POLICY AREA FOR INNOVATION #8

Fashion transition: eco-design for circularity

#sustainable innovation #responsible production #intrapreneurship
#local & global synergies #consumer engagement #distributed manufacturing
#traceable & transparent supply chains #fashion waste management

01 BACKGROUND

The fashion and textiles ecosystem is one of the 14 strategic sectors in the EU's Industrial Strategy, aimed at accelerating the green and digital transitions. An **ecosystemic approach** is key, integrating regional sectors into a unified system where collaboration drives transformation. Enabling this strategy means **embedding open innovation across all supply and value chains**, including: recognizing **textile waste** as a valuable resource, developing **advanced manufacturing** to streamline production and reduce overproduction, **educating consumers** on responsible choices, **upskilling makers and designers**, and developing **new service models** that encourage **behavioral change**—such as repair, rental, and resale systems. Bringing together government, industry, academia, and civil society, this approach promotes **sustainability, accountability, and fair standards** while remaining responsive to **evolving market values and societal expectations.**

> *"Integrating environmental sustainability across product design, production, and value chains is key to building a sustainable industrial ecosystem. This involves all stakeholders, from start-ups to large corporations, academic institutions, and suppliers, working together. The strategy aims to create a greener, more competitive sector that can withstand global disruptions. The EU's 2030 vision for textiles envisions products that are durable, repairable, recyclable, made from recycled fibres, free of hazardous substances, and produced in line with social and environmental standards."*
>
> European Commission, 2020[1]; European Union, 2024[2]; European Commission, 2024[3]

Why is eco-design for circularity relevant for the future of the European fashion industry?

ECO-DESIGN FOR CIRCULARITY CAN BUILD **NEW FORMS OF COLLABORATION** TO ESTABLISH A **EUROPEAN DIFFUSED FASHION ECOSYSTEM** DRIVEN BY **OPEN INNOVATION** PRINCIPLES THROUGH:

- **Enabling** innovative manufacturing processes and services
- **Educating** consumers, companies, employees, and municipalities
- **Communicating** a product's lifecycle, origin, materials, recyclability, repairability, and sustainability
- **Tracing** fragmented value chains towards transparency

02 CHALLENGES

- **Complex and fragmented supply chains** hinder the implementation of circular practices consistently and transparently across stakeholders.
- **Absence or decline of local manufacturing**, limiting regional autonomy, scalability of circular initiatives, and access to sustainable production chains.
- **Recycling costs, technical complexity,** and insufficient effective collection and sorting **infrastructures** limit market opportunities for recycled textiles.
- **Limited design** for circularity **and incentives** lead to unsustainable products.
- **Consumer and organizational resistance** hinder circular models.
- **SMEs lack financial and operational resources**, limiting their capacity to invest in circular economy, embrace new technology, and fulfill regulations.

03 OPPORTUNITIES

- **Innovation in recycling and sorting:** advanced technologies streamline recycling and make circular practices scalable and economically feasible.
- **Mandatory sustainable design standards:** EU's new requirements encourage the design of durable, repairable, and recyclable textiles.
- **Re-industrialisation** reduces imports and supports circular supply chains.
- **Consumer awareness and transparency against greenwashing:** the EU promotes transparent environmental labelling to empower consumers and drive demand for sustainable options.
- **Market shifts and profitability of circular models:** declining fast fashion and increased environmental interest favour circular business models.

04 EMERGING CONVERSATIONS AMONG PRACTITIONERS

Fashion's circular transition requires a systemic shift, leveraging DPPs to balance challenges and opportunities for craftsmanship. Transparency in the value chain is crucial, while sustainable strategies (reduce, reuse, recycle, recover) counteract ultra-fast fashion and foster conscious consumer behavior.

Most affected CCIs

- *Visual Arts*
- *Cultural Heritage*
- *Adv & Marketing*
- *Architecture*
- *Education*

Rising conversation in the last 6 months

+48% Buy Less

Repairability in fashion +67%

> *"Second-hand fashion has emerged as a "miracle" and "sustainable" solution. [...] However, as major brands embrace this trend, it is important to ask: is second-hand fashion being used as a strategy to maintain the same exploitative production model?"*
>
> Activism Movement, Europe

> *"The 2023 Global #FashionTransparencyIndex found that while 51% of brands publish a time-bound, measurable sustainable materials strategy, just 44% explain how they define these so-called 'sustainable' materials. This gap [...] paints a clear picture of how brands [...] claim they are sustainable, without backing this up with evidence."*
>
> Fashion Magazine, Western Europe

> *"The real question is whether consumers want to be educated, because something [...] does not add up. I read about greater attention to the issues of impact reduction [...]. Then, however, I also note the growing volumes and profits of ultrafast fashion giants..."*
>
> Sustainability Expert, Southern Europe & Turkey

In which countries are creatives mostly talking about Fashion Transition?

less discussed — more discussed

Regional relevance of conversations regarding circularity and sustainable processes in supply chains, for a circular transition of the fashion system. Data regarding the analysed ***ekip*** community over the past six months.

