



# Asian Chemical Fibre Industries Federation

## Sustainability Practices in Chemical Fibres and Textile Manufacturing

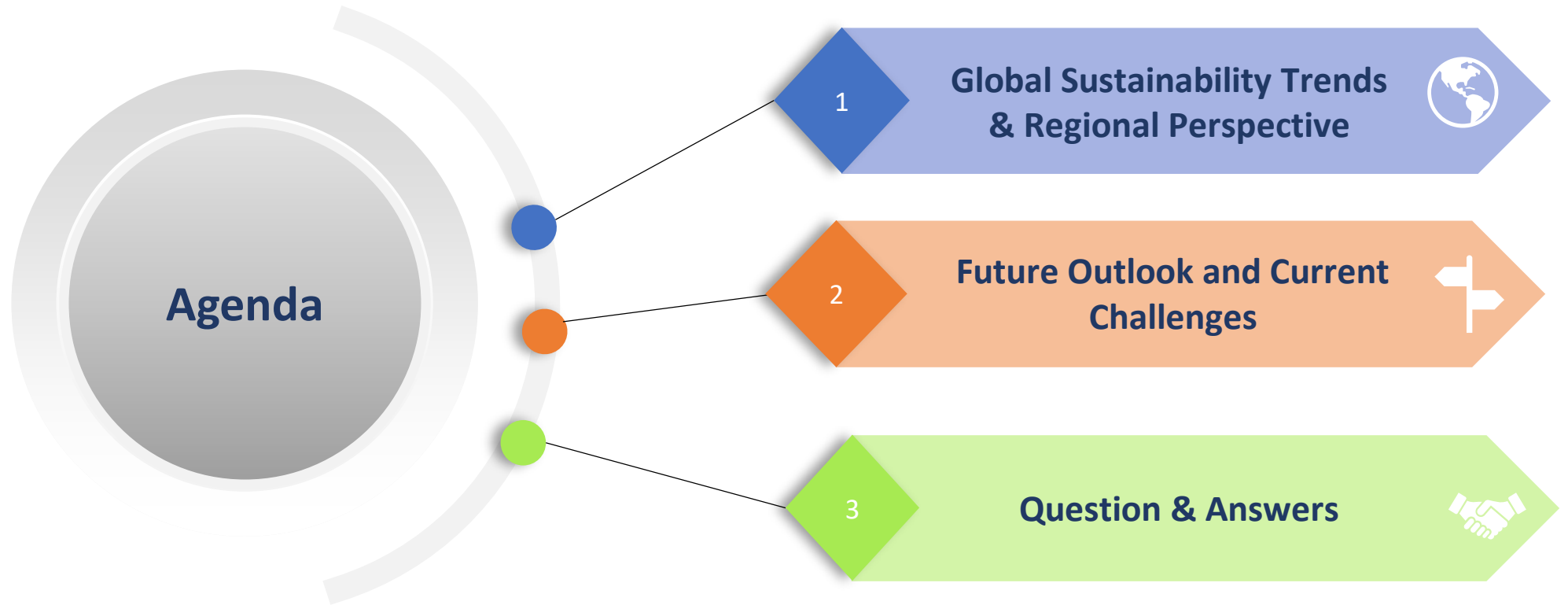
**Rizwan Afzal Chaudhary**

**Chairman - PSFMG**

**Chief Operating Officer** Polyester Business

**Lucky Core Industries**

Polyester Staple Fibre Manufacturer's Group (PSFMG)

