Report on Progress

The Voluntary Sector Collaboration on Textiles

2024

LIFESTYLE AND DESIGN CLUSTER

Danish Board of Business Development

Co-funded by the European Union

Executive Summary

This executive summary presents the key findings from the 2024 Report on Progress under the Voluntary Sector Collaboration on Textiles. With just six years remaining to meet the shared 2030 goals set within the initiative, this year's report provides crucial insights into the collective efforts of 42 (out of 47) signatories working to advance circularity across three goals for adopting circular business models and circular design principles as well as increasing the use of recycled textile fibers. While encouraging momentum is visible in several areas, the results also highlight the scale of transformation still required to meet the ambitions of a circular Danish fashion and textile sector. The following summarizes the current status and remaining gaps for each of the three goals.

Circular Business Models

The goal is to ensure a growing share of total revenue in Denmark comes from circular business models such as resale, repair, rental, maintenance, redesign, repurpose and upcycling. In 2024, resale revenue accounted for 8% of the total 7.26 billion DKK in reported revenue, largely driven by dedicated resale actors and charity organizations. Compared to a 10% peak in 2023, the decline in 2024 resale share underscores the early-stage nature of circular business models compared to traditional business models. Qualitative data reveals that 40% of signatories say they engage in circular business models, and 63% report working to extend product lifetimes, mainly through repair services, take-back schemes, and consumer guidance. Yet, a large gap remains between ambition and scale, particularly among larger companies.

Circular Design

The goal for circular design is to ensure products are created for longevity, reuse, and optimal end-of-life loops. In 2024, 63% of signatories report working with circular design principles, with the highest uptake among small and medium-sized companies. Common approaches include mono-material use, design for durability and recyclability, and the use of internal design guidelines. However, the application of circular design principles varies widely, and only a few signatories have formalized these practices into documented strategies. This signals a growing commitment, but also a need for more standardization and clearer guidance to enable sector-wide alignment.

Recycled Textile Fibers

The 2030 target is that 40% of textile content consists of recycled materials, with at least 10% coming from textile-to-textile (fiber-to-fiber) recycling.[1] In 2024, recycled fibers made up 9% of total fiber use (32.9 million kg), a continued rise from 6% in 2023. Encouragingly, fiber-to-fiber content now constitutes 12% of all recycled fibers—meeting the 2030 sub-target ahead of time. However, most recycled content still comes from recycled PET bottles, and only cotton has seen meaningful fiber-to-fiber integration. Polyester dominates recycled volume, but none of it is from textile sources. Accelerating the shift toward fiber-to-fiber systems and expanding to additional fiber types is essential to meet both the volume and quality dimensions of the recycled fiber goal, as well as being best prepared for future requirements about recycled content.

Acknowledgments

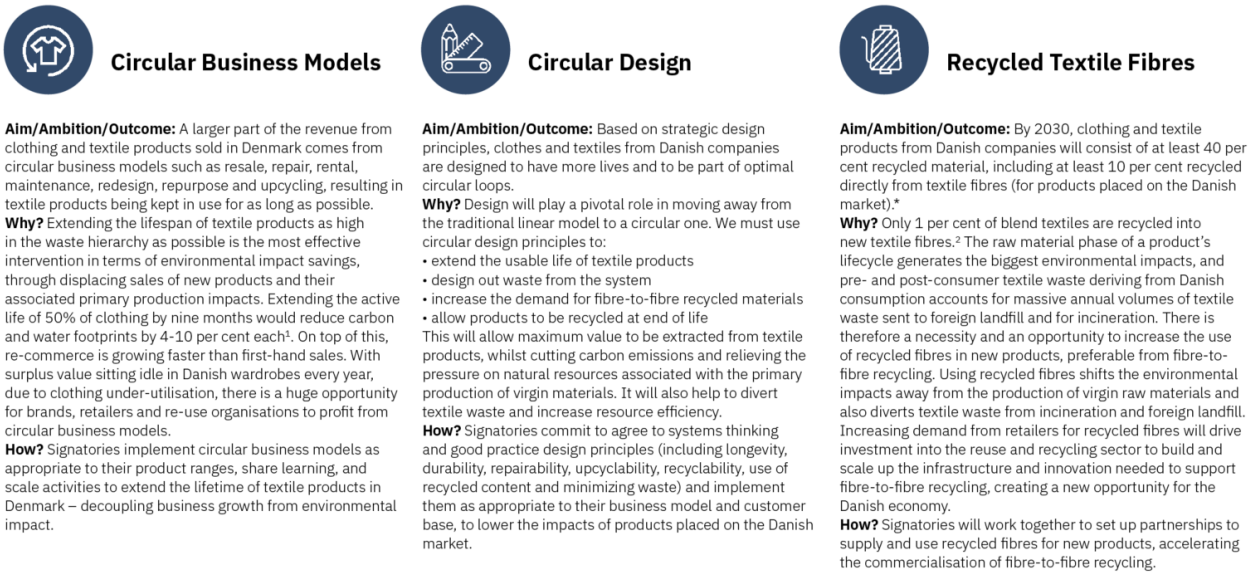
As the secretariat for The Voluntary Sector Collaboration on Textiles, the Lifestyle and Design Cluster would like to extend our sincere gratitude to all the Signatories, who have devoted considerable time and effort to gathering and submitting their data. We sincerely appreciate the dedication and hard work of collecting the data. Without the signatories' contributions, this report would not have been possible.

[1] Measured in weight e.g. the 10% fibre-to-fibre equals 40 grams per kilo (of the 400 grams recycled fibres per kilo) and 4% of the total

Table of Contents

1.0 Introduction

Welcome to the 2024 Report on Progress for the Voluntary Sector Collaboration on Textiles (hereafter referred to as 'the Sector Collaboration'). This report synthesizes the data submitted by the undersigning companies (hereafter referred to as 'signatories'), all of which have committed to achieving ambitious circularity goals by 2030 within circular business models, circular design and recycled textile fiber (see below).



You can read more about the goals in the action plan 2030 here.

Initiated in partnership with the Danish Ministry of Environment in August 2022, the Sector Collaboration represents a proactive effort to guide the Danish fashion and textile industry towards a circular economy, in anticipation of evolving European Union regulations, following the EU Textile Strategy and its extensive framework of related directives and requirements. The purpose of the Sector Collaboration is twofold. First and foremost, it revolves around collaboration — leveraging collective strength to enhance and elevate all participants, both large and small. The second key objective is to prepare the industry for upcoming EU legislation. Navigating the complexities of new regulatory requirements is a challenging task and tackling it as a united front makes the process significantly more manageable.

The Sector Collaboration is open to all companies within the Danish fashion and textile industry, including textile producers, fashion companies, resale actors, as well as service companies that facilitate resale activities. To become a signatory, a company must be willing to align with our shared goals and be eager to engage in the collaborative efforts required to achieve these objectives. Today, the Sector Collaboration includes around 50 signatories. This collaboration encompasses a wide range of sectors such as fashion, sport, interior, children's clothing, carpets, and workwear, among others.

1.1 Commitment to Collaborative Reporting

The Sector Collaboration is a voluntary yet binding collaboration where the textile industry collaborates across different facets. A key requirement for all signatories is to contribute to annual reporting against the three targets of the Sector Collaboration. Recognizing the challenges related to gathering the data

for the annual reporting, signatories will be excluded if they do not meet this requirement at the second reporting deadline, following their sign-up. As we reach the midpoint of this critical decade of action, the data in this report serves as an essential tool to ensure that we are aligning with the set goals and continuously monitoring progress.

1.2 Report Overview

This document marks the second Report on Progress, focusing on the 2024 data for fashion and textile products traded on the Danish market, supplemented by comparative baseline data from 2022. Data from 2022 and 2023 are included for comparison across 27 signatories who remained the same and reported data in all three years. We are diligently working to refine our data collection and analysis methodologies. While we acknowledge the complexities involved in data collection, which may impact the data quality of this report, we are aware that the results are not yet perfect. However, we are collectively committed to refining our methodologies and enhancing the quality of data in future reports as we continue to develop our approach and capabilities in this challenging area.

Further information about the Sector Collaboration can be found here. Additionally, this link provides a list of the companies that have signed on to the collaboration, as well as details about the members of the steering committee. For more information about the data collection process, an overview of the Signatories That Reported Data and a glossary of used words and concepts, please refer to the technical notes at the end of this report.