05 KEY LEGISLATIVE FRAMEWORKS

ESPR- Ecodesign for Sustainable Products Regulation | European Commission[4]

The ESPR replaces the current Ecodesign Directive 2009/125/EC and establishes a framework for setting ecodesign requirements on specific product groups. Detailed requirements will be introduced progressively through Delegated Acts from 2025, and by 2027, all apparel products on the EU market must fully comply. The Regulation applies to the fashion industry through the **EU strategy for sustainable and circular textiles,** aiming to promote longer-lasting textiles by setting design requirements for durability, repairability, and recyclability, alongside clearer product information through Digital Product Passports (DPPs). It encourages circular business models, stronger producer responsibility, and global sustainability, while addressing issues like microplastics, greenwashing, and textile waste export restrictions.

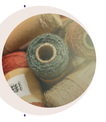
Textiles Ecosystem Transition Pathway | European Commission[5]

The Textiles Ecosystem Transition Pathway aims to make textiles more sustainable, digital, and resilient by 2030, focusing on eco-friendly production, digital adoption, and improved working conditions. It involves collaboration among industry, public authorities, and stakeholders to support research, skills development, and regulatory frameworks.

Waste Framework Directive | European Commission[6]

The Waste Framework Directive (WFD) defines waste management concepts and mandates separate textile waste collection from January 2025. It obliges the EU Member States to separately collect textile waste and encourages them to use **Extended Producer Responsibility (EPR)** schemes–mandatory for textiles– to support sustainability goals.

06 CASE STUDIES AND RELATED INITIATIVES

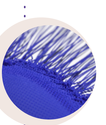


Ecosystex | EU[7]

Ecosystex is a European community that brings together projects and initiatives focused on advancing sustainable and circular practices in the textile industry. It fosters collaboration among stakeholders, including researchers, industry experts, and policymakers, to promote biobased textile solutions and circularity.

Renoon | The Netherlands & Italy[8]

Renoon is a platform that helps fashion brands improve transparency and sustainability by offering tools for tracking and managing product data. It supports companies in complying with regulations and engaging customers with digital product passports.



CIRC| USA[9]

Circ is a textile recycling company focused on turning polycotton waste into high-quality fibers for the fashion industry. Its innovative technology regenerates polyester and lyocell fibers, enabling fashion brands to produce luxurious clothing while reducing environmental harm, towards the transition to circular fashion.

United Repair Centre| The Netherlands & UK[10]

United Repair Centre is a collaborative initiative dedicated to transforming the clothing industry by promoting circularity and social inclusion. It offers high-quality garment repairs while creating job opportunities for marginalized groups. Their data- driven services help fashion brands extend the lifespan of products, reduce waste, and meet growing sustainability demands.

References:
[1] "Industrial ecosystems" (2020). In European Cluster Collaboration Platform. Retrieved 29 January 2025, from http://bit.ly/4aDvVil
[2] "Ecodesign requirements for sustainable products" (2024). In EUR-Lex. Retrieved 29 January 2025, from https://bit.ly/4yfsAt
[3] "Textiles strategy" (2024). In Environment. Retrieved 29 January 2025, from https://environment.ec.europa.eu/strategy/textiles-strategy_en
[4] European Commission (2024). *Regulation (EU) 2024/1781*. Retrieved 29 January 2025, from https://bit.ly/3WCZZVK
[5] European Commission (2023). *Transition pathway for the textiles ecosystem*. Retrieved 29 January 2025, from https://bit.ly/3WAAYLa
[6] Waste Framework Directive. Retrieved 29 January 2025, from https://environment.ec.europa.eu/topics/waste-and-recycling/waste-framework-directive_en
[7] Ecosystex. Retrieved 29 January 2025, from https://www.ecosystex.eu/
[8] Renoon. Retrieved 29 January 2025, from https://www.renoon.com/
[9] CIRC. Retrieved 29 January 2025, from https://circ.earth/
[10] United Repair Centre. Retrieved 29 January 2025, from https://www.unitedrepaircentre.com/

ekip
EUROPEAN CULTURAL AND CREATIVE INDUSTRIES INNOVATION POLICY PLATFORM