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Institutional policy and business practice to support the implementation of a circular economy in the textile value chain

Stakeholder report

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EXECUTIVE SUMMARY

The textile and fashion industry is one of the most resource-intensive and globally interconnected sectors. It contributes significantly to climate change, biodiversity loss, chemical pollution and social risks in complex global value chains. The prevailing linear model, characterised by high production volumes, short product lifetimes and limited material recovery, is incompatible with planetary boundaries, EU climate objectives and long-term industrial resilience.

At the same time, textiles represent a strategic industrial ecosystem spanning environmental policy, trade, innovation, consumer protection and development cooperation. As a priority value chain under the EU Circular Economy Action Plan, the sector is undergoing rapid regulatory transformation through the EU Strategy for Sustainable and Circular Textiles, the Ecodesign for Sustainable Products Regulation (ESPR), Digital Product Passports (DPP), Extended Producer Responsibility (EPR) and related measures.

This stakeholder report synthesises research, policy analysis, and stakeholder dialogue conducted within the project *Institutional policy and business practice to support the implementation of circular economy in the textile value chain*, with a focus on the European Union and Sweden. The analysis identifies structural barriers and strategic opportunities for implementing a circular textile economy that is environmentally effective, economically viable and socially just.

The findings show that reducing overproduction and extending product lifetimes are the most effective strategies for lowering environmental and social impacts. Recycling remains necessary for textiles that have reached technical end-of-life, but it cannot compensate for continued growth in production volumes. Circular business models, such as reuse, repair, remake, rental and product-as-a-service, offer substantial potential when supported by adequate infrastructure, predictable policy frameworks and equitable value-chain arrangements.

However, implementation gaps remain significant. Infrastructure for collection, high-quality sorting and fibre-to-fibre recycling is insufficient. Investment risks are unevenly distributed across global value chains. Competence gaps and digital readiness challenges effective compliance. Without clear governance of Digital Product Passports, interoperable systems, and transitional support for small and medium enterprises, SMEs, regulatory ambition may outpace industrial capacity.

Given the inherently global nature of textile production, EU measures alone cannot ensure a just and scalable transition. As a major import market, the EU must complement internal regulation with a coherent external dimension that promotes international policy alignment, risk-sharing mechanisms and capacity-building in key production regions.

Based on these findings, the report proposes strengthened policy recommendations at both EU and Swedish levels.

At EU level, priorities include:

- Incentivising circular business models while de-incentivising overproduction and linear fast-fashion practices.
- Establishing dedicated funding and blended finance mechanisms to scale circular textile infrastructure.
- Earmarking Extended Producer Responsibility, EPR, revenues to support high-value reuse and fibre-to-fibre recycling.
- Clarifying governance and interoperability of Digital Product Passports.
- Promoting long-term contractual arrangements and equitable risk-sharing across global value chains.
- Integrating circular textile objectives into trade cooperation and development partnerships.
- Establishing harmonised monitoring frameworks to ensure measurable progress.

At national level, Sweden, with its strong research base and collaborative textile eco-system, has the potential to play a strategic role within a broader European transition by:

- Setting measurable circular textile targets aligned with EU objectives and global value-chain realities.
- Designing EPR implementation to stimulate high-value circular flows.
- Mobilising development finance and export credit instruments to support circular capacity in production countries.
- Strengthening competence development and digital readiness domestically and through international collaboration.
- Acting as a testbed and knowledge hub for circular textile solutions.

For corporate decision-makers, the transition represents both compliance risk and strategic opportunity. Companies that proactively invest in durable design, transparent supply chains, circular business models and long-term supplier partnerships are likely to gain competitive advantage as regulatory requirements tighten and market expectations shift.

The circular transition of the textile sector is not solely an environmental imperative - it is a systemic industrial transformation. Aligning regulatory frameworks, financial mechanisms, industrial infrastructure, digital governance and international cooperation will be decisive in ensuring that circular textiles become economically viable, globally scalable and socially just.

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1. INTRODUCTION

The global textile value chain is extensive and characterized by multi-tiered, highly complex supplier networks. Transitioning the industry from a linear to a circular economy requires coordinated efforts across the broader industry ecosystem, alongside policy reforms that extend beyond Sweden and the EU to include key production countries.

This stakeholder report summarizes insights on institutional policy and business practice to support the implementation of a circular economy in the textile value chain. It also provides suggestions on policy and market practice solutions that could enhance the speed and uptake of the implementation of circular economy business models in the Swedish and EU context.

The current global economy is based on a linear model of "take–make–waste," and it is one of the main causes of the triple planetary crisis of climate change, pollution and biodiversity loss.[1] The circular economy is an economic model designed to minimize waste and make the most of resources by keeping products and materials in use for as long as possible.[2] It can be a strong tool to reverse or even stop the triple planetary crisis.[3]

The circular economy emphasizes durability, repair, reuse, recycling, and regenerative design. Its goal is to decouple economic activity from finite resource consumption while reducing environmental impacts and supporting long-term sustainability. By rethinking how products are designed, produced, and consumed, the circular economy offers a pathway to lower emissions, reduced resource extraction, and more resilient systems.

However, applying these principles is particularly challenging in the fashion and textile industry, which is characterized by fast production cycles, overconsumption, complex global supply chains, mixed materials that are difficult to recycle, and business models that still largely depend on selling ever-increasing volumes of new clothing. Beyond environmental objectives, the circular transition of the textile sector also represents a structural industrial transformation affecting production models, global value chains and long-term competitiveness.

2. ENVIRONMENTAL AND SOCIAL IMPACTS

Our current production and consumption patterns cause structural environmental and social impacts. The textile sector is characterised by complex global value chains, high resource use and a strong separation between where products are consumed and where environmental and social impacts occur. While consumption is largely concentrated in high-income regions such as Europe, a significant share of

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[1] What is the triple planetary crisis? UNFCCC 2022

[2] Bali Swain & Sweet, 2021

[3] Circular solutions to the triple planetary crisis UNEP, Inger Andersen 2024

environmental degradation and social risk is located in producer countries.[4] An estimated 80 percent of all textiles consumed in the EU are produced outside the EU.[5] The largest producer country is China with a third of all global textile exports, followed by Bangladesh, Vietnam, India, and Turkey with around five percent each.[6]

Figure 1: Garment manufacturing, India. Photo: R. Bali Swain

Since the turn of the millennium, global fibre production has more than doubled, increasing from around 58 million tonnes in 2000 to over 120 million tonnes today. Synthetic fibres dominate production, and more than half of all textile fibres are derived from fossil-based feedstocks.[7] At the same time, less than one per cent of textiles are produced from recycled textile fibres.[8]

In the EU, the yearly average consumption of textiles is 19 kilos per person.[9] However, according to data from the European Environment Agency 11.6 kg textile waste per person ends up in mixed household waste instead of being collected every year.[10] Moreover, many textile products are never used. Every year, in France alone, €630 million worth of unsold clothes are destroyed. On the European level, an estimated 4-9% of unsold textiles are destroyed before being worn.[11]

Environmental impacts across the textile value chain

Environmental impacts arise at all stages of the textile value chain, from raw material extraction to end-of-life. Natural fibres such as cotton are associated with high water use, land occupation and chemical inputs, contributing to water scarcity, soil degradation and biodiversity loss in several producing regions. Synthetic fibres, which dominate global fibre production, contribute to greenhouse gas emissions and dependence on fossil resources.[12] However, research consistently shows that fibre choice alone does not determine overall environmental outcomes. About 80

[4] EU Strategy for Sustainable and Circular Textiles, European Commission
[5] Fast fashion: EU laws for sustainable textile consumption, European Parliament 2020
[6] Textile Exports by Country 2026, World Population Review
[7] Materials Market Report, Textile Exchange 2024
[8] Circularity Gap Report Textiles, Circle Economy 2024
[9] Textiles and the environment European Environment Agency (EEA) 2025
[10] Ibid.
[11] New EU rules to stop the destruction of unsold clothes and shoes
[12] European Commission – EU Strategy for Sustainable and Circular Textiles

percent of the total greenhouse emissions occur upstream in the production phase, while only three percent of the emissions occur in the distribution and retail phase.[13]

While material substitution can reduce specific impacts, assessments indicate that environmental pressures generated during manufacturing and processing often outweigh potential gains at the fibre stage, particularly when production volumes continue to increase.[14]

Research further highlights overproduction as a key driver of environmental impacts in the textile system. Large volumes of textiles are produced despite relatively low utilisation rates, with many garments used only a limited number of times before being discarded. From a system perspective, increased efficiency or improved material choices risk being outweighed by continued growth in production volumes. Addressing overproduction is therefore central to reducing overall environmental impacts, as well as to improving the effectiveness of circular strategies such as reuse, remanufacturing, and recycling.[15]

Figure 2: Collected and sorted used textiles. Photo: R. Bali Swain

Textile manufacturing is energy- and chemical-intensive. Processes such as dyeing and finishing are major sources of water pollution and chemical exposure, especially in regions with limited environmental regulation or enforcement. Untreated wastewater from textile production can have severe impacts on local ecosystems and surrounding communities.[16]

More than 15,000 different chemicals are used in textile production. These include pesticides used in fibre cultivation, as well as dyes, pigments and solvents applied during manufacturing. In addition, textiles are often treated with chemicals to achieve specific functions, such as water, stain and grease repellence, wrinkle resistance, flame retardancy and antimicrobial properties.[17]

The use phase represents another important source of environmental impact, particularly in high-income consumer markets. Energy and water use related to washing, drying and ironing contribute to climate and resource pressures. In addition, synthetic textiles are a significant source of microplastic emissions during

[13] Textiles and the environment European Environment Agency (EEA) 2025
[14] POLICY BRIEF Skapa förutsättningar för återanvändning som norm
[15] Ibid.
[16] European Environment Agency (EEA) – Textiles and the environment
[17] Textilier, kläder och skor, Naturvårdsverket 2025

washing. Downstream in the use phase, 14 percent of the greenhouse emissions are due to household washing, drying and ironing while an estimated three percent occurs in the end-of-life processing (collection, sorting, recycling, incineration, disposal). While individual consumer behaviour plays a role, research increasingly highlights that utilisation rates and product lifetimes are decisive factors for overall environmental performance.[18]

At end-of-life, the majority of textiles are still incinerated, landfilled or exported for sorting and reuse outside the EU. Only a very small share is recycled into new textile fibres. Mixed materials, chemical additives and limited sorting capacity remain major barriers to fibre-to-fibre recycling at scale. Although recycling is necessary for textiles that can no longer be used, it cannot compensate for high production volumes and short product lifetimes.[19]