2.0 The Circular Business Models Goal

The goal regarding circular business models is as follows: *A larger part of the revenue from clothing and textile products sold in Denmark comes from circular business models such as resale, repair, rental, maintenance, redesign, repurpose and upcycling, resulting in textile products being kept in use for as long as possible.*[2]

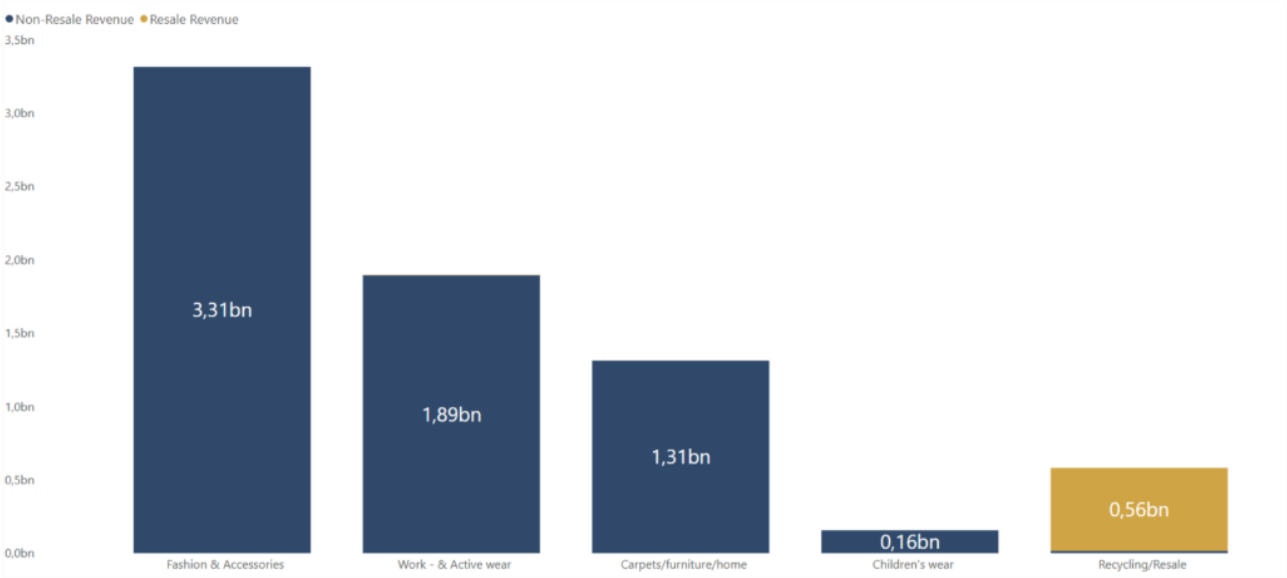
The primary aim of this goal is to ensure that a substantial portion of the turnover in Denmark's fashion and textile industry derives from activities based on circular business models, with garments being utilized for as long as feasibly possible. Signatories pilot circular business models as appropriate to their product ranges, share learnings, and develop large-scale implementation to extend the lifetime of clothing and textile products in Denmark – decoupling business growth from the use of virgin resources. In pursuit of this goal, we have sought both qualitative and quantitative data from the signatories. We have specifically requested quantitative data regarding their resale activities as well as revenue figures from such activities on the Danish market. Additionally, the signatories have responded to a questionnaire focused on their business models.

For more information about reported data around circular business models and various decisions made by the Secretariat in this regard, please refer to the technical notes at the end of this report.

2.1 Quantitative Data on Revenue and Resale per Category

Below the graph and table displaying data for 2024 on all the signatories' total revenue as well as their resale revenue displayed per category.

[2] During the spring 2025 update of the Sector Collaboration Action Plan this goal was updated. It previously read "A larger part of the turnover in clothes in Denmark comes from resale, and clothes are kept in use for as long as possible."



Category	Total Revenue	Non-Resale Revenue	Resale Revenue	% Resale Revenue
Fashion & Accessories	3.314.691.081	3.314.663.535	27.546	0%
Work - & Active wear	1.897.415.211	1.894.626.211	2.789.000	0%
Carpets/furniture/home	1.312.433.822	1.312.433.822	0	0%
Recycling/Resale	581.442.134	17.020.575	564.421.559	97%
Children's wear	156.425.312	156.310.019	115.293	0%
Total	**7.262.407.560**	**6.695.054.162**	**567.353.398**	**8%**

Key Observations:
Total Revenue: 7.26 billion DKK
Total Resale Revenue: 567 million DKK (approx. 8% of total revenue)

- The vast majority of resale revenue (564 mill DKK) comes from the "Recycling/Resale" category, indicating specialized resale business models. Resale revenues in other categories (Fashion & Accessories, Work & Active Wear, Carpets/furniture/home, Children's wear) are currently minimal to non-existent.
- The difference between the total revenue and the resale revenue is called the non-resale revenue – the sales of products that are not according to the definition created by the Sector Collaboration. For the NGO's, this could be products donated by brands and for the Peer-To-Peer marketplaces it could be deadstock bought from brands (pre-consumer products).
- Even though there are signatories within the Fashion & Accessories - and the Children's Wear category that offer resale on their homepage, this is not reflected in the reported data. This is suggests that it is either at an early stage, not selling on the Danish market, or not selling at all. On the other hand, we have received data from work- & activewear companies that show a resale revenue of almost 3 mill DKK.

Below chart and table show the developments from 2022-2024 for the 27 signatories that have reported consistently for all three years:

Year	2022		2023		2024	
Category	Non-Resale Revenue	Resale Revenue	Non-Resale Revenue	Resale Revenue	Non-Resale Revenue	Resale Revenue
Work - & Active wear	1.535.934.711	0	1.011.724.568	0	1.195.475.969	0
Fashion & Accessories	2.755.084.255	497.544	3.040.664.422	2.363	3.013.372.025	22.235
Children's wear	140.588.402	0	96.203.680	0	129.815.152	54.729
Carpets/furniture/home	1.401.594.606	0	1.300.950.424	0	1.312.433.822	0
Recycling/Resale	4.828.187	537.478.367	22.901.767	611.830.603	17.020.575	482.421.559
Total	**5.838.030.161**	**537.975.910**	**5.472.444.861**	**611.832.966**	**5.668.117.543**	**482.498.523**

Key Observations:

2022: 537.9 million DKK (~8.4% of total revenue)

2023: 611.8 million DKK (~10% of total revenue)

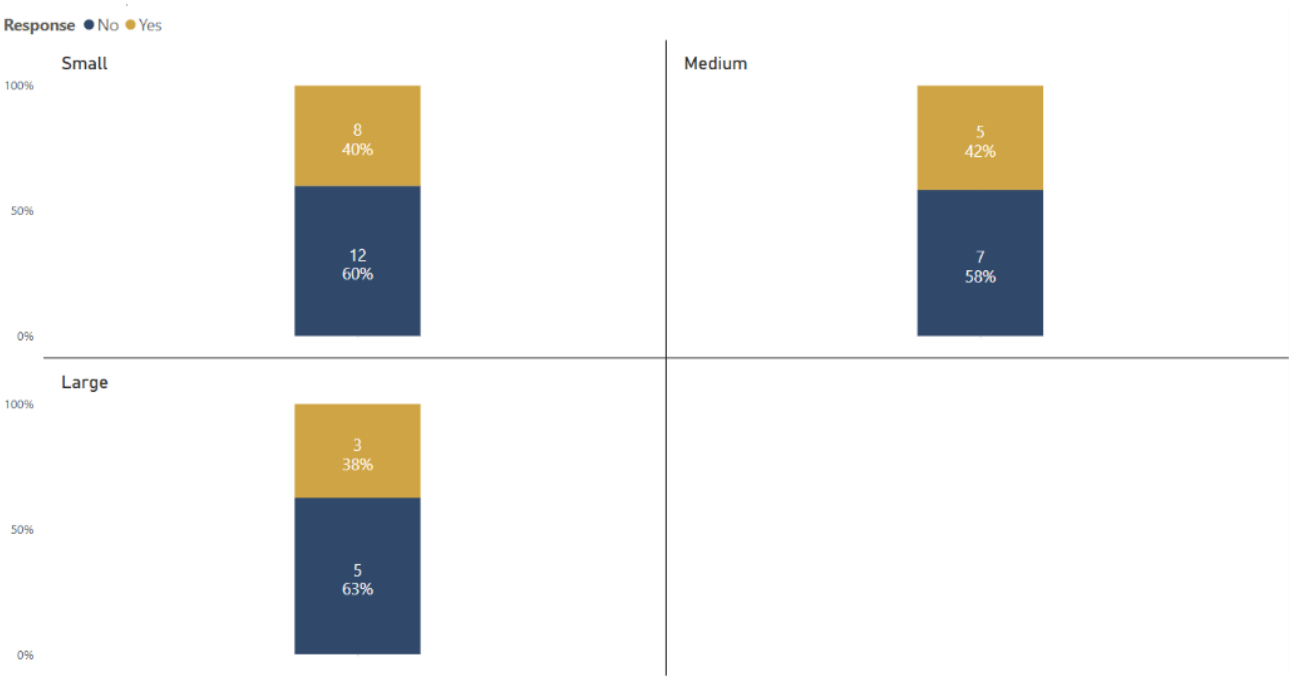
2024: 482.5 million DKK (~7.8% of total revenue)