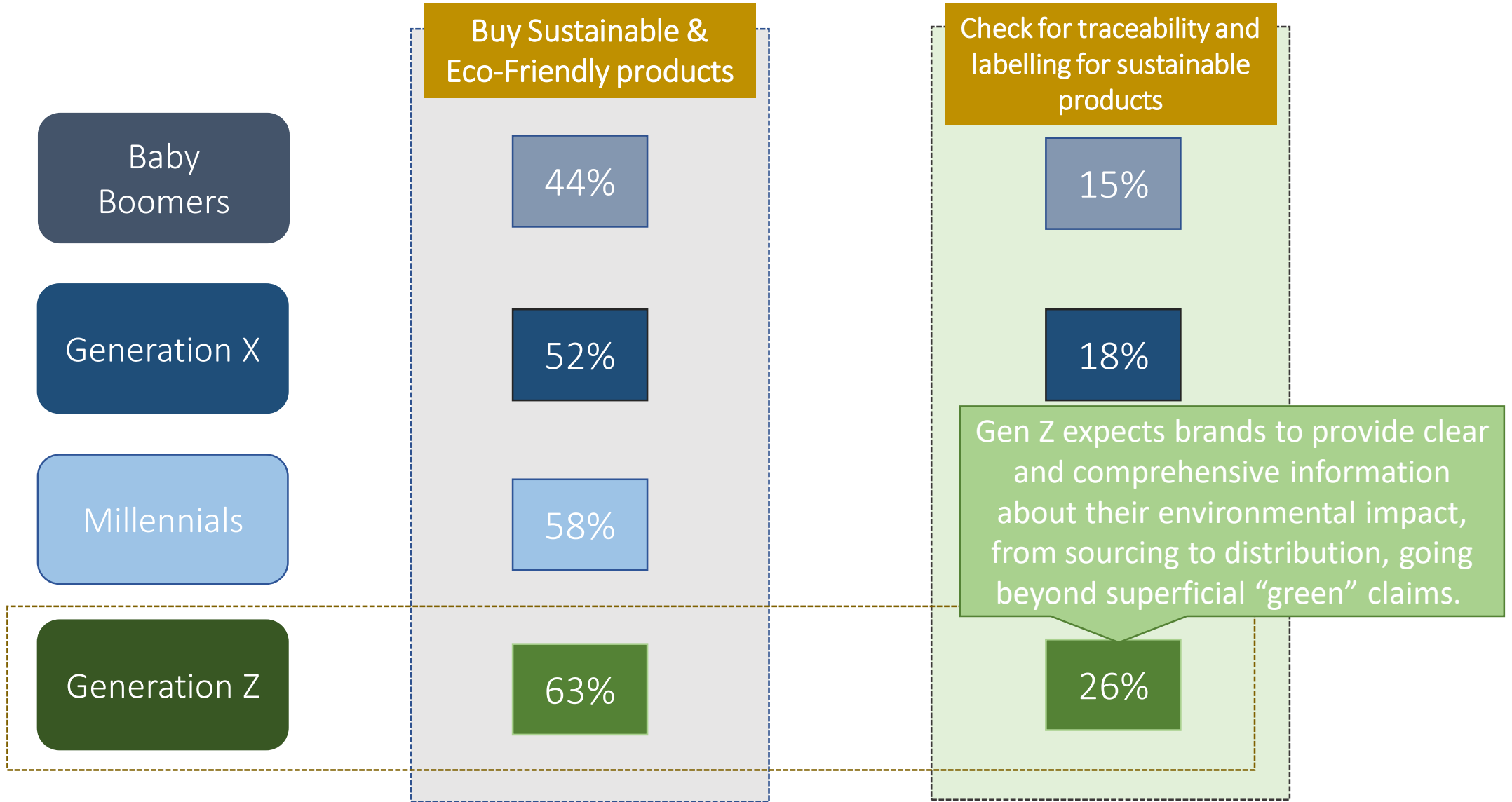




# Global Sustainability Trends & Regional Perspective



# Advent of Green Consumerism





# Regulatory Policies reshaping Global Sustainability Trends

## New EU Regulations Realigning Trade & Compliance

1

### European Green Deal

- EU Green Deal is the policy framework to make Europe the **first climate-neutral continent by 2050**
- Cut greenhouse gas emissions by **at least 55% by 2030** and achieve **net zero by 2050**

**Source: European Commission.** *The European Green Deal.* Communication from the Commission

2

### Carbon Border Adjustment Mechanism (CBAM)

- **CBAM** mean importers might face a carbon tax if suppliers cannot prove their emissions performance
- To prevent “**carbon leakage**” — where production shifts to countries with weaker climate rules — the EU applies CBAM to imported goods.

