

SDG 12, responsible consumption and production:
Ensure sustainable consumption and production patterns
Circular Economy in the Fashion Industry

EU Approach and Global Challenges

The fashion industry is one of the most resource-intensive and polluting sectors worldwide, second only to the oil industry in terms of environmental impact. It consumes vast amounts of water and energy, uses hazardous chemicals, and contributes significantly to air and water pollution, greenhouse gas emissions, and microplastic release. The rise of ‘fast fashion’ has amplified these issues: clothing production has nearly doubled in the last two decades, driven by low-cost garments and rapidly changing trends. Consumers increasingly treat clothes as disposable items, wearing them only seven or eight times before discarding them. Globally, only about 20% of textile waste is collected for reuse or recycling, and less than 1% of materials are recycled back into new clothing, largely due to technological limitations.

To address these challenges, the concept of circular fashion has emerged as a strategic innovation for sustainable development. Unlike the traditional linear model of ‘take-make-dispose’, circular fashion aims to keep materials in use for as long as possible through the principles of reduce, reuse, and recycle. This involves extending the life cycle of garments, promoting repair and reuse, and integrating recycled or renewable raw materials into production. Circular fashion minimises waste and transforms discarded textiles into valuable resources, aligning with the goals of the UN 2030 Agenda and SDG 12: Responsible Consumption and Production.

The European Union has taken significant steps to accelerate this transition through its Circular Economy Action Plan (2015) and subsequent legislative measures. The revised Waste Framework Directive (2008/98/EC, amended in 2018) introduced groundbreaking requirements for the textile sector, including mandatory separate collection of textiles by 2025 and ambitious recycling targets for municipal waste – 55% by 2025, rising to 65% by 2035. The EU also seeks to reduce landfill disposal to a maximum of 10% of municipal waste by 2035. These measures aim to prevent waste generation, encourage sustainable product design, and promote repairability and recyclability.



A key policy instrument supporting this shift is Extended Producer Responsibility (EPR), which makes producers financially and organisationally responsible for the end-of-life stage of their products. EPR incentivises companies to design garments that are durable, repairable, and recyclable. France pioneered EPR for textiles in 2008, requiring all companies placing clothing, footwear, or household linen on the market to contribute to recycling and waste treatment, either through individual systems or collective schemes such as Eco TLC. This model is expected to expand across the EU as part of the circular economy package.

Beyond Policy

The fashion industry's reliance on fast-fashion business models creates structural obstacles to circularity. Current models prioritise rapid production cycles and low costs, which conflict with the principles of durability and reuse. Implementing circular strategies, such as take-back programs, reverse logistics, and closed-loop recycling, requires significant investment in infrastructure and technology. However, cost-effective and scalable recycling technologies for textiles remain underdeveloped, and reverse logistics often entail high operational costs. Moreover, the risk of 'circular rebound' – where increased recycling leads to higher overall production – underscores the need for careful planning to avoid offsetting environmental gains.

Regulatory inconsistencies across global supply chains further complicate implementation. Many brands outsource production to regions with weak environmental standards, undermining efforts to enforce circular practices. The absence of standardised global regulations and limited government incentives for small and medium-sized enterprises (SMEs) exacerbate these challenges, making compliance costly and administratively burdensome.

The Human Factor

Perhaps the most critical – and often overlooked – barriers lie in the 'soft aspects' of business management. Organisational culture and leadership play a decisive role in shaping the success of circular initiatives. Resistance to change, lack of managerial capability, and insufficient green knowledge among employees hinder progress. Developing green intellectual capital, including human, structural, and relational dimensions, is essential. This involves training designers and managers in sustainable practices, fostering collaboration across supply chains and embedding circular principles into corporate culture.



Consumer-related issues present another formidable challenge. Despite the growing awareness of sustainability, the attitude–behaviour gap persists: consumers express concern for ethical fashion but continue to favour low-cost, fast-fashion products. The ‘circular premium’ – higher prices for circular products – often deters purchase decisions, particularly in price-sensitive markets. Brands must therefore innovate in marketing and customer engagement, offering clear incentives and transparent communication to build trust and reshape consumption habits.