- Resale peaked in 2023, achieving a significant share of total revenue (10%).
- Recycling/Resale consistently dominates resale revenue, though a noticeable decrease occurred from 2023 (611.8m DKK) to 2024 (482.4m DKK).
- Other categories show minimal resale revenue across all years, indicating limited growth in integrating resale models outside dedicated resale businesses.
- We see a sharp drop in resale revenue from 2023 to 2024 especially for the Fashion & accessories category.
- Children's wear categories began reporting minor resale revenues in 2024, indicating initial experimentation with resale.
- This data suggests notable progress, but also highlights the need for broader integration of resale models across traditional retail categories to achieve long-term circularity goals.

2.2 Questionnaire on Revenue and Resale per Category

The following section presents the qualitative data related to the circular business models.

Question 1: Do you sell textile products through a circular business model? (yes/no).



Company Size	No	Yes
Small	60%	40%
Medium	58%	42%
Large	63%	38%
Total	**60%**	**40%**

Key Observations:

- 40% of signatories answer yes to selling products through a circular business model. However, this is not reflected in their sales figures, indicating a high activity level but limited revenue. It should also be noted that some companies include recycling in their definition of circular business models, which overstate the actual share of Signatories engaged in circular sales.
- Medium sized signatories are ahead of small and large, and the large signatories are the group's least likely to work with circular initiatives. This is an open question that does not only relate to resale, but to all sorts of circular initiatives and services.

Follow-Up Question 1a: If yes, please describe the circular business model and on which development stage it is, e.g., pilot stage, planning, or operational.

The survey responses highlight a robust commitment across the signatories to implement and refine circular business models, characterized by a focus on repair, maintenance, resale, recycling, and consumer engagement. The key initiatives include:

- **Resale & Secondhand Platforms**
  - Thrift/resale operations
  - Online secondhand shops or dedicated "pre-loved" sections on brand websites
  - Physical vintage/resale stores
- **Repair & Longevity Programs**
  - In-house repair services or reinforced product areas for longer lifespan
  - Long-lasting Care Guides to educate consumers on product maintenance
  - 10-year guarantees on selected items

- **Take-Back & Recycling Systems**[3]
  - Closed-loop textile-to-textile system using post-industrial waste
  - Product return and resale via webshop or partner platforms
  - Use of unsellable textiles for upcycling into new products

- **Other Concepts**
  - Product management systems for long-term reuse
  - Some offers resell credit/gift cards for traded-in items

Question 2: Do you work with initiatives, which encourage or facilitate lifetime extension of the product? (yes/no).

Company Size	No	Yes
Small	25%	75%
Medium	42%	58%
Large	63%	38%
Total	**38%**	**63%**

Key Observations:

- 63% of signatories claim to work with initiatives which extend the lifetime of products.
- Smaller companies demonstrate significant adoption of lifetime-extending practices, possibly benefiting from agility and responsiveness to market trends in sustainability.
- Medium-sized companies have made notable progress but could still significantly expand their initiatives, benefiting from clear frameworks and strategic support.
- Larger companies show relatively low engagement, emphasizing a need for tailored strategies to overcome complexity and scale barriers to circularity.

Key Recommendations:

- **Small Companies:** Maintain momentum by sharing best practices and leveraging agile business models to further enhance lifetime extension.

[3] These types of initiatives are as such not included in the definition of circular business models, but they have been included to reflect was has been reported by signatories. This learning will be taken into consideration for next update of the reporting methodology.

- **Medium-sized Companies:** Expand existing initiatives by adopting proven strategies from small-scale innovators and investing in structured support systems.

- **Large Companies:** Prioritize lifetime extension initiatives at strategic levels, integrating circular practices systematically through supply chains, customer relations, and product design.

- Overall, while a positive majority is engaging in lifetime extension, targeted efforts are particularly needed for medium and large companies to achieve broader, systemic circular economy impacts in Denmark's textile sector.

Follow-Up Question 2a: If yes, please describe the initiatives which can extend the lifetime of the products, e.g., repair, maintenance, modification etc.

Below is a synthesized overview of the feedback gathered from this question. The responses from the signatories show a strong commitment to extending product lifetimes through repair services, resale initiatives, and consumer education. These practices promote durability, reduce waste, and support the circular economy

Repair Services (Most Common)

- In-house or external repair services: Many brands offer repairs for damaged items either in-house or via partners.
- DIY repair support:
    - Repair kits available online
    - Free tools, materials, and advice
    - Repair videos and educational workshops
- Guarantees:10-year repair guarantees offered by multiple companies
- Tailor partnerships: Collaborations with tailors or repair platforms (e.g., SOJO in the UK, local services across Europe)

Recommerce & Resale

- Secondhand platforms: Enables consumers to resell clothing instead of discarding it.
- "Do it for me" resale models: Some platforms manage resale on behalf of customers.
- Take-back programs: Collect, clean, repair, and resell used items.

Maintenance & Design for Longevity

- Care and maintenance guidance:
    - Online care guides, updated repair sections on websites
    - Material advice for matching durability and use case
- Design for durability:
    - Fewer trims for easier repair
    - Use of high-quality, long-lasting materials
    - Color and pattern choices that age well

Upcycling & Transformation

- Upcycling through partnerships: Non-reusable textiles are sold to local companies for transformation into new products
- In-store mending & reuse: Repair and resale of previously used or imperfect items

3.0 The Circular Design Goal

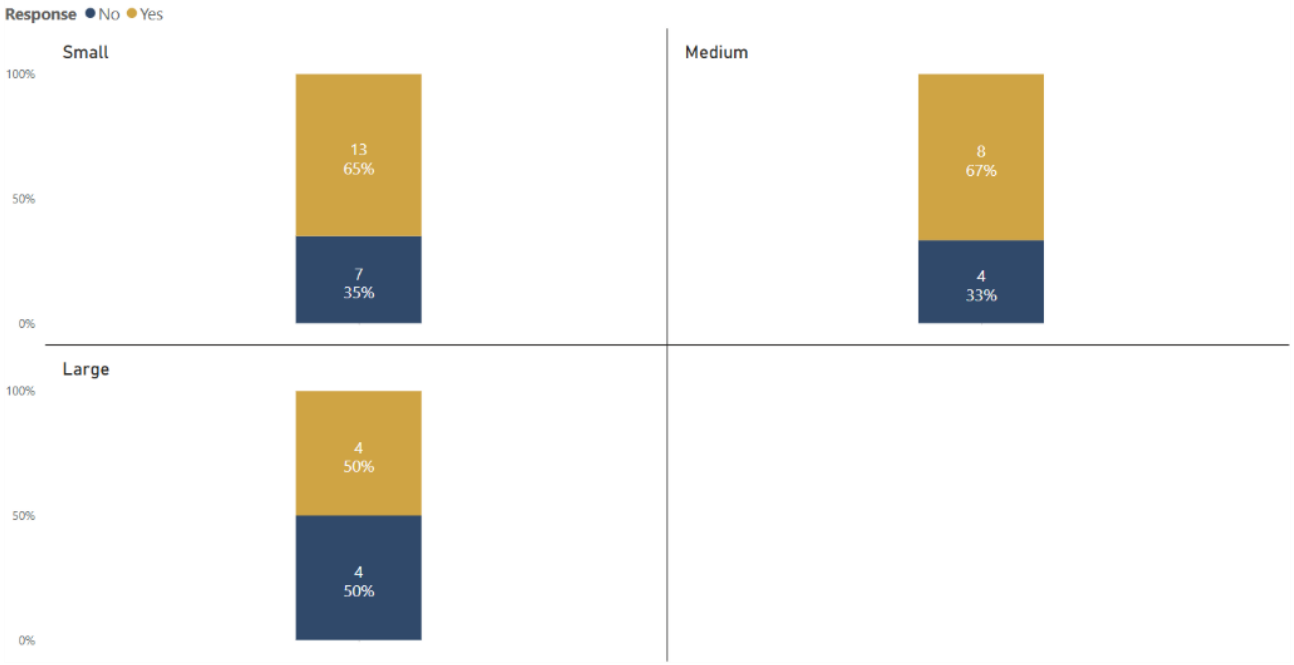
The goal regarding circular design is as follows: *Based on strategic design principles, clothing and textile products from Danish companies are designed to have more lives and to be part of optimal circular loops.*[4]