**Source: European Commission – Taxation & Customs Directorate**



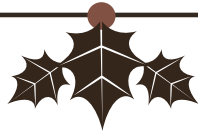
# EU Green Deal Directly Affects Textiles

## Roadmap with 2030 Vision to develop circular economy



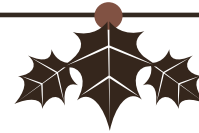
### Traceability

Digital Product  
Passport – Mapping the  
complete supply chain



### Tackling Green Washing

Sustainable Claims  
need to be proven



### Extended Producer Responsibility (EPR)



### Sustainable & Circular Textiles

All textiles must be durable,  
recycle and contain more  
recycled content



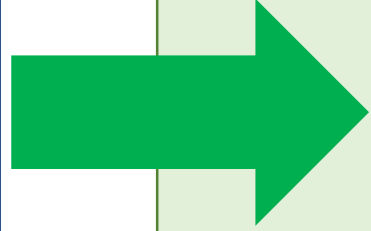


# Global Climate Commitments

Brand working towards setting goals for 2030

UNITED NATIONS  
PARIS CLIMATE  
AGREEMENT  
SIGNING CEREMONY  
— 22 APRIL 2016 —

Goal to limit global warming to  
1.5-2 C above pre-industrial levels



## Global Brands' are Responding to Carbon Neutrality by Setting Sustainability Material Targets

 **INDITEX**  
100% by 2030

   
100% by 2030

 **H&M**  
100% by 2030

  
50% by 2030

  
50% by 2025

 **TARGET**  
100% by 2025

 **PRIMARK**  
50% by 2030

   
