

Petcore Europe Textile Special Industry Group for CIRCULARITY

(a much more difficult « one » than for
PACKAGING)



www.petcore-europe.org



Since 1993 Packaging & Textile SIG since 2023

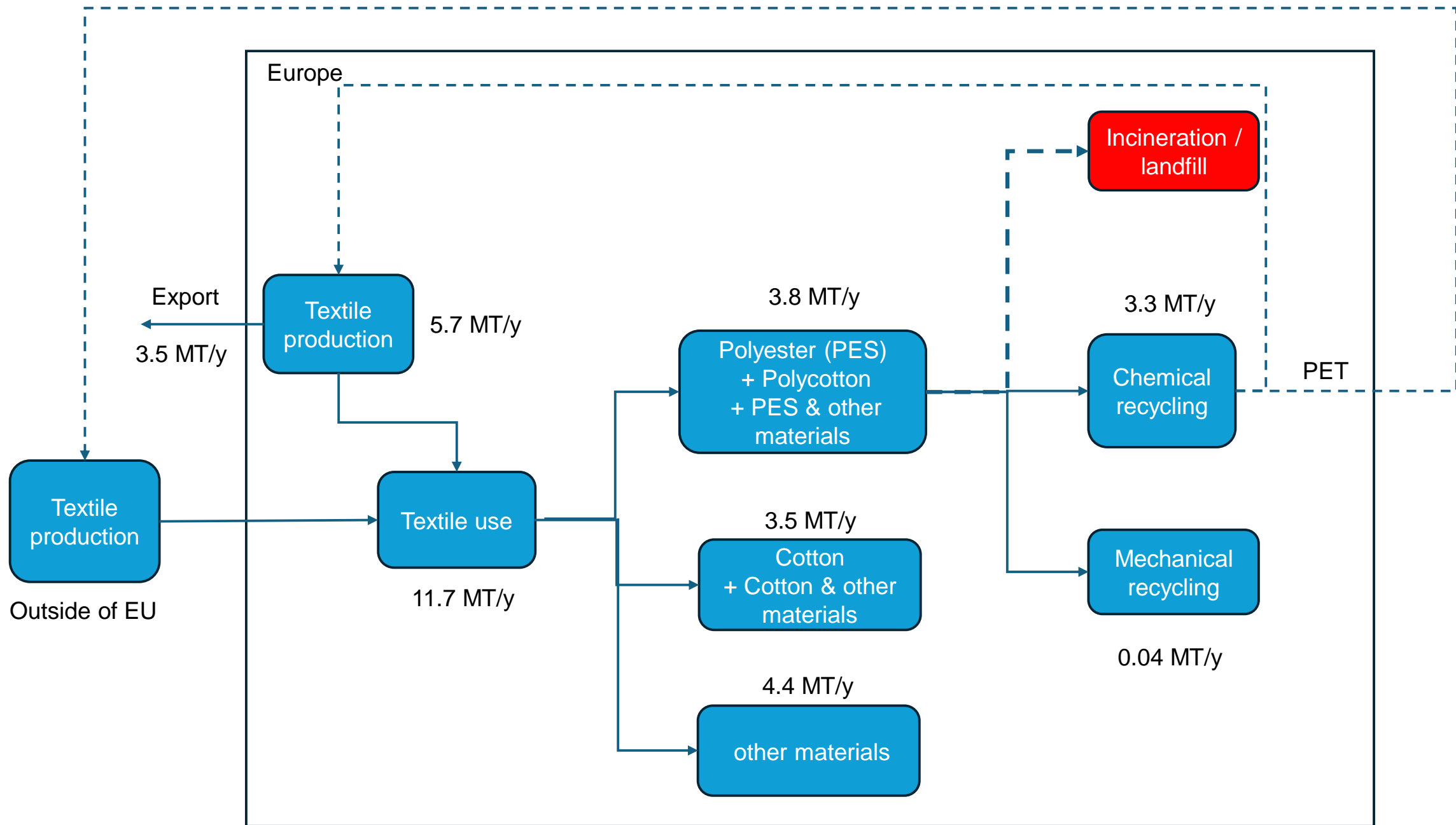
- Based on :
 - Material Synergies.
 - Established infrastructure
 - Advanced & Mechanical Recycling Technologies & Cutting edge recycling solutions supported.
 - Polyester Circular Economy Leadership.

PETCORE EUROPE has decided extend its efforts beyond packaging to tackle the challenges of polyester fibers.



Textile SIG Members





EU Green Deal Circular Action Plan (CEAP) for Textiles

- Key Initiatives concerning CEAP include:

- 1 - Extended Producer Responsibility (EPR). Responsibility for collecting and recycling used textiles: Thus Fostering a closed loop systems.
- 2 - Circular designed principles. New eco-design standards for textiles Durable, repairable, reusable, RECYCLABLE.
- 3 - Sustainable Fiber Use: Greater use of recycled and sustainable fibers is encouraged specially through POLYESTER but reducing use of it ...
- 4 - Reduction of microplastics pollution from textiles. Polyester being concerned, EU promoting the development of new synthetic fibers.