To navigate these complexities, fashion companies must adopt a dual approach: invest in human capital and organisational change, foster collaboration and transparency, innovate business models such as rental and resale, address consumer behaviour through targeted campaigns and incentives, and advocate for policy support to standardise regulations and secure financial incentives for SMEs.

Lessons from Sweden – Moving Beyond Waste-Centric Circularity

The Swedish fashion industry offers a compelling lens into the practical realities of implementing circular economy principles. While global discourse often emphasises waste reduction, Swedish brands reveal that focusing solely on end-of-life interventions is insufficient. Life cycle assessments show that the most significant environmental impacts occur during the take and make stages – raw material extraction and garment production – rather than disposal. This insight challenges the prevailing assumption that recycling and take-back programs alone can drive systemic change.

Swedish brands are experimenting with strategies that target these earlier stages. Some companies are transitioning to natural fibres and reducing fabric blends to facilitate future recycling, while others invest in durable technical fabrics for outerwear to extend product life. However, these choices introduce cost pressures: switching to organic cotton can increase expenses by up to 30%, forcing brands to reconsider sourcing and labour strategies. Larger firms respond by consolidating suppliers to gain leverage for sustainability measures, while smaller brands struggle with resource limitations, often lacking the capacity to conduct carbon footprint assessments or implement advanced recycling technologies.

Design innovation emerges as a critical enabler of circularity. Several Swedish brands are moving away from seasonal collections toward permanent lines, reducing the demand for constant novelty and allowing more time to refine quality and supply-chain practices. Practical design features, such as adjustable seams in children’s clothing, extend garment usability,



reinforcing the notion of clothing as a long-term investment rather than a disposable commodity. Independent labels leverage this approach to differentiate themselves, framing circularity as ‘buy less, buy better’, while fast-fashion brands face structural barriers rooted in trend-driven, low-cost models.

At the make stage, Swedish brands highlight the complexity of global supply chains. While some factories embrace sustainability measures like water filtration and renewable energy, others remain resistant, driven by cost and cultural norms. Partnerships with intermediaries such as the Fair Wear Foundation help in monitoring labour conditions, yet voluntary living wage programs remain rare. This underscores a critical tension: circularity cannot advance at the expense of social equity. Ethical labour practices must be integrated into circular strategies to avoid perpetuating exploitation under the guise of sustainability.

Consumer behaviour adds another layer of complexity. Scandinavian consumers are increasingly demanding environmentally responsible products, influenced by climate activism and cultural awareness. However, the attitude–behaviour gap persists: while sustainability resonates in theory, purchasing decisions often prioritise style and price. Brands are exploring rental and resale models, but logistical challenges and resource constraints hinder widespread adoption. Larger brands assume their premium products will naturally enter second-hand markets, overlooking opportunities to capture resale value and regulate garment life cycles.

Ultimately, the Swedish case illustrates that circularity in fashion remains fragmented and selective, with brands retrofitting linear models rather than pursuing systemic transformation. Without robust policy incentives, technological breakthroughs, and cultural shifts, the circular economy risks becoming another aspirational concept vulnerable to greenwashing. For meaningful progress, strategies must extend beyond waste management to encompass design innovation, supply-chain accountability, consumer engagement, and social justice. Only by addressing these interconnected dimensions can the fashion industry move toward a truly circular and sustainable future.

Questions

1. What is the main environmental impact of the fashion industry, and how has fast fashion intensified these issues?
2. What are the key measures introduced by the EU to promote circularity in textiles?
3. Why is focusing only on recycling and take-back programs insufficient for achieving systemic change?



4. Identify challenges Swedish fashion brands face when implementing circular strategies.
5. Explain the attitude–behaviour gap in sustainable fashion consumption and give one example of how brands are trying to address it.

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Author: Włodzimierz Kuc
wlodzimierz.kuc@lazarski.edu.pl