100% by 2025



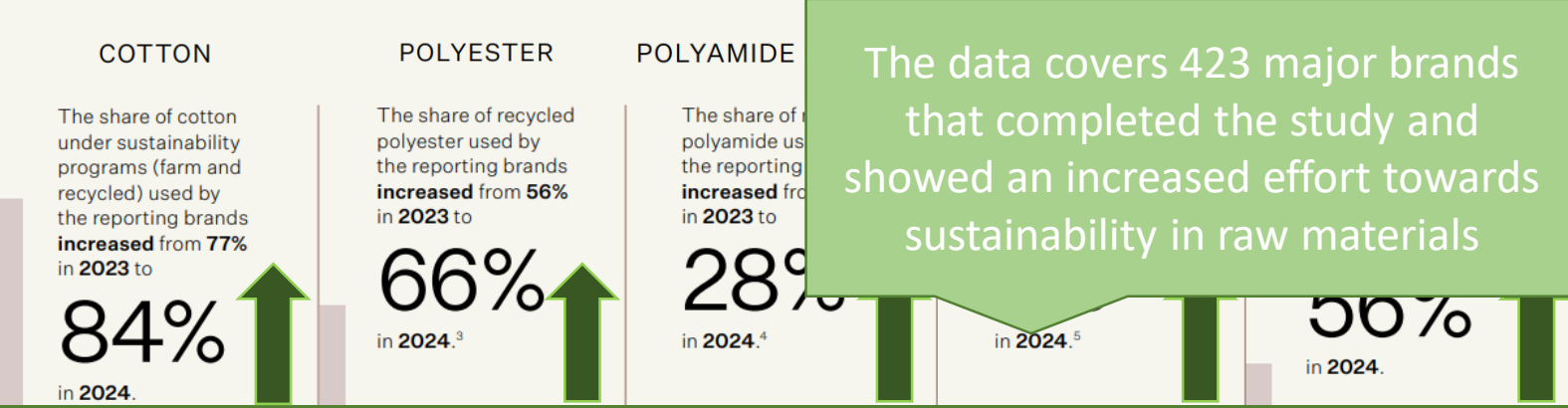
# Materials Benchmark and Insights 2025

## Analysis of Global Fashion Brands towards Sustainability

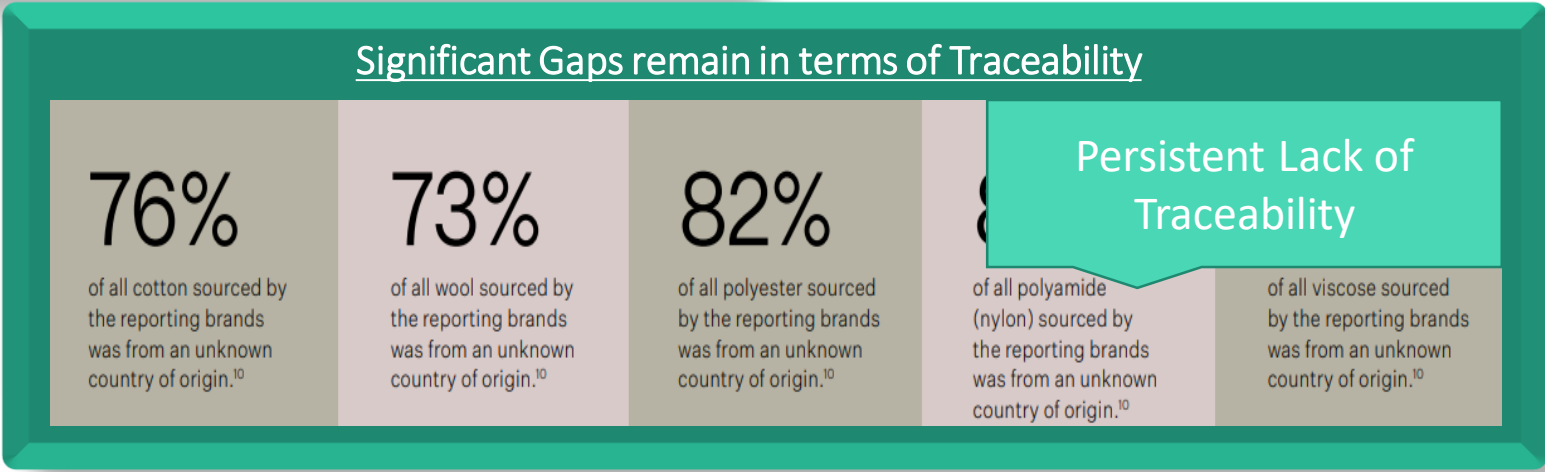
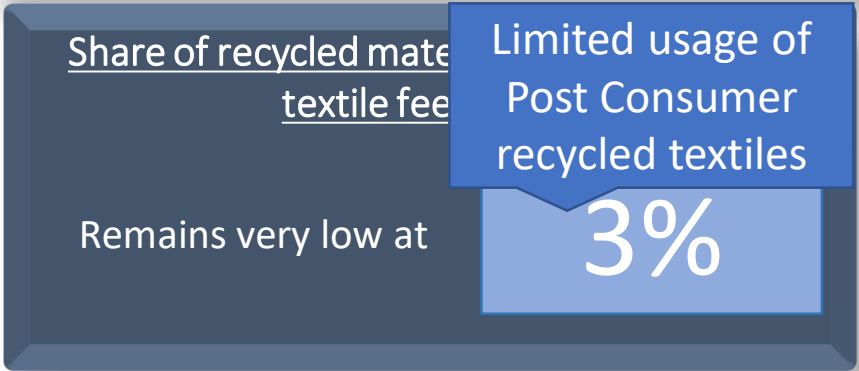
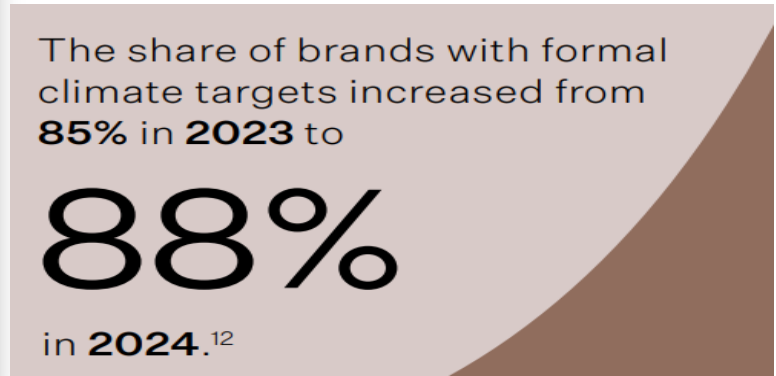


**Textile Exchange**

### Materials sourced with Sustainability in Mind



The data covers 423 major brands that completed the study and showed an increased effort towards sustainability in raw materials





# Significance of Legislation and Traceability

## Claims by Fashions Giants are Misleading

A study done on the 12 biggest brands



**39%**  
of products assessed came with sustainability-related claims such as “recycled”, “eco”, “low-impact” or simply “sustainable”.

**59%**  
of sustainability claims by fashion giants are greenwashing

- Lack of Transparency ( no clear breakdowns of fiber composition)
- Misleading product labels & Buzzwords

### RESULTS

★ ★ ★ Compliant Brands  
Zara, Gucci

% of sustainability claims respectively falling short of UK CMA (Competition & Markets) guidelines.