Social impacts and structural conditions

The textile and garment sector employs millions of workers globally and remains highly labour-intensive. Social risks are particularly pronounced in parts of the value chain characterised by low margins, strong price pressure, short lead times and the presence of a large informal sector.[20] Low wages, excessive working hours and limited access to labour rights continue to be reported in many production regions.[21]

Importantly, these conditions are not solely the result of local practices. Rather, responsibility for social impacts is distributed across the value chain. Purchasing practices, pricing models and short-term contracting contribute to structural constraints that limit suppliers' ability to invest in safer workplaces, skills development and improved working conditions.[22]

Chemical use also raises social and health concerns. Workers and surrounding communities may be exposed to hazardous substances through production processes and insufficient wastewater treatment. These risks often intersect with broader patterns of environmental injustice, where affected communities have limited influence over decision-making and limited access to remediation.[23]

Because textile value chains are global, social and environmental impacts are often geographically distant from consumers and policymakers in Europe. This distance complicates accountability and governance, and highlights the importance of policy frameworks that address impacts along the entire value chain.[24]

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[18] EU Strategy for Sustainable and Circular Textiles, European Commission
[19] Circularity Gap Report: Textiles, Circle Economy, 2024
[20] Sweet, 2022
[21] EU Strategy for Sustainable and Circular Textiles, European Commission
[22] The Outlook Report 2011-2019 Final Program Report Mistra Future Fashion
[23] Textiles and the environment, European Environment Agency (EEA) 2025
[24] EU Strategy for Sustainable and Circular Textiles, European Commission

3. BUSINESS PRACTICES AND MODELS

Implementing a circular textile value chain has proven difficult to implement at scale, in spite of many promising business and industry initiatives and pilots. Business models that promote reduced production and longer lifetimes already exist on the market, and new technological solutions for collection and sorting have potential to reintroduce large volumes of textile feedstock into circular material flows, provided adequate market demand, infrastructure and investment conditions.

A priority for sustainable circulation is to increase the use time of every produced item, since recycling alone will not solve the many resource and emission challenges connected to the production of new textiles. This also implies that long-term business resilience will increasingly depend on decoupling revenue generation from continuous growth in production volumes and instead creating value through durability, services, and extended product lifetimes.

Thus, value for the society and business need to be linked to business models that support prolonged use-life and at the same time reduce new production.[25] Some examples of business models and case studies are presented here.

Reducing the production of new goods

A number of strategies can be used by fashion and textile companies to reduce the production of new goods, while maintaining economic viability.

Sufficiency: A sufficiency-oriented business model is based on limiting excessive consumption.[26] This strategy is, for example, used by the fashion brand Asket that offers a single permanent collection consisting of a limited number of timeless, high-quality garments.[27] A permanent collection enables the company to reduce development and production costs, avoid discounting and seasonal sales, and build long-term customer loyalty.

Product-as-a-Service (PaaS): In a product-as-a-service business model, the provider retains ownership of the product. Profitability is therefore linked to keeping products in circulation for as long as possible and minimising the need for new production.[28] Repair and remake services as well as renting or leasing provide viable business models that have the potential of prolonging the use-life of products and building strong customer loyalty. By retaining ownership, the company can invest in higher-quality designs with longer lifetimes to ensure economically viable circulation. Implementing such circular models at scale also requires adjustments in purchasing practices and longer-term supplier relationships, enabling shared investment in durability, recycling capacity and digital traceability systems across the value chain.

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[25] The Outlook Report 2011-2019 Final Program Report Mistra Future Fashion

[26] How can businesses drive sufficiency? Bocken et al. 2021

[27] We cant shop our way to sustainability, Asket 2020

[28] Product-as-a-Service in the circular economy, Cradlenet & Stena Circular Consulting 2023

CASE STUDY

Photo: Elis

Elis: Reducing the need of new production with textiles-as-a-service

Elis is a global company operating with a textiles-as-a-service model. Through professional rental, cleaning, repair, and logistics services, customers gain access to workwear, bed linen, and other textile products without purchasing or owning them. This business model allows customers to focus on their core activities while contributing to a lower environmental footprint.[29]

A life-cycle assessment (LCA) of Elis' rental solution for workwear shows significant environmental benefits compared to ownership-based models, demonstrating how a product-as-a-service model can be an efficient way of reducing resource use and emissions.[30]

[29] Circular services at work, Elis Textilservice, 2026
[30] Environmental benefits of Eli's circular business model, Elis Textilservice, 2026

Preventing waste through extending product lifetime

Extending product lifetimes can be achieved through strategies applied both in the design phase and during the use phase. Similar to sufficiency-oriented approaches, these strategies can be compatible with economically viable business models.

Design for longevity: Design for longevity encompasses strategies such as timeless aesthetics, high-quality materials, repairability, and versatility. These design principles aim to ensure that products remain functional, desirable, and usable over a long period of time. The outdoor brand Houdini explicitly applies these strategies in its product development[31] and has found that some of their garments are, on average, used more than 1 000 times[32]. Design for longevity is also a core element of Kappahl Group's circular strategy, as illustrated in the case study below.

Care and repair: Care and repair services play an important enabling role in extending product lifetimes. Companies producing textile care products, for example, can support more resource-efficient use by reducing the need for frequent washing or replacement. One such example is Pure Effect, which produces bacteria-based textile care products with the aim of improving resource efficiency.[33] The denim company Nudie Jeans has built a loyal customer base through its "free repairs forever" concept, demonstrating how repair services can support both extended product use and long-term customer relationships.[34]

Business models for waste handling, reuse and recycling

Although these business models cannot compensate for increasing volumes, they are essential for closing the loop in a circular economy and for achieving the goals of the EU strategy for sustainable and circular textiles (see Chapter 5).

Textile waste can be found at all levels and in all processes along the value chain, from yarn spinning, textile production, cutting and sewing, unsold goods in retail, to post-consumption end-of-life. Different business models for collection, sorting, processing, and regeneration of the textiles for these different categories of textile waste are usually required. For example, factory spill usually holds a higher quality of the fiber compared to post-consumption textiles, and can therefore be used to make new clothes as is, without recycling or processing the material.

An example of this is Kappahl's 'Rescued fabrics collection', that uses factory spill from the Newbie collection to make new clothes.[35]

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[31] Design philosophy, Houdini Sportswear

[32] Houdis for a long life of adventures, Houdini Sportswear, 2003

[33] The positive properties of microorganism create impact, The story of Pure Effect, pure effects, 2015

[34] How to repair the jeans, Nudiejeans.com

[35] Rescued fabrics collection, Kappahl

CASE STUDY

Photo: Kappahl

Kappahl Group: Combining circular strategies to reduce environmental footprint

Part of Kappahl Group's circular strategy is to keep products in use for as long as possible and to prevent them from becoming waste. "Design Made to Last" is their design motto. They have been piloting a number of circular concepts and many have been commercialised, for example clothes made of leftover fabrics and rental services.

Kappahl has also demonstrated that textile waste originating from their products could be used as a substitute input material to replace fossil coal in steel production, illustrating alternative pathways for handling textile waste when other circular strategies are no longer possible.[36]

[36] A longer version of this case can be found in Borglund & Sweet, 2025

Post-consumption textiles that cannot be reused and have reached their technical end-of-life usually require recycling processes to get back into use. To differentiate between textiles that can be part of a prolonged life or not requires systems and business models for collection and sorting into different feedstocks, as well as distribution and markets for different qualities and fibers.

Collection and sorting: With new EU regulations, separate collection and sorting of textiles will be mandatory, driving new business opportunities. The technology company Cyclothe provides an example of how these requirements can be addressed through smart collection bins and AI-based sorting solutions.[37]

Open and closed loop recycling: Textiles can be recycled into open or closed loops, using mechanical or chemical recycling. Open-loop is when a textile is recycled into a different or lower-value product (e.g., insulation panels or automotive padding). Open-loop recycling is today the main method for recycling textiles.[38]

Closed-loop recycling is when a textile is recycled back into a new textile, so-called fibre-to-fibre recycling. This enables materials to be kept in closed loops, but remains technically and economically challenging. While such technologies represent important progress, they should be complementary to strategies that reduce production volumes and extend product lifetimes rather than as substitutes for upstream prevention measures.[39]

Conventional shredding-mechanical recycling methods often produce fibres with a lower intrinsic value, while thermomechanical recycling processes, for example PET bottles re-purposed into recycled polyester yarn, have proven to be one of the most commercially successful methods in the open-loop recycling category.[40]

In closed-loop recycling, the primary commercially recycled products consist of recycled fibers, yarns, garments, and home textiles. Most of these regenerated products are produced through shredding-mechanical recycling processes. One company that has developed a more cost-efficient, high-quality mechanical solution intended for closed-loop, is ReSpin, described in the case study above.

In the fashion and apparel sector the use of chemical recycling methods are slowly growing, although still a costly and resource-intensive method.[41] One of the leading companies is the Austrian company Lenzing who developed a fiber-to-fiber recycled fiber, TENCEL™ Lyocell, upcycling cotton scraps from pre-consumer spinning waste and post-consumer garments. The process transforms these cotton scraps into cotton pulp, blending up to one-third of the recycled cotton pulp with wood pulp and then spinned into yarn used to create fabrics and garments.

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[37] We Are Redesigning Waste, Textile Waste Management cyclothe.com
[38] Huang et al., 2024
[39] Fast fashion: EU laws for sustainable textile consumption, European Parliament 2020
[40] Huang et al., 2024
[41] Rags to Revenue, Accelerating Circularity 2025

CASE STUDY

Photo: [ReSpin]

ReSpin: Improving fiber-to-fiber recycling with high-quality, low-impact technology

ReSpin has developed a patented mechanical fibre-to-fibre recycling technology designed to produce high-quality fibres with low environmental impact. The process does not require the use of chemicals, water, or excessive energy. By producing long fibres from recycled textiles, ReSpin avoids the need to add virgin material to its recycled output. The modular design of the recycling equipment allows installation at different scales, from small facilities to industrial-scale plants, enabling local recycling directly at production sites.[42]

[42] RespinJenny - The Machine, respin.se

Figure 3: Chemical recycling plant, Circulose.
Photo: R. Bali Swain

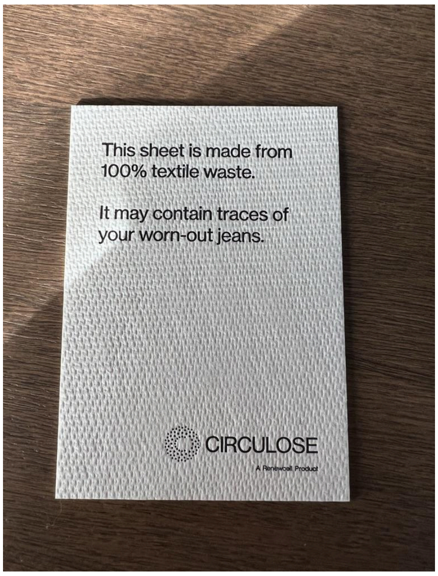

Figure 4: Recycled textile-to-textile material, CIRCULOSE®.
Photo: R. Bali Swain.