Design plays a critical role in transitioning from the traditional linear model to a circular one. By employing circular design principles, we aim to extend the usable life of textile products, enable their recycling at the end of life, eliminate waste from the production system, and enhance the demand for recycled materials. These measures are expected to maximize the value extracted from clothing and textile products, significantly reduce carbon emissions, and alleviate the pressure on natural resources incurred by the production of virgin materials.

Signatories commit to adopting and implementing good practice design principles that include durability, reusability, recyclability, the use of recycled content, and minimizing waste. These principles are to be applied in a manner that is congruent with each company's business model and customer base, thereby minimizing their environmental impact.

For this goal no quantitative data exists. The signatories were only asked to enter qualitative data by completing a questionnaire.

Question 1: Do you work with circular design principles during your product design / product development? (yes/no)



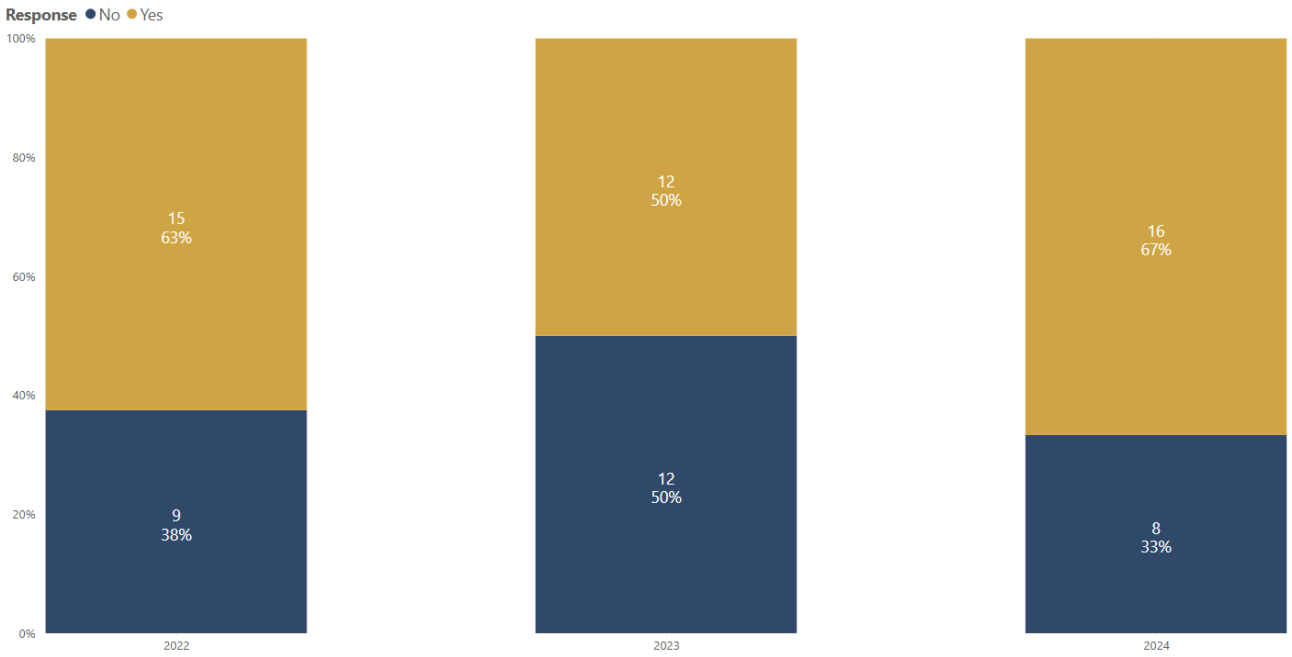
Company Size	No	Yes
Small	35%	65%
Medium	33%	67%
Large	50%	50%
Total	**38%**	**63%**

[4] During the spring 2025 update of the Sector Collaboration Action Plan this goal was updated. It previously read "Create a design guide template that needs to be adopted by and adapted to the individual signitury cmpany for clothes and textiles from Danish companies to be designed to have more lives and to be part of optimal circular loops."

Key Observations:

- A majority of respondents (~63% overall) incorporate circular design principles.
    - **Small companies:** 65% work with circular design, showing strong adoption.
    - **Medium-sized companies:** Highest engagement (67%), indicating focused efforts and capacity.
    - **Large companies:** Moderate engagement (50% yes, 50% no), indicating mixed integration.
- Circular design principles are widely adopted, particularly by small and medium-sized companies.
- Large companies show balanced but lower adoption, likely reflecting greater complexity in implementation.
- There is considerable potential for increased circular design integration, especially in larger enterprises.

Below chart shows the developments from 2022-2024 for the 27 signatories that have reported consistently for all three years:



Follow-Up Question 2a: If yes, how do you work with circular design principles?

Below is a synthesized overview of the feedback gathered from this question. Survey responses show a promising commitment across the fashion and textile industry to work with circular design. However, it is important to note the varied nature of these responses, which indicates that the signatories interpret and apply circular design principles in many different ways. This diversity in approaches underscores the need for clearer definitions, hereby creating a better foundation for a more strategic approach and a full value-chain perspective.

Material Choices

- Mono-material design (e.g. 100% wool, 100% PES) to facilitate recycling.
- Avoidance of blended fibers and elastane.
- Use of recycled and recyclable fibers (especially recycled polyester).
- Natural fibers and non-dyed materials preferred.
- Suppliers are advised to use durable monocompositions.

Product Design Strategies

- Focus on durability, longevity, and reparability.
- Minimization of components: labels, trims, hangtags, polybags.
- Modular or self-supporting textile structures (e.g. no foam needed).
- Design for reuse and take-back schemes.
- Emphasis on classic, re-runnable styles that remain in circulation.

Guidelines, Tools & Processes

- Internal design guides developed and implemented.
- Ongoing tool testing and participation in circular design projects.
- Use of standards, checklists, or four core principles (e.g. mono-fibers, natural materials, undyed).
- Some use third-party collaborations to structure their approach (e.g. circular.fashion).

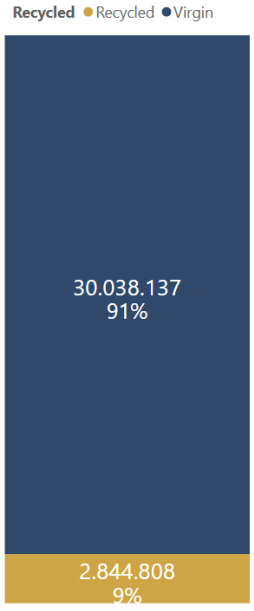
4.0 The Recycled Textile Fibers Goal

The goal regarding circular business models is as follows: By 2030, clothing and textile products from Danish companies will consist of at least 40 per cent recycled material, including at least 10 per cent recycled directly from textile fibers (for products placed on the Danish market).[5][6]

4.1 Rationale for Increased Use of Recycled Fibers

It is estimated that approximately 1% of blended textiles are recycled back into new textile fibers[6]. The phase in which raw materials are processed contributes most significantly to the environmental impact during the product lifecycle. This situation presents not only a pressing need but also an opportunity
to enhance the utilization of recycled fibers in new products. By incorporating recycled fibers, we can shift the environmental burden away from the production of virgin raw materials and simultaneously divert textile waste from landfills and incineration. Furthermore, a rising demand for recycled fibers among retailers can stimulate investments into the reuse and recycling sectors, thereby enhancing the necessary infrastructure and innovation to support more efficient fiber-to-fiber recycling. This shift is poised to create significant new opportunities within the Danish economy.

