

Textiles **at a glance**

Global fiber production for textile manufacturing has almost **doubled** in the last 20 years, reaching **109 million tonnes in 2020**



97% of textiles are made with **virgin feedstock** such as cotton (25%) and plastic (63%), while only a **tiny percentage** (2%) of fibers are made from **recycled materials**.

Around 6 million tonnes of post-consumer textile waste is produced every year in Europe alone. That number is expected to reach 7.2 million tonnes by 2035.



Half a million tonnes of plastic microfibers (the equivalent of 50 billion plastic bottles) are released into the ocean every year from washing textiles over their lifetimes.



Only **1%** is **recycled into new textile products** (fiber-to-fiber recycling)



12% are downcycled



Around **85%** end up in **landfills or incinerators**

4 key beliefs to enable textiles circularity

The combination of these 4 key beliefs can transform the textiles value chain – from the inside out.



#1

Supportive policy, legislation, and incentives

#3

Investments to scale infrastructure for automated sorting and mature recycling technologies

#2

Cross-industry collaboration and business model innovation

#4

A robust digital core to capture data and insights across the textile value chain

Textile waste includes:



Reusable textiles are manually sorted out, while non-reusable textiles are delivered in bales, typically weighing between 350 and 500kg.

Textile waste could also include:

Unsorted material from separate collection sources (from recycling centers)

Manually pre-sorted and industrial waste (from textile leasing and rental services)

Post-industrial waste (factory floor clippings)

Pre-consumer waste (unsold clothing)

Post-consumer waste (clothing and household textiles)

Textile waste from municipal solid waste (textiles disposed of in household bins)

Post-commerical waste (hotel or hospital linen, work uniforms)

The different output products are pressed into bales and sent to the appropriate recycling facility.

Cotton

• Polyester

• Blends

Today, pre-processing (which could involve cutting materials down, shredding, and removing any additional material components), is usually done by recyclers. In the future, however, this important step would ideally become part of this process.



'Automated sensor-based sorting enables us to accurately sort and categorize a bale of mixed materials, into high-purity single material products, to suit multiple different recycling technology feedstock specification requirements.'

Louisa Hoyes, Director Strategic Partnerships, TOMRA Textiles

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