In Sweden the company Circulose is, after a challenging start, again starting commercial production of recycled pulp made from scrapped cotton textiles. The chemical closed-loop recycling process is similar to Lenzings, but Circulose sells the resulting recycled material to a few large fabric manufacturers in Asia that they have signed strategic partnership with. To ensure volumes and enable a restart of the production, Circulose has made agreements with several fashion brands.[43] This again shows the importance of developing the necessary ecosystem of industry partners to secure financial gains of circular investments.

4. POLICIES IN THE EUROPEAN UNION AND SWEDEN

Since the adoption of its first *Circular Economy Action Plan* in 2015 and the second version in 2020, the EU has continuously introduced new policies to promote a more circular European economy.[44] The ambition is for Europe to become the most circular region in the world by 2030.[45] The *EU strategy for sustainable and circular textiles* is the guiding framework for creating a greener and more competitive European textiles sector.[46]

A number of EU regulations and directives are especially relevant for achieving a circular economy in the textiles sector, some of the most comprehensive being the *Ecodesign for Sustainable Products Regulation* (ESPR) including *Digital Product Passports* (DPP) and the *Waste Framework Directive* including *Extended Producer Responsibility* (EPR).

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[43] Efter konkursen - nu startar produktionen igen för Circulose, Aktuell Hållbarhet 2026.

[44] First circular economy action plan, European Commission 2015

[45] The Clean Industrial Deal, European Commission, 2025

[46] EU strategy for sustainable and circular textiles, European Commission

The Swedish textiles sector is mainly affected by policies adopted at the EU level, but there are also national policies that apply. The most relevant policies for promoting a circular economy in the EU and Swedish textiles sectors are covered below. Note that almost all of them are in the process of being adopted, amended or developed at the time of writing this report. The practical application and interaction of these changes will become clearer as implementing acts are adopted and national transposition progresses. Also see an overview Table 1 in Appendix.

The EU strategy for sustainable and circular textiles

The EU strategy for sustainable and circular textiles was adopted by the European Commission in 2022 with the aim of creating a greener, more competitive textiles sector and serves as a guiding document for EU policies regulating circularity in the European textiles sector. It sets a vision for 2030 which proclaims that all textiles that are placed on the EU market should be durable, repairable and recyclable, to a great extent made of recycled fibres, free of hazardous substances and produced respecting social rights. Furthermore, producers will take responsibility along the value chain, and consumer norms will have shifted towards high-quality, circular clothes rather than fast-fashion.[47]

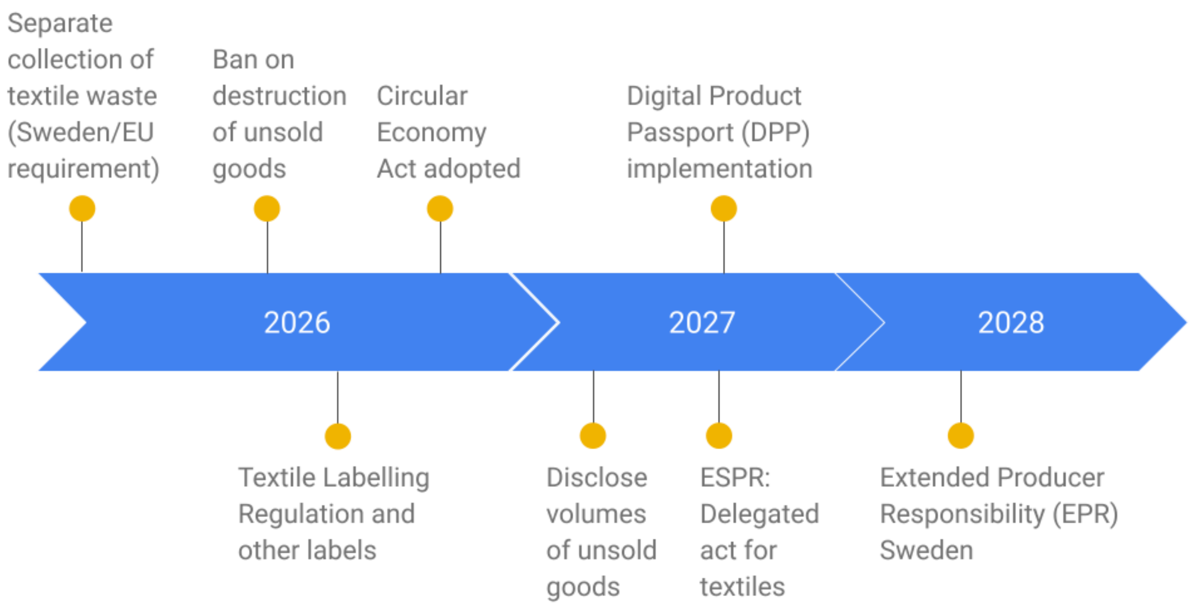

Figure 5: Timeline of European policy implementation for the textile value chain.

Ecodesign for Sustainable Products Regulation (ESPR)

The Ecodesign for Sustainable Products Regulation (ESPR) entered into force in 2024 with the objective to significantly improve the sustainability of products placed on

[47] EU strategy for sustainable and circular textiles, European Commission

the EU market by improving their circularity, energy performance, recyclability and durability. The ESPR builds on the previous Ecodesign directive and introduces new product groups to be included.[48] In its *Ecodesign for Sustainable Products and Energy Labelling Working Plan 2025–2030*, the European Commission has identified textiles and apparel as the new product group with the highest priority. (Note that footwear is not yet included, but may be added after an evaluation that will be completed in 2027.)[49]

Central to the ESPR are the ecodesign requirements on performance and information for physical products. These requirements will be presented in delegated acts for each product group and will include e.g. measures for improving product durability, reusability, upgradability and reparability, addressing the presence of substances that inhibit circularity, increasing recycled content, limiting the generation of waste and banning the destruction of unsold goods. Delegated acts may also include minimum requirements for public procurement. The European Commission's Joint Research Centre (JRC) is currently committing a preparatory study to identify suitable ESPR requirements for textiles.[50]

A first delegated act adopted 9 February 2026 bans destruction of unsold apparel, clothing accessories and footwear from 19 July 2026. A complementary implementing act, applicable from February 2027, enforces businesses to disclose volumes of unsold goods that are discarded.[51] The final requirements for textile and apparel products will be presented in a delegated act for textiles which is expected to be adopted in 2027.[52]

Digital Product Passports (DPP)

Most of the information requirements mandated by the ESPR will be included in a product's Digital Product Passport. This is a digital data carrier containing information on, for example, the product's material composition and if it contains any substances of concern, as well as information on how the product can be safely used, recycled and disposed of. The information will be made available via, for example, a QR code on the physical product.[53]

The information can be specific to different product levels depending on the value, size and sustainability impacts of the specific product category; it can be specific to the product model, batch or even each unique item. Exactly which product level that applies and which information that must be included will be regulated by the respective delegated acts. Information related to the use phase, such as reparation

[48] Ecodesign for Sustainable Products Regulation, European Commission
[49] ESPR and Energy Labelling Working Plan 2025, European Commission
[50] Preparatory Study on Textile Products, European Commission
[51] New EU rules to stop the destruction of unsold clothes and shoes, European Commission
[52] ESPR and Energy Labelling Working Plan 2025, European Commission
[53] Ibid.

information, must naturally be specific to the item level. For products manufactured in the EU, the manufacturer is responsible for providing the DPP. For products manufactured outside of the EU, the importer is responsible.[54]

Waste Framework Directive

The EU Waste Framework Directive from 2008 defines the legal requirements for how waste is to be treated in the EU. The aim is to protect the environment and human and animal health as well as to reduce the pressure on resources. A revision on the directive, focussing on textile waste, entered into force in October 2025. This revision introduced a regulation on extended producer responsibility for textiles that is described in the section *Extender Producer Responsibility (EPR)* below.[55]

One aspect of the Waste Framework Directive, that is specifically relevant for promoting the circular economy, is the introduction of end-of-waste criteria, i.e. criteria for when certain waste ceases to be waste and can be put on the market again as a product or secondary resource.[56] Textile waste streams and by-products are considered having high priority, but their end-of-waste criteria have not yet been determined.[57]

Extended Producer Responsibility (EPR)

The regulation on Extended Producer Responsibility for textiles, under the Waste Framework Directive, implies that EU member states must ensure that producers of textile products cover the costs of handling used products such as collection, transport, sorting and preparation for reuse, recycling and other recovery operations and disposal.[58] Note that the producer, in this case, does not have to be the actual manufacturer, but it is the organisation or company that makes the product available on the European market for the first time that is responsible.[59]

The cost paid will be "eco-modulated", which means that costs will be adjusted based on product sustainability criteria, such as those included in the Ecodesign for Sustainable Products Regulation.[60]

The obligations for the Extended Producer Responsibility for textiles will be carried out collectively by specific producer responsibility organisations. National EPR schemes must be established no later than 17 April 2028.[61]

54 Textilier, kläder och skor, Naturvårdsverket 2025
55 Waste Framework Directive, European Commission
56 Ibid.
57 Scoping possible further EU-wide end-of-waste & by-product criteria, European Union, 2022
58 Directive (EU) 2025/1892 of the European Parliament and of the Council
59 Textilier, kläder och skor, Naturvårdsverket 2025
60 Revised Waste Framework Directive enters into force, European Commission, 2025
61 Revised Waste Framework Directive enters into force, European Commission, 2025

Textile Labelling Regulation and other labels

In addition to the DPP, some products may also be required to have an ESPR label or other labels. For textiles, the Textile Labelling Regulation will be specifically important.[62] This regulation currently only specifies requirements for labelling textile products with their fibre composition, but it is undergoing a revision to align better with the EU strategy for sustainable and circular textiles and to include more environmentally relevant information. The revised proposal is expected to be presented in the second quarter of 2026.[63]

As of 27 September 2026, a voluntary EU label for commercial guarantee of durability, will start being used on the market under the Directive on empowering consumers for the green transition (see more below). This label may be used by producers that wish to offer consumers a guarantee of durability at no additional cost for longer than two years.[64]

Textile products that meet its criteria may also include the EU Ecolabel, which guarantees that hazardous substances have been limited to the extent technically possible in the manufacturing of the product.[65] The EU Joint Research Center, JRC, is currently conducting a preparatory study on updated criteria in line with the EU strategy for sustainable and circular textiles.[66]

Other relevant EU directives and regulations

In addition to product performance, information, labelling and waste legislation, the EU textile sector also has to oblige to policies on chemicals, supply-chain due diligence, sustainability reporting, consumer information rules, and waste shipment controls. The following directives and regulations further contribute to establishing a European circular textiles market. Below you will find a short description of some of the relevant directives and policies that will influence the textile sector.