<b>H&amp;M</b>	<b>96%</b>
<b>asos</b>	<b>89%</b>
<b>M&amp;S</b>	<b>88%</b>



# Regional Perspective & Competitor Benchmark

## Meeting the Regional Sustainability Standards

### CHINA

- Dual Carbon targets — peak by 2030, carbon neutral by 2060
- Big push: recycling, renewables, circular fiber production, capacity rationalization



### BANGLADESH

- Holds the world's largest concentration of LEED (Leadership in Energy and Environmental design)-certified green garment factories (USGBC)
- International brands highlight factories as preferred partners



### INDIA

- Cost Competitive and is improving sustainability to protect its massive textile export market share
- Strong government support for EPR frameworks, plastic waste management, and green manufacturing





# Future Outlook

# TRADITIONAL FIBRES

COTTON



WOOL



POLYESTER



VISCOSE



SILK



NYLON



# SUSTAINABLE FIBRES

BOTTLE TO TEXTILE



BIODEGRADABLE TECHNOLOGY



TEXTILE TO TEXTILE





# Industry, Policy & Circularity

## Why the Focus will Shift to Textile-to-Textile Recycling?



Polyester Staple Fibre  
Manufacturer's Group (PSFMG)



Source: Textile Exchange



# Textile Waste: A Growing Menace



Only 1% is recycled  
into new clothes



A Garbage truck full of  
clothes goes to landfill  
every second



THE  
ENVIRONMENTAL  
CRISIS CAUSED BY  
TEXTILE WASTE



Waste clothes in the Atacama desert in Chile, on 15 June 2023

## 92 Million

Tons of clothes-related waste discarded  
every year

Clothing and textiles  
account for at least 7% of  
global landfill waste.



Enough to fill  
one and half  
Empire State  
Buildings  
everyday



## MATERIALS MATTER STANDARD PILOT V1.0



**Textile  
Exchange**

The **Materials Matter Standard** is a next-generation sustainability certification (mandatory certification started in 2026) to help the textile supply chain



Prove better  
climate and social  
practices



Enable Circularity  
(Textile-to-Textile  
Recycling)



Align with new EU  
and brand  
sustainability laws



Replace older  
multiple standards  
with one unified  
framework

It signals that the  
*future* is **textile-to-  
textile recycling!**

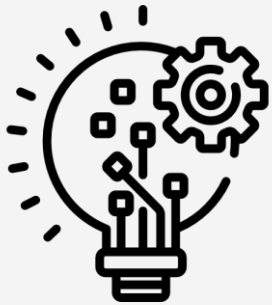


# Current Barriers to Textile-to-Textile Recycling

01

## SUPPLY CHAIN BOTTLENECKS

- Not enough feedstock – There is no organized, large scale system to collect textile waste



02

## TECHNOLOGY

- Limited to few global pilot plants
- No standardized technology to test T2T recycling claims



03

## COST COMPETITIVENESS

- Buyers want circular content but don't always pay a premium



04

## POLICY & REGULATION

- Policy Uncertainty in the US weakens sustainability momentum



# TRADITIONAL FIBRES

COTTON



WOOL



POLYESTER



VISCOSE



SILK



NYLON

- 2nd most used synthetic fibre
- 5% of the global fibre market
- 6.7 million tonnes produced globally

# SUSTAINABLE FIBRES

RECYCLED NYLON  
(ECONYL)



BIO-BASED NYLON  
FIBRE



TEXTILE TO TEXTILE  
(LOOPAMID)