Total weight (kg) and split (%) of fibers



Fiber	Weight (kg)	Weight (kg) %
Virgin	30.038.137	91 %
Recycled	2.844.808	9 %
Total	**32.882.945**	**100 %**

[5] During the spring 2025 update of the Sector Collaboration Action Plan this goal was updated. It previ-ously read “By 2030, all clothing and textiles from Danish companies will consist of at least 40 per cent recycled material, including at least 10 per cent recycled directly from textile fibres.”

[6] Measured in weight e.g. the 10% fibre-to-fibre equals 40 grams per kilo (of the 400 grams recycled fibres per kilo) and 4% of the total

Key Observations:
Total fiber weight: ~32.88 million kg
Virgin fibers dominate strongly at 91% (~30 million kg)
Recycled fibers constitute only 9% (~2.84 million kg)

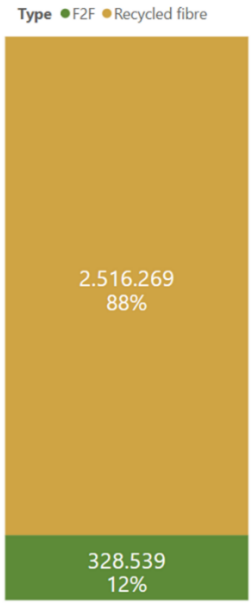
- Recycled fiber use is significantly below the 2030 goal of 40% recycled fibers.
- There is an urgent need to substantially increase recycled fiber integration.

Key Recommendations:

- Develop focused strategies for sourcing and scaling recycled textile fibers specifically.
- Strengthen infrastructure and partnerships for recycling textiles at scale.

Overall, there's considerable progress needed to achieve the ambitious circular fiber targets by 2030.

Weight (kg) and split (%) of Recycled fibers and F2F



Type	Weight (kg)	Weight (kg) %
Recycled fibre	2.516.269	88 %
F2F	328.539	12 %
Total	**2.844.808**	**100 %**

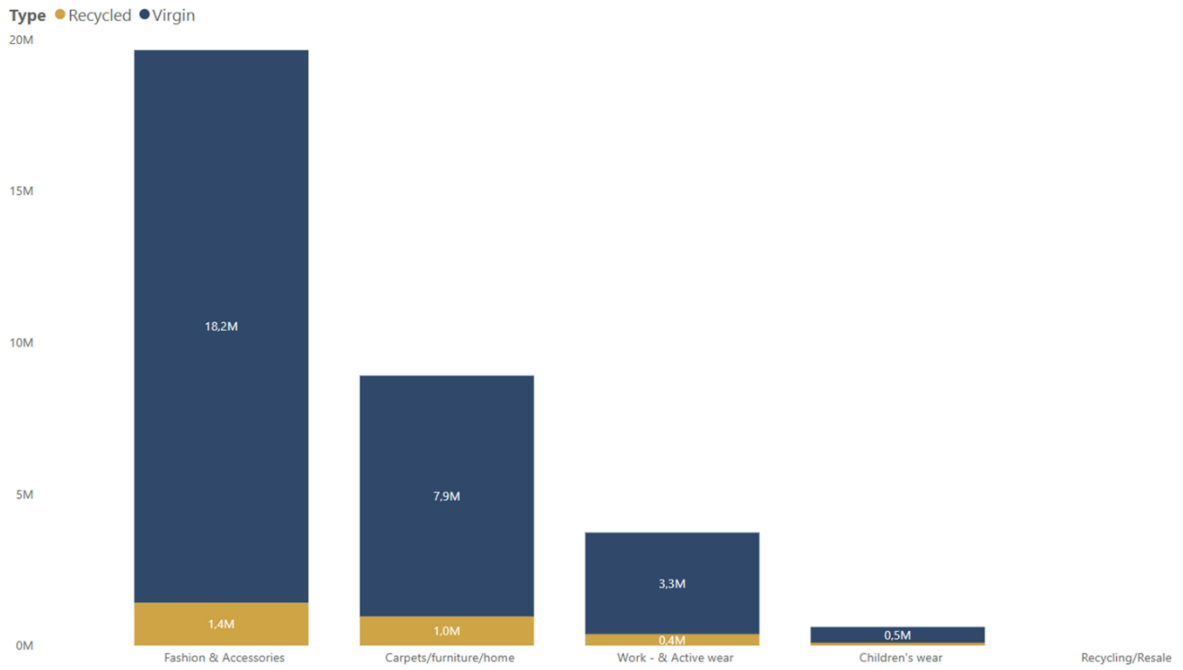
Key Observations:
Total recycled fiber: 2,844,808 kg (100%)
General recycled fibers: 2,516,269 kg (88% of recycled fiber)
Fiber-to-fiber (F2F): 328,539 kg (12% of recycled fiber)

- The goal states at least 10% of recycled fibers should specifically come from fiber-to-fiber recycling and with its 12%, F2F fibers currently exceed the 2030 minimum requirement of 10%.

Key recommendations:

- Sustain and increase practices related to fiber-to-fiber recycling and its continued implementation in fashion and textile products.
- Increase investing in technology and infrastructure supporting fiber-to-fiber recycling for broader industry adoption.

Weight (kg) of virgin and recycled fibers by category



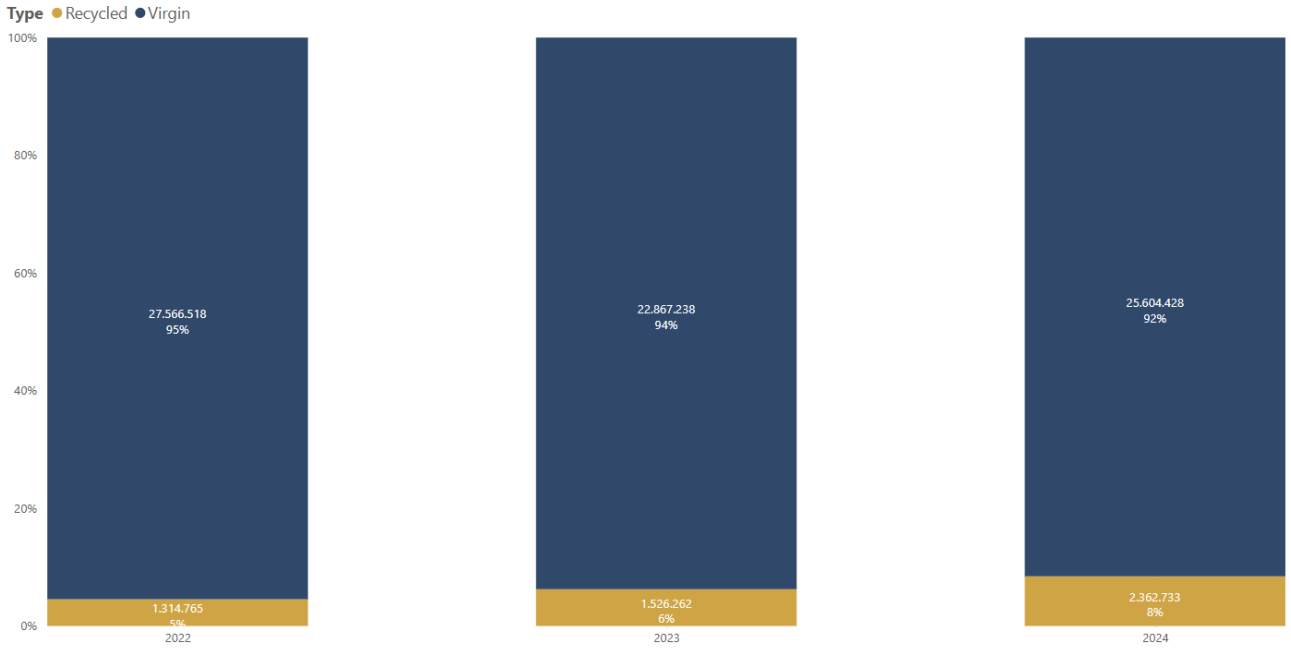
Category	Recycled KG	Recycled %	Virgin KG	Virgin %	Total KG	Total %
Fashion & Accessories	1.414.531	7%	18.225.545	93%	**19.640.076**	**100%**
Carpets/furniture/home	959.954	11%	7.942.722	89%	**8.902.676**	**100%**
Work - & Active wear	378.612	10%	3.348.250	90%	**3.726.862**	**100%**
Children's wear	91.711	15%	521.620	85%	**613.331**	**100%**
Recycling/Resale						
Total	**2.844.808**	**9%**	**30.038.137**	**91%**	**32.882.945**	**100%**

Key Observations:
Fashion & Accessories: Largest category (19.6 million kg total), but only 7% recycled.
Carpets/Furniture/Home: 8.9 million kg, with 11% recycled fibers.
Work & Active Wear: 3.7 million kg, 10% recycled.
Children's Wear: Smallest volume (613,331 kg) but highest percentage at 15% recycled.
Recycling/Resale category has no recorded fiber data.

