consumer & Retail Lead in KPMG's EMA ESG expertise hub. She brings deep industry experience on embedding sustainability as a driver of brand growth, innovation and consumer and retail engagement. Kristel spent many years working with one of the world's largest CPG companies, building a track record of senior stakeholder influencing and strategic thought leadership on ESG.



Joy Jadam

Senior Manager,
Sustainability
KPMG in Switzerland
E: jjadam@kpmg.com

Joy Jadam is a Senior Manager at KPMG in Switzerland, focusing on circular economy implementation and broader sustainability initiatives. With extensive experience in environmental management and sustainable business acumen, she's adept at translating complex concepts into actionable insights for leaders and policymakers.



Chiara Catgiu

Manager, Climate Change & Sustainability Services
KPMG in Italy
E: ccatgiu@kpmg.it

Chiara Catgiu is the circular economy specialist of KPMG Global Climate Change and Decarbonization Center, supporting clients to define their circular economy strategies and implementation plans to enable them to reach their climate-related targets. Chiara is a Manager of KPMG's Climate Change and Sustainability Services team in Italy.



Elisa Becher

Senior Associate
EMA ESG Hub
KPMG in Germany
E: ebecher@kpmg.com

Elisa Becher is a Senior Associate at KPMG's EMA ESG Hub, supporting Consumer & Retail clients through the transformative process towards sustainability, with particular focus on Circular Economy. She commenced her professional journey as an ESG Strategy Consultant, dedicated to assisting clients in incorporating sustainability considerations into their business strategies.



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