Circular Economy Act

The forthcoming Circular Economy Act, that is expected to be adopted in 2026, aims to establish a single market for secondary raw materials, increase the supply of high-quality recycled materials and stimulate circular market demand. It will include measures to accelerate the shift to a resource-efficient, low-waste and climate-neutral European economy.[67] A first pilot draft of an implementing act focusing on plastics was presented 23 December 2025 including, for example,

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[62] ESPR and Energy Labelling Working Plan 2025, European Commission

[63] Review of Regulation (EU) 1007/2011

[64] Sustainable consumption, European Commission, 2025

[65] Establishing the ecological criteria for the award of the EU Ecolabel for textile products, European Commission 2014

[66] Preparatory Study on Textile Products, European Commission

[67] Circular Economy, European Commission

end-of-waste criteria and harmonised rules for chemically recycled plastic content. Simultaneously a set of measures were presented to increase investment and innovation for scaling circular practices in line with the aims of the Circular Economy Act.[68] While not (yet) focusing specifically on the textiles industry, the Circular Economy Act will push the whole European market towards increased circularity, and will affect virtually all sectors.

REACH regulation on chemicals and microplastics

The Regulation on the registration, evaluation, authorisation and restriction of chemicals (REACH) entered into force in 2007. Its objective is to protect human health and the environment against harmful substances. Under REACH, companies are responsible for managing risk from chemicals and for providing safety information. Manufacturers and importers are responsible for gathering and registering information on chemical substances with the European Chemicals Agency (ECHA).[69] In 2023, additional measures were adopted under REACH to restrict microplastics that are intentionally added to products, including, for example, detergents, fabric softeners and glitter.[70]

Waste Shipment Regulation

The updated EU Waste Shipment Regulation, which entered into force in 2024, aims to ensure that the EU does not export its waste challenges to third countries, to prevent illegal shipments of waste, to increase traceability and to support the transition to a circular economy by facilitating shipments of waste destined for recycling between member states. The regulation includes a general ban on waste exports for disposal and on hazardous waste exports.[71] The aforementioned update on the Waste Framework Directive focussing on textiles clarifies that collected textiles are considered waste, and thus subject to the Waste Shipment Regulation, until they have been properly sorted.[72]

Corporate Sustainability Reporting Directive (CSRD)

CSRD, which was adopted in 2022, requires companies to report what financial risks and opportunities they see when it comes to environmental and social sustainability in relation to their activities. Reporting is done according to the European Sustainability Reporting Standards (ESRS). It aims to make it easier to evaluate and compare sustainability performance of European companies, and – based on that information – to direct financial flows towards sustainable investments.[73] In 2025, in the so-called Omnibus package, reporting requirements were reduced in scope

[68] New package of measures to boost circular economy, European Commission, 2025
[69] REACH Regulation, European Commission
[70] Protecting environment and health, European Commission, 2023
[71] Waste shipments, European Commission
[72] Revised Waste Framework, European Commission, 2025
[73] Corporate sustainability reporting, European Commission, 2025

and limited to only the largest companies. While originally even listed small and medium sized companies were supposed to start reporting within a few years, now only companies with more than 1 000 employees and a turnover of over 450 million euro need to report. Smaller companies can opt to report according to voluntary reporting standards (VSME). These adjustments were published in the Official Journal of the European Union on 24 February 2026 and entered into force 20 days after.[74]

Corporate Sustainability Due Diligence Directive (CSDDD)

CSDDD entered into force in 2024 and aims to foster companies to pursue responsible operations regarding sustainability and human rights across their global value chains. Companies in scope need to identify and address potential adverse impacts from their operations in their value chain.[75] Similarly to the CSRD, the scope for CSDDD has been reduced and the amendment is awaiting final approval before it will enter into force. Now, only companies with over 5 000 employees and a turnover over 1,5 billion euro have to comply with CSDDD. The original requirement for companies to adopt a transition plan for climate change mitigation has been deleted.[76]

Directive on Empowering Consumers for the Green Transition

The Directive on Empowering Consumers for the Green Transition entered into force in 2024. It ensures that consumers are informed on the durability and reparability of goods and their legal guarantee rights. It also strengthens rules against greenwashing and early obsolescence practices.[77] For companies, the directive implies that claims on a product's environmental performance need to be objective and verifiable and that information comparing environmental, social or circularity aspects of products must be rigorously substantiated.[78] As already mentioned, an EU label for commercial guarantee of durability will be introduced under this directive on 27 September 2026.[79]

EU Forced Labour Regulation

A new EU law published in December 2024 that prohibits products made with forced labour from being sold, placed on, or exported from the European Union market.[80] The regulation is part of the EU's broader human-rights and supply-chain due diligence policy and applies to all products and sectors from 14 December

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[74] Official Jounal of the European Union 2026/470, 2026
[75] Corporate sustainability due diligence, European Commission
[76] Simplified sustainability reporting & due diligence rules for businesses, European Parliament, 2025
[77] New EU rules to empower consumers for the green transition, European Commission, 2024
[78] Amending Directives 2005/29/EC and 2011/83/EU as regards empowering consumers for the green transition, European Union 2024
[79] Sustainable consumption, European Commission
[80] EUR-Lex

2027. Forced labour is defined by the International Labour Organization (ILO) as 'all work or service which is exacted from any person under the threat of a penalty and for which the person has not offered himself or herself voluntarily.' It refers to situations in which persons are coerced to work through violence, intimidation, manipulated debt, retention of identity papers, or threats of denunciation to immigration authorities.[81]

Swedish policies for circular economy in the textiles sector

Swedish national policy for promoting a circular economy in the textiles sector is to a large extent based on EU policy. There are, however, some national policies and initiatives in place. The most relevant and topical policies are presented below.

National strategy for circular economy

In 2020, Sweden adopted a national strategy for the transition to a circular economy aiming to contribute to achieving Sweden's environmental and climate goals, as well as the global goals of Agenda 2030. Textiles is one of six prioritised material flows identified.[82]

National action plan for circular economy

In 2021 the strategy was complemented with a national action plan. Textiles is identified as a prioritised material flow and two national programmes for circular textiles were presented in this action plan: a national platform for sustainable textiles and fashion hosted by the University of Borås, and dialogue meetings for a sustainable textiles value chain co-hosted by the Swedish Environmental Protection Agency and the Swedish Chemicals Agency.[83] The intention of the action plan was to introduce national targets for the prioritised material flows. So far, targets have only been adopted for plastics.[84]

Collecting and sorting of textile waste

From 1 January 2025, textile waste must be separately collected and sorted according to the EU Waste Framework Directive. Municipalities are responsible for collecting and sorting household waste. Textile manufacturers and wholesalers are responsible for collecting and sorting their own waste. From 1 October 2025, underwear as well as damaged and heavily stained textiles unsuitable for recycling are exempt.[85]

[81] Internal Market and SMEs
[82] Cirkulär ekonomi – strategi för omställningen i Sverige, Regeringen, 2023
[83] Cirkulär ekonomi - Handlingsplan för omställning av Sverige, Regeringen, 2021
[84] Sveriges handlingsplan för plast, Regeringen, 2022
[85] En mer cirkulär hantering av textilavfall, Naturvårdsverket, 2025

Extended producer responsibility

Sweden must establish a programme for extended producer responsibility (EPR) for textiles no later than 17 April 2028 in accordance with the amended EU Waste Framework Directive. The Swedish Environmental Protection Agency has conducted a preparatory study on implications of transposing the regulation to national law, identifying the lack of adequate infrastructure for circular handling of textiles.[86] The agency has also been assigned by the Swedish government to develop a proposal on how to establish the extended producer responsibility for textiles in Sweden. The proposal will be presented on 13 November 2026.[87]

5. CHALLENGES FOR IMPLEMENTATION

Companies report a wide range of barriers that make the implementation of circular processes and business models challenging. Some of these barriers relate to the gap between ambitions in the newly adopted EU textile policy and the operational readiness of the industry, where systems for collection, sorting, classification etc. of textile feedstocks are still largely missing. Other barriers relate to uncertainties regarding market developments and readiness for circular business models as well as inertia in the complex linear ecosystem of textiles.

Complex value chains

Traditional business models and supply chains are not designed for circularity. The industry is fragmented and it is difficult to share information and track materials through complex global supply chains.[88] Despite national and regional circularity goals, there is a lack of established links between brands, waste management sector, textile producers, and users of recovered textiles, resulting in siloed systems where less than 1% of clothing is recycled into new garments.[89]

In spite of many efforts to improve environmental and social performance upstream in the global value chain, many challenges persist due to lack of integrated efforts between brands and producers as well as the absence of globally institutional rules and standards.

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[86] Kartläggning inför ett utökat producentansvar för textil och skor, Naturvårdsverket, 2025

[87] Uppdrag att genomföra producentansvaret för textil, Regeringen, 2025

[88] Bali Swain & Sweet 2023a

[89] Reimagining Growth Landscape Analysis, Textile Exchange, 2024

Figure 6: Garment factory India. Photo: R. Bali Swain

Figure 7: Water treatment plant at a textile dye factory, India. Photo: R. Bali Swain

Brands often have limited contacts beyond their first tier suppliers and many suppliers are dependent on the commitments of the brands to buy certain quantities, in order for them to invest in sustainability and circular production. Brands may require sustainability efforts such as energy efficient sewing machines, water recycling plants, organic dyes and recycled materials, but do not always follow through. More balanced contractual arrangements and long-term purchasing commitments would reduce this asymmetry and enable suppliers to invest in circular upgrades with greater financial security.

Producers, for example, report that brands ultimately end up rejecting clothes with organic dyes and do not create designs for recycled materials.[90] Likewise, EU policies, for example in including scope 3 in reporting of the sustainability impact of brands, have so far not been far reaching and transparent enough to cover the many tiers of suppliers in the textile value chain, to make a decisive impact on sustainability and governance of the whole value chain.

Infrastructure and industrial solutions

In spite of the recent EU-wide implementation of textile collection, there is still a lack of adequate systems and cost-effective technologies for collecting, sorting, distributing, and recovering textiles at the scale and volumes needed to circulate all

[90] Bali Swain & Sweet 2023b

textile waste that occurs.[91] Textile feedstock of sorted, processed and classified recycled material are still largely missing. Even if well-functioning systems are implemented in some individual sites, these solutions need to be standardized and implemented everywhere, along with market developments for different fractions and qualities of feedstock that will ensure that products and materials are circulated in a sustainable and efficient way.