- All categories are currently below the overall 2030 recycled fiber target (40%).

The recommendation is to prioritize increasing recycled fibers especially in Fashion & Accessories due to volume and impact potential, although keeping in mind that a clear focus on fiber-to-fiber is to be prioritized.

Below chart and table show the developments from 2022-2024 for the 27 signatories that have reported consistently for all three years:



Year	2022		2023		2024	
Type	KG	%	KG	%	KG	%
Virgin	27.566.518	95%	22.867.238	94%	25.604.428	92%
Recycled	1.314.765	5%	1.526.262	6%	2.362.733	8%
Total	**28.881.282**	**100%**	**24.393.500**	**100%**	**27.967.161**	**100%**

Key Observations:

2022: 5% recycled (1.31 million kg)

2023: 6% recycled (1.53 million kg)

2024: 8% recycled (2.36 million kg)

- Recycled fiber proportion steadily increasing within the 27 signatories
- Although recycled fiber usage shows positive and steady growth, current progress (8% in 2024) is far below the 40% recycled fiber target for 2030.
- Continued incremental improvement at the current pace (approx. +1-2% annually) is insufficient; accelerated and significant scaling-up is essential.

Key recommendations:

- Accelerate the rapid expansion of recycled fiber integration across all categories.
- Prioritize strategic investments and strengthen policy measures to substantially shift fiber sourcing towards recycled materials.
- Foster industry-wide collaboration to establish infrastructure, increase recycled fiber availability, and drive consumer demand for clothing and textile products with recycled content.

4.2 Questionnaire on Recycled Textile Fibers

In addition to the overall quantitative data on recycled fibers and how these are documented, the signatories were asked to complete a questionnaire with three questions. In the following section, we will delve into the responses.

Question 1: How do you generally document your recycled materials?

Here is a synthesized overview of the key methods used by signatories to document the use of recycled materials:

Types of Documentation Used

- GRS Certification (Global Recycled Standard) is the most used standard:
  - GRS Scope Certificates (SC)
  - GRS Transaction Certificates (TC)
  - GRS-certified factories and finished products
- Documentation from yarn/fabric suppliers
- Other standards and labels:
  - Cradle to Cradle Certification
  - EU Ecolabel (requires independent third-party verification)
  - Repreve and RCS (Recycled Claim Standard)

Collection and Management of Documentation

- Certificates are stored in internal systems for verification and traceability.
- Companies specify recycled content in tech packs and ensure compliance in bulk production.
- Scope and transaction certificates are collected from suppliers and manufacturers.
- Documentation can occur at the raw material, product, or factory level.
- Some brands use item numbers to identify recycled materials internally.

Question 2: If you work with certifications, which ones do you use?

Most Commonly Used Certifications

- GRS – Global Recycled Standard (the dominant certification across nearly all respondents. Used for recycled materials and full supply chain traceability).
- RCS – Recycled Claim Standard (often used alongside GRS; both RCS 100 and RCS Blended mentioned).

Organic & Natural Material Certifications

- GOTS – Global Organic Textile Standard (used for organic cotton and other natural fibers)
- OCS – Organic Content Standard (used for verifying organic material content)
- RWS – Responsible Wool Standard (applied to ensure animal welfare and land management practices in wool sourcing)
- Leather Working Group (certification for sustainable and responsible leather production)
- Lenzing Certifications (used for TENCEL™, modal, and viscose products)

Chemical and Safety Standards

- OEKO-TEX® Standard 100 (a widely used certification for testing harmful substances in textiles)
- Oeko-Tex Made in Green (combines product safety with social and environmental production standard)
- Bluesign® - in early adoption phase (focuses on responsible chemical use and safer textile production

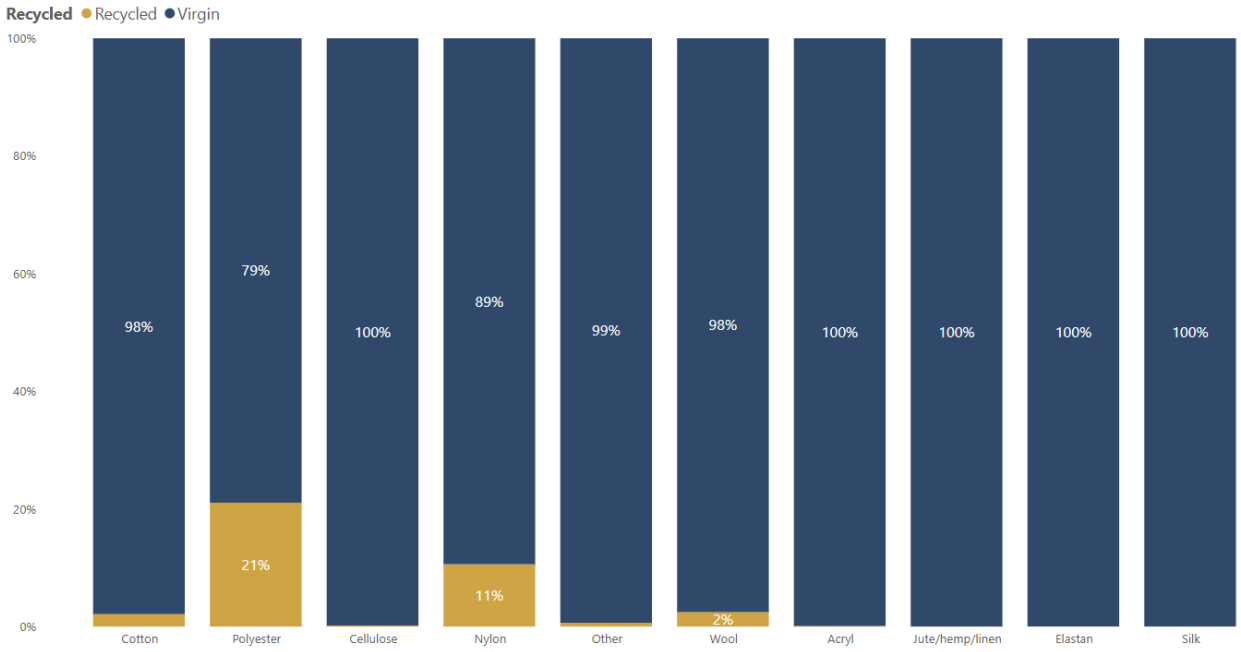
Environmental and Circularity Certifications

- EU Ecolabel (Independent certification for products with a reduced environmental impact)
- Cradle to Cradle Certification (recognized for promoting circular design and safe materials)

4.3 Data by Fiber Type

In the following sections, we will delve deeper into the distribution of different fiber types used by the signatories and explore how various recycled methods are employed across these categories. This detailed examination aims to provide a clearer understanding of the material composition and recycling practices within the industry.