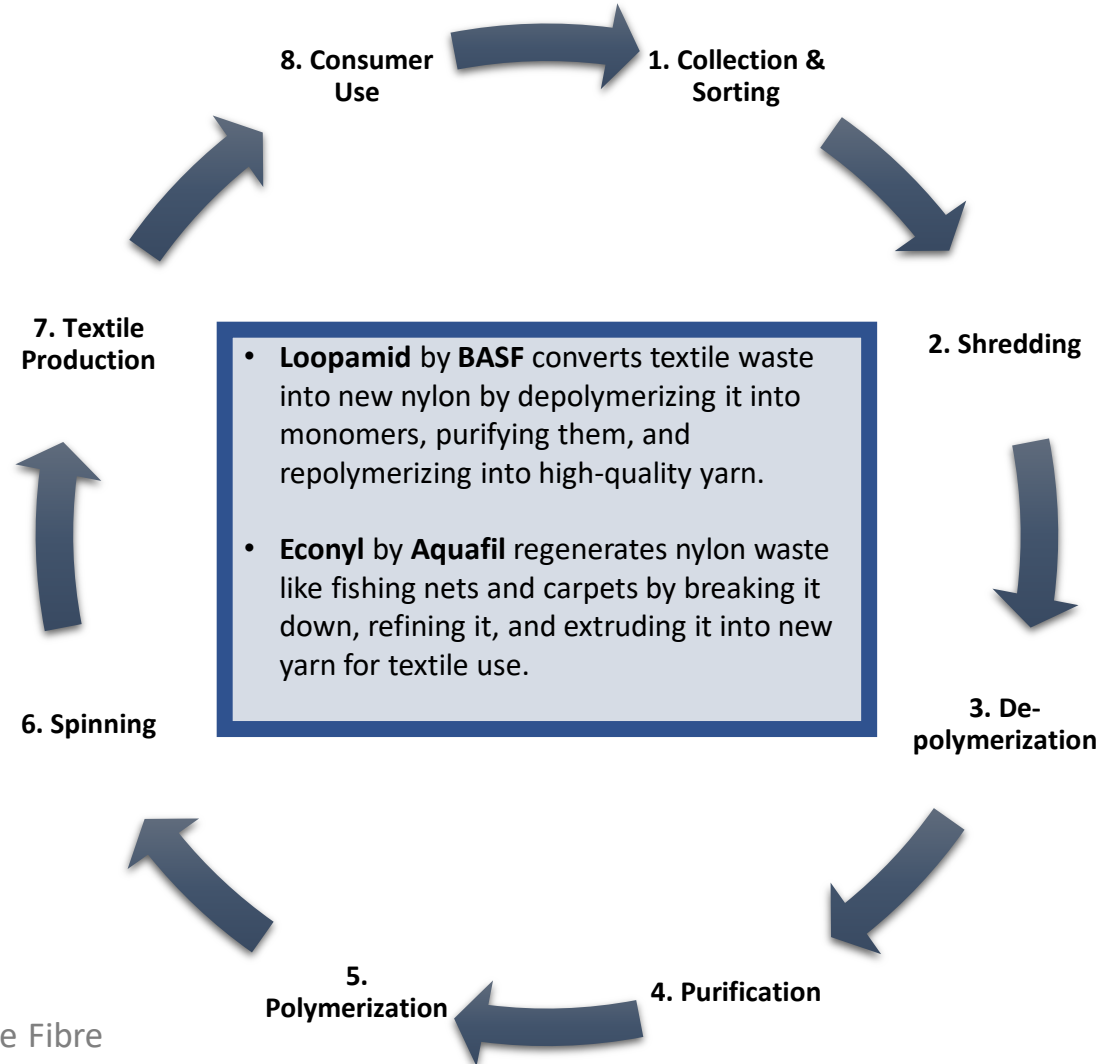


Source: Materials Market Report'24



# Recycling Nylon

## Transforming Nylon Waste into Econyl & Loopamid



### Key Benefits

- **Eco-Friendly:** Reduces waste and lowers carbon emissions.
- **Durable:** Resistant to abrasion, chemicals, UV light, and moisture.
- **Versatile:** Ideal for activewear, bags, outdoor gear, and more.
- **Energy-Efficient:** Saves up to 75% of the energy used in virgin nylon production.
- **Marine Conservation:** Helps clean oceans and protect marine life.
- **Infinite Recycling:** Continuous closed-loop reuse system

Inditex has turned the Loopamid material into a capsule jacket.



Source: Loopamid'26 & Econyl'26

# TRADITIONAL FIBRES

COTTON



WOOL



POLYESTER



VISCOSE

- Makes up 80% of man-made cellulosic fibre
- 5% of the global fibre production
- 6.3 million tonnes produced globally