Industrial solutions for reuse, refurbishment and reverse logistics are important enablers for achieving effective circular flows but are still largely missing on the market. The solutions and necessary infrastructure also need to be embedded in the global eco-system of textile consumption and production. The gap between what industry can do today and what the ambition of the upcoming EU textile policy is remains wide and will likely manifest as bottlenecks in handling and processing collected textiles in the coming years. While public policy plays a critical role in enabling infrastructure development, industry participation and co-investment will be necessary to ensure that systems are economically viable and aligned with market needs.

Costs and financial risk

To enable a shift towards circularity, significant investments are needed to implement new infrastructure, technology, and reverse logistics. It is, however, not always clear who should take the risk for these investments, which may lead to delays in implementation.[92] Producers who make investments to meet brand demands, rarely get to share the return on their investment, resulting in unequal risk sharing between suppliers on the one hand and global brands on the other.[93] This is especially challenging for SMEs that often lack the financial resources needed and may be unable to deliver on large and long-term contracts that could otherwise provide financial security.[94]

Culture and behaviour

Adapting circular business models and new ways of working throughout the value chain requires all actors to change, from the strategies in each company to the behaviour of individual end users. In spite of an increased acceptance of reuse, there is still a low market share of secondhand apparel, where strategies aimed at cultivating environmentally responsible habits and nudging consumers towards adopting more sustainable behaviours are often missing. Slow adoption in parts of the value chain can cause transition inertia on the whole market.[95]

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[91] Scaling textile recycling in Europe–turning waste into value
[92] Bali Swain & Sweet 2023a
[93] Bali Swain & Sweet 2023b
[94] Ibid.
[95] Ibid.

Knowledge and competencies

Knowledge on how to implement circularity and the potential consequences are largely missing in the textile ecosystem.[96] This is a barrier in the industry as well as in the political sphere, which may cause inadequate decisions and inefficient implementation, delaying circular transition. A need for clear, concerted and knowledgeable policies targeted to the textile and fashion industry, could push the industry to make scalable investments in the circular transition. In addition to the industry's need for knowing the policies and risks to make investments, business leaders need to understand how to develop circular strategies and business models to stay competitive. That includes being able to find the right competencies and educating and training existing workforce to be able to effectively implement circular ways of working.[97] [98]

Product design and contents

Conventional product design prioritises cost efficiency, speed to market and short-term aesthetics rather than durability, repairability or end-of-life recovery. As a result, many textile products are difficult to disassemble, repair or recycle once they reach the end of their first use phase.[99] Material complexity also causes challenges. Many products are designed with blended fibres, chemical coatings and treatments, and include other materials such as metal zippers, which makes it more challenging to sort the textile for different circular business models.

Blended fabrics are hard to separate and recycle efficiently. However, certain products, like sportswear and shoes, require synthetic blends to achieve necessary qualities such as elasticity, moisture wicking, and durability.[100] Lastly, the presence of hazardous substances, such as dyes and finishes, complicates both reuse and recycling. Textiles containing harmful chemicals may not be suitable for second-hand markets, which limits reuse potential and increases the likelihood that products are downgraded to lower-value applications or disposed of or often burned.[101] Products that are from the onset designed for repair, upcycling, and recycling, using more mono-fibers, designed for disassembling and repair, and using less of chemical coatings, can more easily be included in prolonged circular streams.

[96] Salhi et al., 2024; Amir et al., 2023
[97] Kompetensbrist försvårar miljömål i tillverkningsindustrin, Hanna Martin, 2025
[98] Bali Swain & Sweet 2023a
[99] Circularity Gap Report: Textiles, Circle Economy, 2024
[100] Circularity Gap Report: Textiles, Circle Economy, 2024
[101] Shamsuzzaman et al, 2025

Figure 8: Flower dye samples at Indian factory. Photo: R. Bali Swain

Data, digitalization and transparency

Data, digitalization and transparency are crucial elements in measuring and understanding the content and sustainability of circular products and businesses[102]. In such a complex, fragmented and global value chain like the one for textiles and fashion, the lack of reliable, accessible information creates structural barriers to circular transition at every stage of the product life cycle.[103] Businesses need tools and strategies for effectively identifying product contents, assessing product condition and determining what is the appropriate way of handling and circulating products and materials.[104]

The Digital Passports suggested by the EU textile policy, are one way of ensuring transparency regarding information on a product's composition of materials and substances that can give input to how we use, recover and recycle a product. Other types of information and data needed relate to the continuation of traceability regarding post-consumption collected textiles. To effectively develop markets for different usages and qualities, easily available information of volumes, qualities, and condition of the collected textiles would be needed. Such information could also be useful in giving feedback into how to design better for circular products and services. In addition, depending on what happens with the collected textile, reused, remade, or recycled, the technology enabling tracking might be lost in the process. Another issue relates to the storing and collection of data, who should do the investment in data centers and who should have access to the data and other implications need to be resolved as part of the digitalization and data collection decisionmaking.

For companies, digital transparency and traceability systems are increasingly becoming strategic infrastructure necessary for market access, risk management and value-chain coordination. Investments in data systems should therefore be treated not merely as compliance measures, but as long-term capabilities that enable circular business models and international alignment.

Policy

In our research, industry expressed a lack of supportive policies, incentives, and standardized regulations to enable the circular transition.[105] Brands requested a unified policy framework that encompasses all actors within the value chain to establish a level playing field.[106] This is of course a challenge since EU policy regulates within EU borders, but can not force large textile nations outside EU to accept or adjust to EU policies. The responsibility falls on the brands to implement and control

[102] Amir et al., 2023
[103] EU Strategy for Sustainable and Circular Textiles, European Commission, 2025
[104] Bali Swain & Sweet 2023a
[105] Salehi et al 2024
[106] Bali Swain & Sweet 2023b

that regulations are followed in their value chains, but stakeholders voiced a need for an effective enforcement of policies, as well as a system of oversight and supervision. A concrete example of a policy intervention that stakeholders would like to see is a pay-back system similar to existing models for plastic bottles and cans.

The EU textile directive is now underway to be implemented in the member states and the potential hurdles in implementing it into industry practice is yet to be seen, although some have already been flagged as problematic and in need of efforts to resolve. Addressing these barriers requires coordinated action across business strategy, policy design, infrastructure development and international cooperation.

6. OPPORTUNITIES

The above challenges can also be understood as signals of where opportunities can be found. Among the most critical enabling conditions for circularity is the development of large-scale infrastructure for collection, sorting and high-quality recycling. Coordinated action across design, business innovation, business models, infrastructure and policy can unlock systemic change.[107]

Opportunities for circular economy implementation differ depending on where in the value chain action is taken. While some opportunities can be realised by individual companies through changes in product design or business models, the most comprehensive opportunities arise when measures are aligned across the value chain and supported by coherent and predictable policy frameworks.[108]

From a policy and practice perspective, opportunities should therefore be assessed not only in terms of technical feasibility, but also in relation to economic viability, scalability and alignment with existing regulatory frameworks. Several research initiatives highlight that solutions which appear promising at pilot level often struggle to scale without such alignment.[109] Stakeholder discussions further underline this point, emphasising that uncertainty around policy direction and responsibility sharing can slow down implementation even where technical solutions exist.[110]

Product and design-related opportunities

Decisions made during product development have a decisive influence on a textile product's environmental performance over its entire life cycle. One of the most significant opportunities for circularity therefore lies in shifting design priorities away from short-term trends and cost optimisation towards durability, repairability and long-term use.[111]

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[107] The Outlook Report, Final Program Report, Mistra Future Fashion 2019
[108] European Commission – EU Strategy for Sustainable and Circular Textiles
[109] Ibid.
[110] Bali Swain & Sweet, 2023a
[111] EU Strategy for Sustainable and Circular Textiles, European Commission

Designing for durability and quality increases the potential for extended product lifetimes, reuse, remake and resale. This includes material choices, construction methods and design features that enable repair and refurbishment. Research shows that even moderate increases in product lifetime can deliver substantial environmental benefits when applied across large volumes of products.[112]

Designing for multiple life cycles represents another important opportunity. This involves anticipating reuse in second-hand markets, enabling adaptation and alteration, and avoiding hazardous substances and design features that limit further use. From a circular perspective, products should be designed with their next user in mind, not only the first.[113]

From an industry perspective, shifting design priorities also requires organisational change. Design teams are often constrained by cost targets, lead times and trend-driven processes that limit the scope for durability and circular design considerations. Addressing these constraints represents an opportunity to integrate circularity earlier and more systematically into product development processes, rather than treating it as a downstream add-on.

Increased transparency and access to product information further strengthen design-related opportunities. Clear documentation of materials, chemical content and construction details enables more informed decisions not only at design stage, but also during use, repair and end-of-life. As regulatory requirements related to product information increase, companies that proactively adapt design processes to these demands may gain a strategic advantage.[114]

Business model opportunities

A central opportunity for circular economy implementation lies in business models that decouple value creation from increased production volumes. Models that prioritise extended use, multiple ownership cycles and service-based offerings can reduce environmental impacts while maintaining economic value.[115]

Reuse, remake, repair and resale models are among the most established circular business opportunities in textiles. Second-hand markets, repair services and refurbishment activities extend product lifetimes and improve resource efficiency. When supported by appropriate logistics, quality control and consumer trust, these models can operate at significant scale.[116]

Product-as-a-service and leasing models offer further opportunities, particularly in segments such as workwear, uniforms, seasonal products such as ski ware and

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[112] Policy brief: Skapa förutsättningar för återanvändning som norm, IVL 2025
[113] EU Strategy for Sustainable and Circular Textiles, European Commission, 2022
[114] Ibid.
[115] Skapa förutsättningar för återanvändning som norm, IVL Svenska Miljöinstitutet, 2025
[116] EU Strategy for Sustainable and Circular Textiles, European Commission, 2022

specialised textiles. By retaining ownership, producers gain incentives to design for durability and recyclability, while users gain access to functional products without the need for ownership.[117]

Scaling remains a key challenge. Opportunities therefore lie not only in developing new models, but in integrating circular offerings into existing core business structures. This includes adapting logistics, pricing strategies, customer communication and performance metrics to support extended product use.

In addition, new value chains can be developed around industrial textile flows, such as production waste, surplus materials and post-industrial textiles. Collaboration between manufacturers, recyclers and downstream users can turn previously underutilised streams into valuable resources, reducing waste and increasing material efficiency.