Split (%) of Virgin and Recycled fibers by fiber type

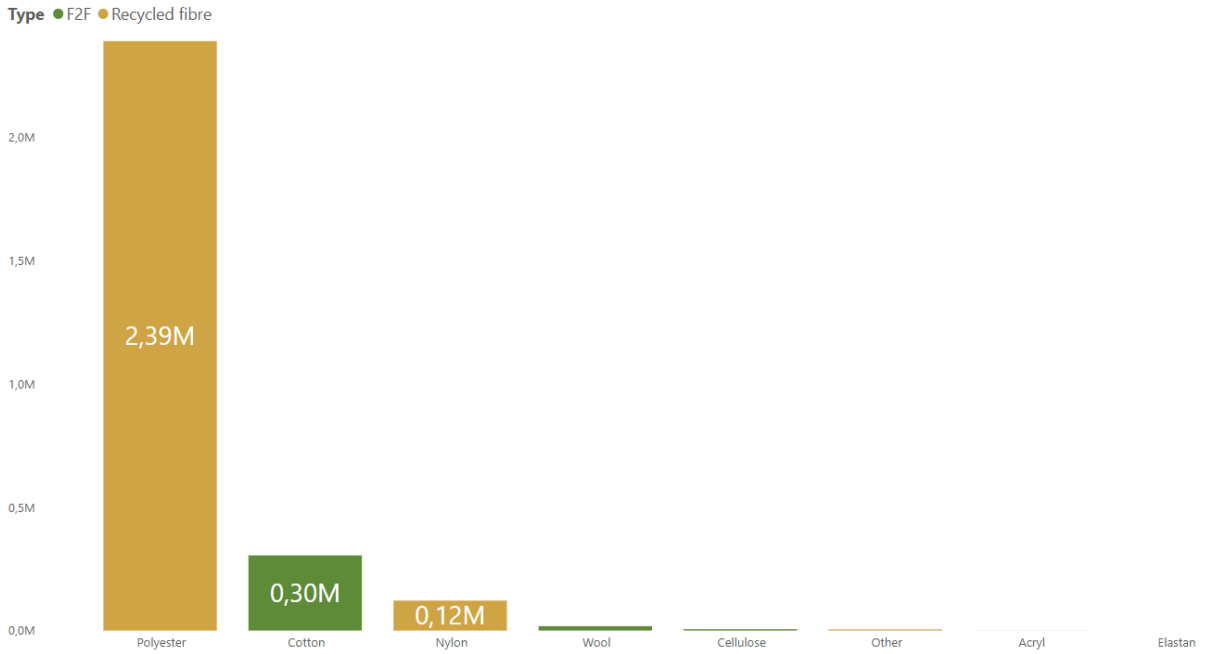


Fabric	Recycled		Virgin		Total	
	KG	%	KG	%	KG	%
Cotton	304.746	2%	14.083.256	98%	**14.388.002**	**100%**
Polyester	2.390.005	21%	8.967.547	79%	**11.357.551**	**100%**
Cellulose	5.487	0%	3.029.093	100%	**3.034.580**	**100%**
Nylon	121.440	11%	1.024.650	89%	**1.146.090**	**100%**
Other	4.785	1%	749.249	99%	**754.034**	**100%**
Wool	17.860	2%	708.460	98%	**726.320**	**100%**
Acryl	421	0%	538.279	100%	**538.700**	**100%**
Jute/hemp/linen			482.778	100%	**482.778**	**100%**
Elastan	63	0%	442.691	100%	**442.754**	**100%**
Silk			12.135	100%	**12.135**	**100%**
Total	**2.844.808**	**9%**	**30.038.137**	**91%**	**32.882.945**	**100%**

Key Observations:

- Polyester is by far the largest source of recycled fiber overall (21%)
- Nylon is moderate recycling rate; potential for growth (11%)
- Cotton is widely used but very low recycled content (2%)

Weight (kg) of recycled fibers by fiber type



Type	F2F		Recycled fibre		Total	
	KG	%	KG	%	KG	%
Polyester			2.390.005	84%	**2.390.005**	**84%**
Cotton	304.746	11%			**304.746**	**11%**
Nylon			121.440	4%	**121.440**	**4%**
Wool	17.860	1%			**17.860**	**1%**
Cellulose	5.487	0%			**5.487**	**0%**
Other	445	0%	4.340	0%	**4.785**	**0%**
Acryl			421	0%	**421**	**0%**
Elastan			63	0%	**63**	**0%**
Total	**328.539**	**12%**	**2.516.269**	**88%**	**2.844.808**	**100%**

Key Observations:

- Polyester dominates recycled fibers (84%), but none is currently F2F.
- Cotton is the primary source of F2F recycling, with all recycled cotton (11%) coming from F2F.
- Other fiber types show very limited to no fiber-to-fiber activity.

Key Recommendations:

- Expand fiber-to-fiber recycling capabilities to include polyester, nylon, and wool, reflecting their significant share of overall fiber use.
- Strengthen infrastructure and supply chain collaboration to support closed-loop recycling systems across all major fiber types.
- Increase investment in R&D to accelerate scalable, high-quality fiber-to-fiber recycling beyond cotton.
- Accelerate the shift from bottle-based polyester (rPET) to fiber-to-fiber recycled materials, as future legislation is expected to reserve PET bottles for closed-loop recycling in the food and beverages industry.

5.0 Outlook

As we look ahead, the data reporting process remains a central pillar in the Sector Collaboration's efforts to support the transition to a more circular textile and fashion industry in Denmark. While the data collection for 2024 showed noticeable improvements compared to previous years, the process continues to present challenges. These relate not only to the technical aspects of reporting but also to the internal coordination it requires within companies. As such, a key priority moving forward will be to further refine and simplify the data collection framework, ensuring that it supports meaningful insight without becoming an undue burden for signatories.

In parallel, significant regulatory changes are on the horizon. The forthcoming implementation of Extended Producer Responsibility (EPR) for textiles, as outlined in the revised EU Waste Framework Directive (WFD), is expected to reshape the landscape for data requirements. This development will likely increase the scope and specificity of the data that companies will need to report.

The Sector Collaboration will continue to monitor the ongoing discussions around the national implementation of the WFD and an EPR system in Denmark. This will likely inform adjustments to the data collection model, ensuring it remains relevant and fit for purpose as new requirements come into force. By aligning closely with future legislative expectations, the Sector Collaboration can help signatories stay ahead of the curve, positioning them to meet both compliance obligations and emerging market demands with confidence.

While the full impact of current initiatives may not yet be fully visible in the quantitative data it is clear that Signatories are actively engaging with circularity goals across areas that are aligned with forthcoming legislation such as eco-design principles, business model innovation, and recycled fiber content. Continued commitment, paired with an evolving and responsive data framework, will be key to capturing and accelerating this progress in the years to come.

6.0 Technical Notes

6.1 Data Collection

The data collected is national for textile products gathered and entered by the signatories. The Sector Collaboration is an initiative initiated by the Danish Ministry of the Environment, and as such, data collection is currently confined to the Danish market. The signatories report data for a calendar year, as companies have different financial years. The ambition is to have a yearly report showing the progress for the total Sector Collaboration. By 2024 and the years forward the plan is to report data in Q1 from the previous calendar year.

How the Data is Collected

In our efforts to streamline data collection for the Sector Collaboration, we have partnered with Valcon, a consulting firm, working with IT solutions for collecting and analyzing data. The developed app for collecting the data has been instrumental in facilitating an efficient and secure method for our signatories to submit their data. By using this app, signatories can easily input their information, which is crucial for our ongoing analysis and reporting.
The signatories enter their data into a Power Pages application to which they have individual access via unique passwords. The data is collected in the app and stored in Dataverse. You can read more about the security of the app here. Access to the aggregated data for reporting purposes is restricted to key personnel at Lifestyle & Design Cluster.

It has been clarified that textile companies typically store data in one of the following five IT systems (however, data storage also takes place in Excel, in internal documents or order confirmations): TRIM-IT, SPY System, Aspect 4 Textile, Delogue or Pebblestone. The systems are used to process data about the companies' products and typically not for data about sales.

The Power Pages app is structured as signatories can download templates to help prepare the data. For example, the fiber categories extract data from their own systems and then copy this into the respective columns. Therefore, the signatories cannot extract data directly from their IT systems. The level of existing data varies from signatories. Some, including smaller, signatories that already work with sustainability have collected/aggregated data, which they have used for climate calculations or had to provide data for the French or Dutch extended user responsible systems. Some signatories have data at the product level (SKU) but other signatories primarily operating on the Danish market must gather, clean and report data for the first time.