SILK



NYLON



# SUSTAINABLE FIBRES

Viscose to Viscose  
Recycling





# Recycling Viscose

Shifting towards closed-loop recycling, ending deforestation

## EU Deforestation Regulations for safe viscose production:



Geospatial deforestation proof required



Certified sustainable sourcing

## Parameters at play to achieving sustainability:



1 tonne recycled fiber replaces 3 tonnes virgin wood

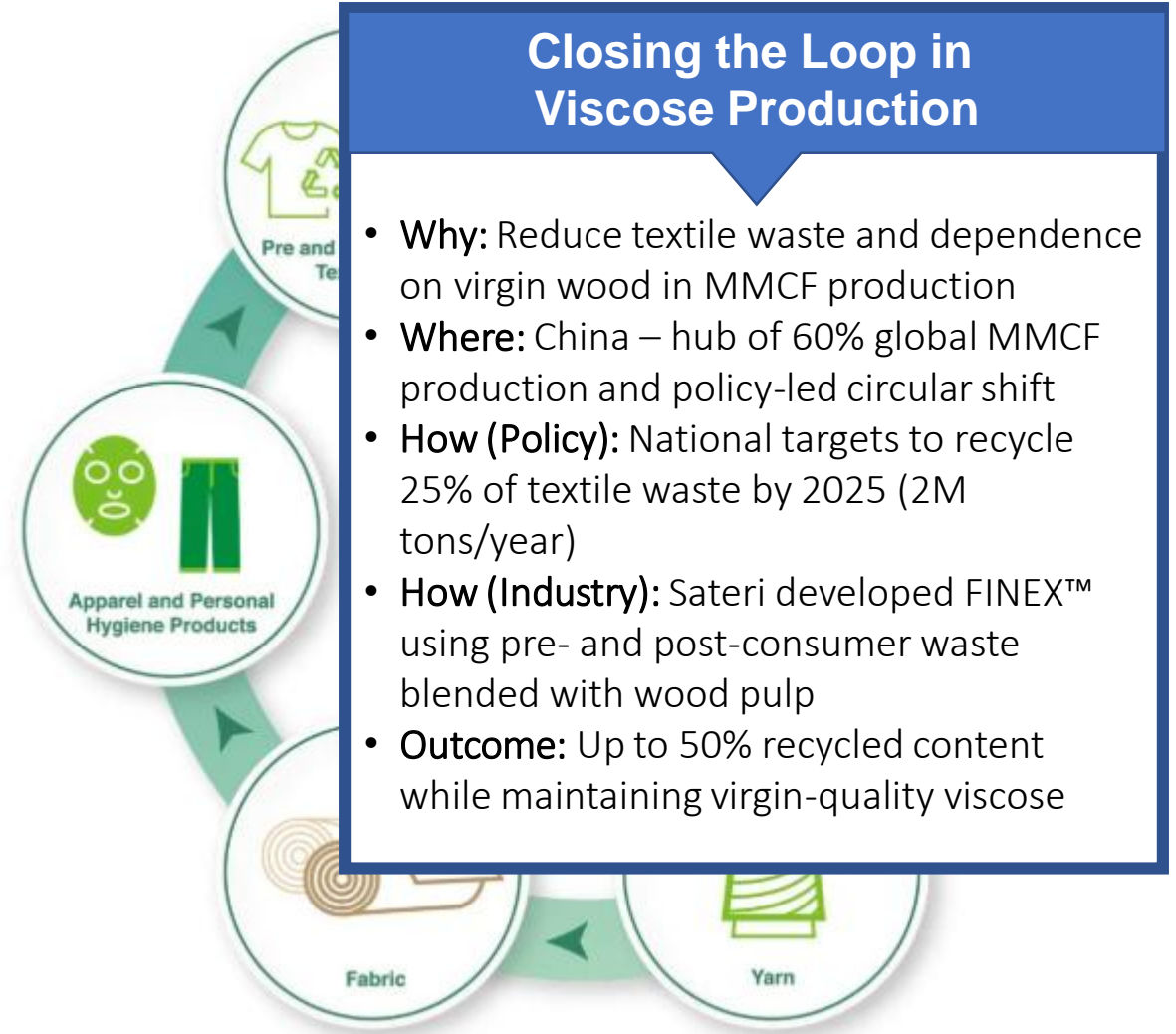


50% of viscose producers committed to responsible production



Closed-loop systems recycle most solvents in production

Polyester Staple Fibre Manufacturer's Group





# Key Takeaways

## Global Shift to Sustainability

- Green consumerism is rising, driven by new EU regulations (Green Deal, CBAM, Digital Product Passport, EPR).
- Sustainability claims must be transparent and verifiable.

## Industry Trends

1. Growing adoption of sustainable raw materials, but textile-to-textile recycling remains minimal.
2. Greenwashing is a major concern – ~60% of claims by fashion giants lack substantiation

## Regional Outlook

- Pakistan's textile industry is a global leader in cotton and spinning capacity but faces gaps in recycling capacity, renewable energy access, and unified sustainability policy.

## Opportunities

- Strengthen traceability and certification systems.
- Collaborate across industry, policy, and supply chain to meet 2030 emissions and circularity goals.

**Thank You**

**Q&A**