System and infrastructure opportunities

When municipalities got the legal responsibility to collect household textile waste in Sweden 1 January 2025, it became clear that sufficient infrastructure was missing. Large amounts of textiles that were collected couldn't be recycled or circulated, leading to the adjustment of the legislation 1 October 2025 exempting underwear and damaged and dirty textiles.[118] This highlights the need and opportunities for businesses handling professional collection and sorting with the aim of preserving the highest value possible.

System-level infrastructure for collection, sorting and pre-processing is essential to enable circular solutions at scale. Harmonised national and regional systems can further improve collection rates, reduce leakage to waste streams and ensure that textiles preserve their highest potential value.[119]

From a systems perspective, one of the main opportunities lies in better coordination between collection, sorting and downstream use. Fragmented systems often result in textiles being diverted to lower-value applications despite having higher potential value. Collection and sorting systems must be designed to support both higher level strategies, such as reuse and remake, and lower level strategies, such as recycling.[120] Sorting is particularly important from a strategic point of view, as this is the point where identification of the textile product as reusable or not is made. Under the EU waste hierarchy principles, the priority should be to reuse, then repurpose/ remake, and lastly recycle. Classification of the collected item is therefore an important first step in sorting into different textile feedstocks fractions for further processing.

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[117] Ibid.

[118] Lagen ändras – strumpor kan slängas i soporna, SVT Nyheter

[119] Textiles and the environment: the role of design in Europe's circular economy, EEA, 2019

[120] Ibid.

There is an opportunity for innovative entrepreneurs to develop circular business models based on these collected textiles, for example by scaling remake, distribution and sales of used textiles. With the new ban on the destruction of unsold goods, mentioned in the section *Ecodesign for Sustainable Products Regulation (ESPR)* above, unsold goods may become an additional input stream adding value to these business models.

Advanced sorting technologies, combined with manual expertise, can improve efficiency and quality, enabling higher-value applications and more effective circulation and recycling. Investments in such infrastructure are often capital-intensive and depend on long-term policy signals to become viable.[121]

Scaling textile-to-textile recycling remains an important opportunity, particularly for textiles that can no longer be reused. Improved recycling technologies and infrastructure are necessary components of a functioning circular textile system.[122]

The development of shared infrastructure also presents an opportunity to reduce costs and risks for individual actors. Public–private partnerships, regional collaboration platforms and shared investment models are frequently highlighted as mechanisms to enable infrastructure development that would otherwise be difficult for single companies to finance.

Data systems such as digital product passports can support traceability, transparency and informed decision-making across the value chain. When combined with harmonised standards, digital tools can reduce information gaps and enable more coordinated circular practices.[123]

Policy-enabled opportunities

Policy frameworks play a decisive role in shaping the conditions under which circular economy solutions can emerge and scale. One of the most significant opportunities lies in using policy not only as a regulatory instrument, but as a means of providing long-term direction and predictability for investment and innovation.[124]

At EU level, harmonised policies can reduce fragmentation and create a level playing field for companies operating across borders. Clear and consistent requirements related to product design, information and producer responsibility can support circular practices while reducing administrative complexity.[125]

Policy can also play a role in reducing uncertainty during periods of transition. Clear timelines, transitional arrangements and guidance can help companies adapt to

[121] Textiles and the environment: the role of design in Europe's circular economy, EEA, 2019
[122] Ibid.
[123] EU Strategy for Sustainable and Circular Textiles, 2022
[124] Ibid.
[125] EU Strategy for Sustainable and Circular Textiles, 2022

new requirements while continuing to operate effectively. Opportunities arise when policy design takes into account the pace at which industry can realistically implement change.

Furthermore, coherence between different policy areas is essential. Opportunities for circular textiles are strengthened when environmental objectives are aligned with trade, innovation and industrial policies. Policy will also be the most effective if it is aligned across borders. Alignment within the EU is essential, but a truly circular global value chain can only come into effect if there is alignment globally. Misalignment, by contrast, risks undermining implementation and slowing progress.

Sweden's strategic role in a European context

Sweden's ability to act independently in the textile sector is limited by the global nature of value chains and the central role of EU regulation. At the same time, Sweden has a long history and extensive knowledge in textile production, which opens up opportunities to become a leading example and act as a testbed and knowledge hub for circular textile solutions. If implementing adequate infrastructure, instruments and control mechanisms to comply with existing and upcoming EU regulation, Sweden could yet again become a frontrunner in the textile industry.

National initiatives related to collection systems, innovation support and collaboration platforms can contribute to implementation while feeding into European processes. By aligning national measures with EU policy development, Sweden can support learning, reduce fragmentation and help accelerate the transition towards a circular economy for textiles.

Sweden's long-standing engagement in textile research, innovation and collaboration platforms provides a strong foundation for such a role. By leveraging existing networks between industry, academia and public authorities, Sweden can contribute practical insights into what works in real-world implementation. These insights, many of which are reflected in stakeholder dialogues, can in turn inform EU-level policy development and support more effective and harmonised solutions.[126][127]

7. RECOMMENDATIONS FOR POLICY AND PRACTICE

The circular transition is urgent if we are to stay within planetary boundaries, and if we are to reach circular and climate targets on a national and EU level. A number of measures within policy and practice on the EU and national levels should be implemented to further accelerate a circular and just transition of the global textile and fashion value chain. Based on the findings from stakeholder dialogues and research, the authors would like to give the following recommendations.

[126] Skapa förutsättningar för återanvändning som norm, IVL Svenska Miljöinstitutet , 2025
[127] Bali Swain & Sweet, 2023a

Policy recommendations at the EU level

1. Incentivise circular business models. The EU should incentivise circular business models by simplifying administrative processes, prioritising permits and making financing more accessible for circular businesses. Textile policy should function as a system enabler by conditioning investments in collection and sorting facilities to align with the waste hierarchy, thereby providing guidance and stability to industrial development.

To ensure implementation at scale, the EU should establish dedicated funding mechanisms for textile circularity infrastructure under existing financial instruments (e.g., Innovation Fund, InvestEU, Cohesion Funds). Funding should prioritise reuse, remanufacturing and fibre-to-fibre recycling systems that demonstrably reduce production volumes and extend product lifetimes.

Extended Producer Responsibility (EPR) schemes should earmark a defined share of collected fees for reinvestment in collection, sorting and reuse infrastructure. Transparent allocation criteria should ensure that funding supports high-value circular flows rather than locking in low-value waste management solutions.

Measures should prioritise strategies that lead to reduced production volumes and extended product lifetimes, such as reuse, repair, remake, rental, and product-as-a-service business models, over downstream waste management.. The EU should also encourage Member States to promote circular products and services to consumers, for example through repair vouchers and reduced VAT for reuse, remake and repair services.

2. De-incentivise fast fashion and linear business models. Promoting circular business models will not be sufficient if linear business models continue to dominate. The EU should apply measures addressing business models that rely on overproduction, excessive discounting and short product lifetimes.

The delegated act for textiles under the ESPR should include strict minimum requirements for durability, repairability and waste prevention, and phase out hazardous substances that inhibit circularity. Financial instruments based on the polluter-pays principle should discourage excessive production volumes and systematic destruction or discounting of unsold goods.

The EU should progressively strengthen warranty and repairability obligations for textile products and explore linking EPR eco-modulation to overproduction patterns. Improved transparency requirements regarding production volumes and unsold goods could further support alignment with circular economy objectives.

3. Make circular public procurement mandatory. Public procurement represents substantial purchasing power and can help steer the market towards circularity. The EU should mandate circular requirements in textile-related public procurement, prioritising avoidance of new production, extended product use, reuse and service-based models.

Lifecycle-based procurement criteria should include clear end-of-life obligations and progressively increasing ambition levels to ensure alignment with EU climate and circular economy targets.

4. Strengthen international alignment and reduce fragmentation in global value chains. The textile value chain is inherently global, and EU measures alone cannot ensure a just and circular transition. As a major import market, the EU should work towards greater international alignment of textile policies to reduce fragmentation and administrative burden for companies operating across multiple jurisdictions.

Circular textile objectives should be integrated into trade dialogues and future trade agreements through dedicated cooperation chapters on sustainable and circular textiles. These could include mutual recognition of relevant standards, regulatory cooperation on ecodesign requirements and interoperability of Digital Product Passport systems.

The EU should establish structured "Circular Textile Dialogues" with key production countries to promote policy alignment, transparency and long-term cooperation. These dialogues should focus on industrial upgrading, chemical management, recycling capacity and social safeguards.

Ensuring interoperability of Digital Product Passport systems with supplier-country digital systems is critical to avoid unintended trade barriers. Clear governance rules and capacity-building support should accompany DPP implementation to ensure inclusive participation by producers outside the EU.

5. Promote equitable risk-sharing and co-investment across the value chain. The EU should promote long-term contractual arrangements and co-investment models between brands and suppliers, particularly in circular production and recycling infrastructure. Financial instruments should incentivise equitable risk-sharing mechanisms across the value chain.

Blended finance mechanisms under EU development and investment instruments (e.g., EFSD+, EIB, EBRD) should be mobilised to support textile circularity infrastructure in major production regions. Concessional loans, guarantees and first-loss mechanisms can reduce investment risk in areas such as wastewater treatment, advanced sorting facilities and fibre-to-fibre recycling plants.

The EU should encourage sustainability-linked supply chain finance models, where suppliers meeting circular performance benchmarks gain improved financing conditions or longer-term purchasing commitments. Such mechanisms can enable suppliers to invest in cleaner production and circular upgrades without bearing disproportionate financial risk.

Extended Producer Responsibility schemes and EU funding instruments should also enable cross-border investment partnerships that support circular capacity building in strategically important production regions.

6. Support producing countries in building circular and social capacity. The European market is highly dependent on production outside its borders. The EU should therefore support capacity building in key production regions through research cooperation, technology transfer and workforce development.

Development cooperation instruments should support:

- Upgrading wastewater treatment and chemical management systems.
- Establishment of regional sorting and recycling hubs.
- Technology transfer for resource-efficient and use of recycled fibre in the production.
- Training and reskilling programmes to enable transition into circular activities such as repair, sorting and recycling.

Such partnerships should aim to strengthen industrial resilience in production countries while contributing to global environmental objectives and safeguarding decent working conditions.

7. Establish clear governance for Digital Product Passports (DPP). The success of circular textile systems depends on transparent and reliable product information. The EU should establish clear governance rules regarding Digital Product Passport data, including data ownership, access rights, interoperability standards and responsibilities for data storage. Open and harmonised standards should prevent market fragmentation and ensure accessibility for SMEs both within and outside the EU. Technical assistance should support suppliers in adapting to digital traceability requirements.

8. Develop a European Circular Textile Competence Initiative. To ensure effective implementation of circular textile policies, the EU should support the establishment of specialised competence centres focused on circular textile design, recycling technologies and circular business models.