In the app we are asking for both qualitative and quantitative data related to the three goals within the Sector Collaboration. In the qualitative reporting (Questionnaire), signatories must select "Yes" or "No" and write the answer directly into the app. In the quantitative reporting, signatories have been asked to enter data manually.

Who Reported Data

The data are collected from signatories who have completed the necessary and relevant questionnaires and inputs into the app. The report shows the summary for each of the goals in an anonymized setup. The data for calendar year 2022 was obtained from 36 signatories, for calendar year 2023 we obtained data from 39 signatories and for 2024 from 42 signatories. Consequently, a steadily increasing development of signatories who report.

The signatories can be divided into five categories related to their product profile and into three different company sizes. The company size is related to the number of employees registered in the CVR register. Some signatories cover several categories, but since their data is aggregated for the whole company rather than for each of their brands, we have chosen the category based on their main business.

Year/Category	Small	Medium	Large	Grand Total
2022	**22**	**9**	**5**	**36**
Carpets/furniture/home		2	1	3
Children's wear	4	1		5
Fashion & Accessories	14	2	2	18
Recycling/Resale	1	2	1	4
Work - & Active wear	3	2	1	6
2023	**22**	**10**	**7**	**39**
Carpets/furniture/home		2	1	3
Children's wear	6	1		7
Fashion & Accessories	11	3	4	18
Recycling/Resale	2	2	1	5
Work - & Active wear	3	2	1	6
2024	**20**	**13**	**9**	**42**
Carpets/furniture/home		2	1	3
Children's wear	5	1		6
Fashion & Accessories	10	5	5	20
Recycling/Resale	2	2	1	5
Work - & Active wear	3	3	2	8

Throughout this report, we compare data from 2024 to 2022 and 2023. And for this comparison we have segmented the 27 signatories who have reported consistently during all three years, since the Sector Collaboration’s start.

2022-2024	Small	Medium	Large	Grand Total
Carpets/furniture/home		2	1	3
Children's wear	2	1		3
Fashion & Accessories	9	2	2	13
Recycling/Resale	1	1	1	3
Work - & Active wear	2	2	1	5
Grand Total	14	8	5	27

Not all signatories have entered data for all three goals as it may not be relevant to their type of business or because they were not able to collect the data for this report. For example, Peer-To-Peer marketplaces who do not produce textile products have not reported data for recycled textile fibers.

Data Reported on the Three Goals

Data Reported on Circular Business Models

The signatories were asked to report two sets of data: a) Total revenue for the Danish market in DKK b) total revenue of resale on the Danish market in DKK. Even though the Signatory does not have any resale they still had to report on their total revenue in order for us to calculate the share of resale for the category they belong to.

To avoid double registration, it is possible to register at either wholesale or retail, just as it is possible to add wholesale sales to foreign e-platforms that resell the products to Danish consumers. This data must be obtained from the platforms, which can provide information on how many products are resold to Danish consumers.

This report shows data on revenue, not on pieces nor on weight. The reason is that only some signatories managed to extract data on pieces and weight. We focused on making it mandatory for all signatories to report data on their revenue on the Danish market, even though it is sensitive for many companies to inform about this.

Data Reported on Circular Design

For this goal no quantitative data exists. The signatories were only asked to enter qualitative data by completing a questionnaire with three overall “yes/no”- questions, two of which had a follow-up question added.

Data Reported on Fibers

The aim is to have signatories report on the total amount of recycled fibers compared to virgin fibers used to produce clothing and textile products. Signatories have reported data for products traded over a period of 12 months = a calendar year. The finished products must have been sold in Denmark. The amount per fiber is entered in kilograms per fiber type. Each signatory has been asked to report both the virgin fibers, the recycled fibers and the recycled F2F (fiber-to-fiber). For each type of recycled fiber, they were asked to indicate the verification measure used (A, B or C). Signatories are expected to have documentation validating that their products include recycled content. Signatories are, however, not required to submit this documentation as part of their reporting. Only third-party certified recycled material is accepted. Each signatory is responsible for ensuring that any reported recycled material is third-party certified. The Sector Collaboration allows for three types of verification measures that can document the recycled material. When conducting the reporting, signatories are asked to indicate which verification measure is used to ensure the authenticity of the recycled material.

By the year 2030, a significant goal has been set for the signatories: all clothing and textiles from Danish companies will be made up of at least 40% recycled material. Importantly, of this 40%, at least 10% will be sourced directly from recycled textile fibers. This specification emphasizes a focused effort not just on general recycled materials such as rPET but particularly on integrating recycled textile fibers into products, highlighting a deeper level of commitment to circularity in textile production.

6.2 Word and Concept Clarification

This section provides clarification of key terms and concepts used throughout this report. The definitions presented here are derived from both relevant external sources and directly formulated by the signatories, developed collaboratively within working groups. These terms are specifically relevant to the goals we are pursuing within the Sector Collaboration.

Fiber types

Defined by Textile Exchange (2022) and REGULATION (EU) No 1007/2011. This lists 48 fibers but reporting on the 48 fiber types on the regulation's list will be very resource intensive. Therefore, it has been decided that the list includes the nine fibers that make up 95,68% of the world's textiles:

Polyester (54%) // Synthetic fiber
Cotton (22%) // Natural fiber
Jute/hemp/linen (6%) // Natural fiber
Cellulose (5,11%) // Man-made fiber
Nylon (polyamide) (5%) // Synthetic fiber
Acrylic (1,5%) // Synthetic fiber
Elastane (1%) // Synthetic fiber
Wool (0,92%) // Natural fiber
Silk (0,15%) // Natural fiber
Other (4,32%)

Peer-To-Peer Marketplaces

A physical or online service for citizens/consumers to sell and buy items to/from other citizens/consumers. Peer-To-Peer marketplaces are also asked to report their total revenue. In this case, it means their GMV (Gross Merchandise Value) incl. fees and shipping. This is the amount that consumers pay among themselves, including fees and shipping.

Recycled Material

The definition of recycled material in the Sector Collaboration follows the ISO standard 14021:2017 for Environmental Labels and Declaration: "proportion, by mass, of recycled material in products. Only pre-consumer and post-consumer materials shall be considered as recycled content."[7] This definition includes pre- and post-consumer recycled materials, and both recycled materials from textiles and other waste sources. This can include but is not limited to:

- Recycled PET from plastic
- Recycled Nylon from fishing nets
- Recycled Cotton from industry off-cuts
- Recycled Wool from post-consumer goods

[7] www.iso.org

Pre-consumer materials include items returned tried on but unused by consumers to the retailer. It also includes all items (for example trims, yarn, belt, buttons, pieces of fabrics/off-cuts) used in the textile value chain. The Textile Exchange certifications, the Recycled Claim Standard (RCS) and the Global Recycled Standard (GRS), follow the above ISO definition. Since these certifications are specifically developed for the textile industry, the Sector Collaboration will primarily refer to the RCS and the GRS as third-party verification measures for recycled content.

Additional certifications may be included going forward if they are aligned with the ISO definition. Definitions and documentation requirements will follow EU requirements and standards and may be adjusted going forward.

Resale

Within the framework of the Sector Collaboration's efforts to promote circular business models, the working group has established a formal definition of resale. This term is defined as products that were previously possessed, either owned or leased/rented, by a consumer. These are categorized as post-consumer products. Importantly, this definition explicitly excludes new products, deadstock, returns, claims, 2nd sorting products, and re-designed products. This clarification ensures a precise understanding and implementation of resale practices, focusing solely on genuinely used items, thereby supporting our objectives of reducing resource consumption and extending product lifecycles.

Retail

Sales direct to consumers (B2C = Business to consumer). To sell goods to the public, usually in small amounts, for their own use. Retail price: The price that customers pay for goods in stores.

Revenue

Defined as: "money generated from normal business operations, calculated as the average sales price times the number of units sold. It is the top line (or gross income) figure from which costs are subtracted to determine net income"[8]

SKU number

Stock Keeping Unit.

Textile product

A product with more than 80% textile content. See REGULATION (EU) No 1007/2011.

Wholesale

Sales to retailers (B2B = Business to business). The activity of selling goods, usually in large amounts, to businesses which then sell them to the public. Wholes price: The price at which goods are sold to shops by the people who produce them, rather than the price that the customer usually pays in the shop

[8] Investopedia