These centres should facilitate knowledge transfer across Member States and partner countries and support SMEs, designers and policymakers in adapting to new regulatory and technological requirements.

9. Establish a harmonised monitoring framework for textile circularity. The EU should develop harmonised indicators to measure progress towards circular textile objectives, including reductions in production volumes, increases in product lifetime, reuse rates, fibre-to-fibre recycling rates and phase-out of hazardous substances.

Transparent monitoring and regular evaluation will strengthen accountability, reduce uncertainty and ensure that policy ambition translates into measurable impact across global value chains.

Policy recommendation at the Swedish national level

1. Set measurable national targets for circular textiles aligned with EU and global value-chain objectives. Sweden should establish clear and measurable national targets for circularity in the textile sector, aligned with EU legislation and climate objectives. Targets should include indicators for reduced production volumes, increased product lifetime, reuse rates and high-value recycling capacity.

Given the global nature of textile value chains, Sweden's targets should also consider upstream impacts in production countries. Monitoring frameworks should integrate scope 3 emissions and circularity indicators to ensure coherence between domestic objectives and global value-chain realities.

Clear ministerial responsibility and cross-agency coordination should be assigned to ensure consistent implementation and follow-up.

2. Design Swedish Extended Producer Responsibility (EPR) to stimulate high-value circular flows and global alignment. Sweden's national implementation of EPR for textiles should actively prioritise reuse, repair and fibre-to-fibre recycling in accordance with the waste hierarchy.

A defined share of EPR revenues should be allocated to:
- Domestic (or Nordic) infrastructure for sorting and reuse,
- Continued R&D support for innovation in fibre-to-fibre recycling,
- Collaboration projects with production regions aimed at improving circular capacity upstream.

Sweden should design its EPR scheme in a way that facilitates interoperability with other Member States digital systems and supports alignment with supplier-country systems to avoid fragmentation.

3. Strengthen Sweden's role in international circular textile partnerships. Sweden has a strong legacy of textile innovation and international collaboration, including previous initiatives such as the Swedish Textile and Water Initiative (STWI).[128] Building on this experience, Sweden should:
- Use development cooperation instruments (e.g., Sida) to support circular production capacity in key textile-producing countries.
- Promote partnerships between Swedish brands and suppliers focused on water efficiency, chemical management and recycling infrastructure.

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[128] Evaluation of STWI Projects 2014-2018, Niras 2018

- Support pilot projects for regional sorting and recycling hubs in strategic production regions.

Such partnerships should emphasise industrial upgrading, risk-sharing and long-term resilience rather than compliance alone.

4. Mobilise Swedish development finance and export credit instruments for circular transition. Swedish public finance actors, including Swedfund, EKN and SEK, should integrate circular textile criteria into investment and export strategies.

This may include:
- Blended finance solutions for wastewater treatment, advanced dyeing technologies and recycling infrastructure in production countries.
- Guarantees, concessional loans, or green bonds for Swedish companies co-investing in circular infrastructure abroad.
- Sustainability-linked finance instruments tied to measurable circular performance indicators.

Aligning export promotion with circular objectives will strengthen Sweden's competitiveness in sustainable textile innovation.

5. Develop a national competence and workforce transition programme with international reach. To address identified competence gaps, Sweden should establish a national programme for circular textile competence development covering:
- Circular design and systems thinking.
- Advanced sorting and recycling technologies.
- Digital Product Passport implementation.
- Circular business model innovation.

Given the global nature of the value chain, Swedish competence initiatives should also include collaboration with educational institutions and industry partners in production countries, supporting knowledge exchange and joint training programmes. This would reinforce Sweden's role as a knowledge hub within the European circular transition.

6. Ensure Swedish digital readiness and global interoperability. Sweden should proactively support SMEs in adapting to Digital Product Passport requirements through:
- Technical guidance,
- Innovation funding,
- Digital infrastructure support.

At the same time, Sweden should actively engage in EU-level discussions to ensure DPP systems remain interoperable with supplier-country systems, avoiding unintended exclusion of smaller producers.

7. Promote long-term purchasing practices and equitable risk-sharing. Sweden should encourage companies operating in global textile value chains to adopt long-term sourcing agreements that support supplier investment in circular upgrades.

Government agencies can support this through:

- Voluntary guidelines for responsible purchasing,
- Public–private dialogue platforms,
- Incentivised financing instruments for companies engaging in co-investment models.

Risk-sharing mechanisms between brands and suppliers should be promoted as a core component of just transition.

8. Strengthen monitoring and policy coherence across ministries. Sweden should ensure coherence between:

- Circular economy policy,
- Trade policy,
- Development cooperation,
- Industrial strategy,
- Climate policy.

A coordinated national platform for circular textiles should integrate domestic circular objectives with Sweden's international development and trade engagements.

Transparent monitoring and regular evaluation of progress should be institutionalised to ensure that Swedish measures contribute to both national and global circular transition goals.

Business recommendations

The transition towards a circular textile economy requires structural changes in business strategy, sourcing models and investment priorities. Companies operating within the EU market should anticipate tightening regulatory conditions and align corporate strategy accordingly.

1. Reassess growth models and production volume strategies. Companies should critically evaluate reliance on volume-driven growth models. Long-term competitiveness will increasingly depend on durability, resource efficiency and circular value creation rather than increased throughput.

Boards should integrate circularity and production-volume risk into strategic planning, scenario analysis and capital allocation decisions.

2. Integrate circular design as a core performance criterion. Durability, repairability, mono-material strategies and reduced chemical complexity should become central design requirements rather than sustainability add-ons.

Circular design criteria should be embedded in product development KPIs and linked to financial performance metrics, anticipating eco-modulated EPR fees and ESPR requirements.

3. Invest in long-term supplier partnerships and equitable risk-sharing. Circular transition cannot be implemented through short-term sourcing contracts. Companies should:

- Establish long-term purchasing commitments
- Co-invest in wastewater treatment, sorting and recycling infrastructure
- Implement sustainability-linked supply chain finance mechanisms
- Share investment risk equitably across the value chain

Such partnerships reduce compliance risk, secure feedstock access and improve supplier resilience.

4. Participate in circular infrastructure development. Companies should actively engage in:

- Co-investment platforms for sorting and recycling
- Public–private partnerships
- Regional circular textile hubs in production countries

Early participation may provide strategic advantages in securing access to high-quality recycled materials.

5. Ensure digital readiness and supply chain transparency. Digital Product Passport implementation will require traceable data on materials, chemical content and lifecycle characteristics.

Companies should:

- Map supply chain data flows
- Invest in digital infrastructure and traceability systems
- Support supplier readiness
- Prepare for interoperability across jurisdictions

Digital transparency should be treated as strategic infrastructure rather than compliance cost.

6. Align financial strategy with circular transition. Capital allocation decisions should reflect anticipated regulatory tightening. Companies should assess:

- Exposure to eco-modulated EPR fees
- Risk of stranded assets in linear production models
- Investment needs for repair, reuse and service-based models

Sustainability-linked financing instruments and green bonds can support circular investments.

7. Prepare for measurable performance accountability. As monitoring frameworks strengthen, companies should proactively develop internal indicators covering:

- Production volumes
- Product lifetime
- Reuse rates
- Recycled content
- Chemical phase-out

Transparent reporting can reduce regulatory friction and enhance investor confidence.

8. CONCLUSION

The textile and fashion sector plays a central role in the global economy but also generates significant environmental and social pressures. Current production and consumption patterns are dominated by a linear model characterised by high production volumes, short product lifetimes and limited material recovery. As demonstrated in this report, such a model is incompatible with planetary boundaries, EU climate ambitions and long-term economic resilience.

Transitioning towards a circular textile economy therefore requires systemic change across the entire value chain. Reducing overproduction and extending product lifetimes represent the most effective strategies for lowering environmental impacts. Recycling technologies and material innovation are important components of circular systems, but they cannot compensate for continued growth in production volumes. Circular strategies must therefore prioritise durability, reuse, repair and service-based models that maximise the use value of each product.

The analysis also shows that the transition is not limited by technological potential alone. Rather, the main barriers relate to coordination, infrastructure and governance. Systems for collection, high-quality sorting and fibre-to-fibre recycling remain insufficient. Investment risks are unevenly distributed across global value chains, limiting suppliers' ability to upgrade production and participate in circular systems. In addition, competence gaps, fragmented policy frameworks and limited digital readiness create uncertainty for both policymakers and businesses.

At the same time, opportunities for transformation are substantial. Design decisions made early in product development strongly influence the environmental performance of textiles throughout their lifecycle. Emerging business models centred on reuse, repair, resale and product-as-a-service demonstrate that value can be created while reducing the need for new production. Advances in sorting technologies, digital product information and recycling processes also open new pathways for circulating materials more effectively.

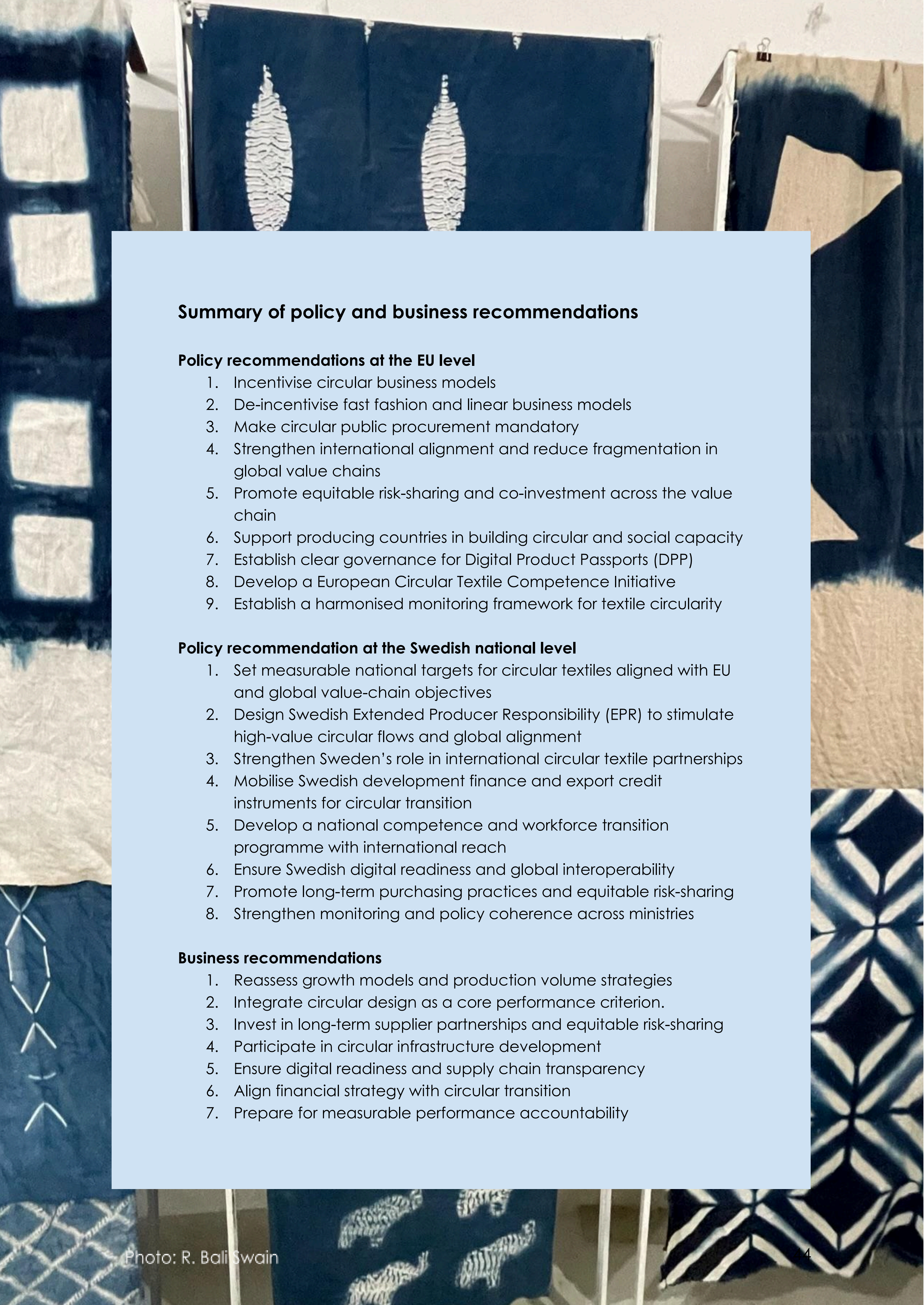
Policy plays a decisive role in enabling these opportunities to scale. The EU policy landscape for textiles is evolving rapidly, with the EU Strategy for Sustainable and Circular Textiles, the Ecodesign for Sustainable Products Regulation, Digital Product Passports and Extended Producer Responsibility establishing new market conditions. These instruments create important incentives for durability, transparency and resource efficiency. However, the success of these policies will depend on effective implementation, sufficient infrastructure and predictable long-term signals for investment.

Given the global nature of textile production, EU regulation alone cannot ensure a just and circular transition. A coherent external dimension of textile policy is therefore essential. Cooperation with key production countries, support for industrial upgrading, technology transfer and capacity-building will be critical to ensure that circular systems function across the entire value chain. Aligning policy frameworks internationally can reduce fragmentation, lower compliance costs and enable companies to invest in circular solutions with greater confidence.

Sweden can play an important role within this broader European transition. With strong research capabilities, collaborative industry networks and experience from international sustainability initiatives, Sweden has the potential to act as a testbed and knowledge hub for circular textile solutions. By aligning national measures with EU policy development and supporting international partnerships, Sweden can contribute practical insights into how circular systems can be implemented at scale.

For businesses, the transition towards circular textiles represents both a regulatory challenge and a strategic opportunity. Companies that proactively invest in durable design, transparent supply chains, circular business models and long-term supplier partnerships will be better positioned to operate in a market increasingly shaped by circular economy policies. Aligning corporate strategy with emerging regulatory frameworks can reduce compliance risks while opening new sources of value creation.

Ultimately, the transition towards a circular textile economy is not solely an environmental objective but a broader industrial transformation. Achieving it will require coordinated action across policy, business practice, infrastructure development and international cooperation. By aligning incentives, reducing investment risks and strengthening collaboration across global value chains, the textile sector can move towards a system that is environmentally sustainable, economically viable and socially responsible.



Summary of policy and business recommendations

Policy recommendations at the EU level

1. Incentivise circular business models
2. De-incentivise fast fashion and linear business models
3. Make circular public procurement mandatory
4. Strengthen international alignment and reduce fragmentation in global value chains
5. Promote equitable risk-sharing and co-investment across the value chain
6. Support producing countries in building circular and social capacity
7. Establish clear governance for Digital Product Passports (DPP)
8. Develop a European Circular Textile Competence Initiative
9. Establish a harmonised monitoring framework for textile circularity

Policy recommendation at the Swedish national level

1. Set measurable national targets for circular textiles aligned with EU and global value-chain objectives
2. Design Swedish Extended Producer Responsibility (EPR) to stimulate high-value circular flows and global alignment
3. Strengthen Sweden's role in international circular textile partnerships
4. Mobilise Swedish development finance and export credit instruments for circular transition
5. Develop a national competence and workforce transition programme with international reach
6. Ensure Swedish digital readiness and global interoperability
7. Promote long-term purchasing practices and equitable risk-sharing
8. Strengthen monitoring and policy coherence across ministries

Business recommendations

1. Reassess growth models and production volume strategies
2. Integrate circular design as a core performance criterion.
3. Invest in long-term supplier partnerships and equitable risk-sharing
4. Participate in circular infrastructure development
5. Ensure digital readiness and supply chain transparency
6. Align financial strategy with circular transition
7. Prepare for measurable performance accountability

Photo: R. Bali Swain

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APPENDIX

Appendix. Overview of EU and Swedish textile regulations						
EU Textile regulations/directives	**EU Legal Reference / Instrument**	**EU Adoption / Entry into Force**	**Implementation / Enforcement in Sweden**	**Instrument Type**	**Status**	**Swedish act / Government bill (notes)**
1. Ecodesign for Sustainable Products Regulation (ESPR)	Regulation (EU) 2024/1781	2024. Delegated act on unsold goods enters into effect July 2026	Directly applicable in Sweden from 18 July 2024; textile-specific delegated acts pending	Regulation	Adopted / In force	Directly applicable. No national act required; delegated acts for textiles pending.
2. Digital Product Passports (DPPs)	Established under ESPR (Reg. 2024/1781)	delegated acts expected 2027–2028	Applies in Sweden when delegated acts for textiles enter into force	Delegated acts under ESPR	(delegated acts expected 2027–2028)	Will apply when ESPR delegated acts adopted; Sweden to follow automatically.
3. Empowering Consumers in the Green Transition (ECGT)	Directive (EU) 2024/825	Published 6 March 2024	Sweden must transpose by 27 March 2026	Directive	Adopted - transposition required	Transposition pending; Sweden must transpose by 27 March 2026.
4. Right to Repair (RtR)	Directive (EU) 2024/1799	Entered into force 30 July 2024	Sweden must transpose and apply from 31 July 2026	Directive	Adopted - transposition required	Transposition pending; Sweden must transpose and apply from 31 July 2026.
5. Environmental Claims (Green Claims)	COM(2023)166 (proposal)	Proposed March 2023; not adopted	Not applicable in Sweden – no final EU act yet	Proposal (Directive)	Proposal / Not adopted	No EU act to transpose; Sweden not applicable until EU act adopted.
6. Packaging & Packaging Waste Regulation (PPWR)	Regulation (EU) 2025/40	Published 22 January 2025	Applies in Sweden from 12 August 2026 (phased obligations)	Regulation	Adopted / In force (phased application)	Directly applicable; Sweden to apply obligations from 12 August 2026 (phased).
7. REACH Revision / Chemicals Strategy	Planned revision of REACH Regulation	Proposal expected Q4 2025; not adopted	No implementation yet – will apply once adopted	Regulation (REACH revision expected)	Proposal expected (Q4 2025) / Not adopted	No Swedish implementation yet; will apply once EU act adopted.
8. Revised Waste Framework Directive (Textiles & Food)	Directive (EU) 2025/1892	Entered into force 16 October 2025	Sweden must transpose; textile EPR to be in place by approx. April 2028	Directive	Adopted - transposition required	Sweden must transpose; textile EPR to be in place by approx. April 2028.
9. Separate Textile Waste Collection	Waste Framework Directive (Art. 11 amendment)	Requirement effective 1 January 2025	Sweden requires municipal separate collection from 1 January 2025	Directive (WFD provisions)	Adopted - in force	Separate collection required in Sweden from 1 January 2025 (municipal implementation).
10. Producer Responsibility for Textiles (EPR)	Revised Waste Framework Directive 2025	Entered into force 16 October 2025	Sweden to establish EPR scheme by approx. April 2028	Directive (EPR provision)	Adopted - member states to implement	Sweden to establish national EPR scheme by approx. April 2028; Government and Naturvårdsverket preparing measures.
11. Export of Textile Waste	Revised WFD & Waste Shipment rules (2025 updates)	Adopted 2025	Applies in Sweden from EU entry into force; stricter export controls from 2025 onward	Regulation / WSR amendments	Adopted - tighter controls	Applies in Sweden; exporters must comply with stricter sorting and documentation from 2025 onward and per WFD timelines.
12. End-of-Waste Criteria (Textiles)	JRC technical work; future implementing act	Under development 2024–2025	No binding EU criteria yet; Sweden will apply once adopted	Implementing acts / Technical criteria (future)	Under development	No harmonised EU EoW criteria yet; Sweden to apply once EU criteria adopted.
13. Revision of Fibre Regulation	Regulation (EU) No 1007/2011 (under revision)	Under preparation; not adopted	No new Swedish implementation yet	Regulation (amendment expected)	Under preparation / Not adopted	No new Swedish implementation yet; monitoring ongoing.
14. Corporate Sustainability Due Diligence Directive (CSDDD)	Directive (EU) 2024/1760	Entered into force 25 July 2024	Sweden must transpose by 26 July 2026	Directive	Adopted - transposition required	Sweden must transpose by 26 July 2026; national transposition work in progress.
15. Forced Labour Regulation	Regulation (EU) 2024/3015	Published 12 December 2024	Directly applicable in Sweden; enforcement preparation 2025–2027	Regulation	Adopted / In force	Directly applicable in Sweden; enforcement to be implemented by national authorities (market surveillance).
16. Corporate Sustainability Reporting Directive (CSRD)	Directive (EU) 2022/2464 (CSRD)	application. Omnibus package 2025 limiting reporting to companies with more than 1000	Implemented in Sweden from 1 July 2024; reporting phased from FY 2025	Directive	Adopted - phased application	Sweden implemented CSRD-related law changes; national implementation effective from 1 July 2024; reporting phases vary by company size and Omnibus implications.
17. EU Taxonomy Regulation	Regulation (EU) 2020/852 + delegated acts	In force since 2020; updates ongoing	Directly applicable in Sweden; delegated acts apply as published	Regulation	Adopted / Ongoing delegated acts	EU Regulation directly applicable; Sweden follows delegated acts as published.

Table 1. Overview EU and Swedish textile regulations