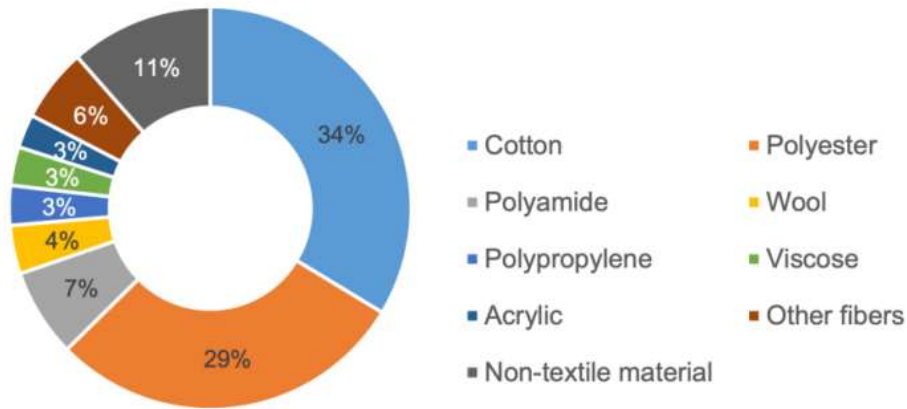
Other key targets

- 1- Carbon Neutrality (Net ZERO by 2050)
- 2- Separate Textile Responsibility (by 2025)
- 3- Harmful Chemical regulation: phasing out hazardous chemical (cheep dyes...)
- 4- Sustainable consumption (better information)



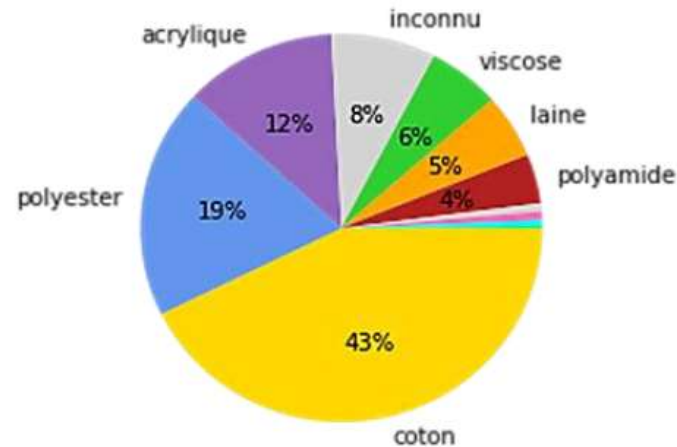
Post consumer Textile waste Fraction composition

European textile waste composition



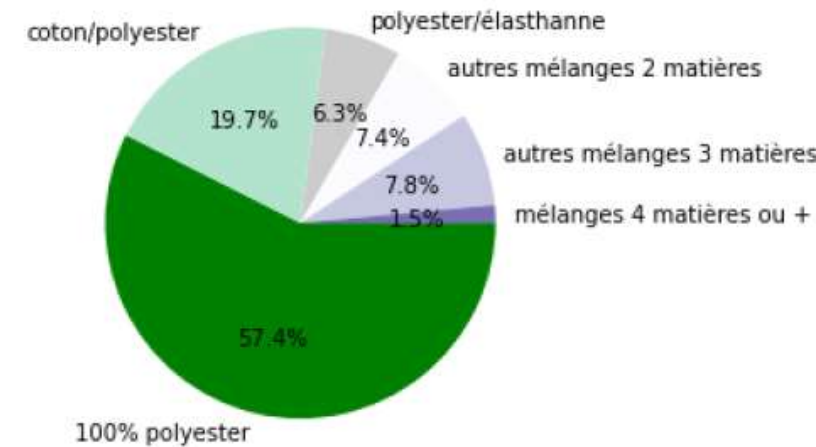
Source: Techno-scientific assessment of the management options for used and waste textiles in the European Union JRC, 2023

French textile waste composition



Source: Re_fashion Study, 2023

French polyester waste type



Source: Re_fashion Study, 2023

- Polyester is the second main fiber after cotton in textile waste
- Circa 43% of the polyester waste are mixed with other fibers

The priority for our members?

The key challenge lies in driving global expansion of textile circularity while simultaneously aligning all recycling steps across the EU

Given the complexity of the polyester textile waste stream the challenge is immense.



The priority for our members?

- For mechanical recycling, the waste stream must be homogeneous. (It must be coming a special collection-small quantities.)
- Depolymerization is confronted to PURIFY 95% of the garments:
 - Cotton from Polyester (Not too difficult but considering a yield of 50%, is it viable economically ?
 - Polyester from Polyamide
 - Polyester from Elastane
 - Flame retardants, PVC...
 - And colours

Whereas FINANCIALLY
ONLY HIGH CAPITAL
INTENSITY PROJECT WILL BE
CAPABLE TO PROCEED TO
TEXTILE POLYESTER
CIRCULARITY.



Key objectives: coordinating the Polyester Value Chain is essential

- Collection & Sorting
- Preparation for depolymerization & mechanical recycling
- Re-POLYMERIZATION ...
- And back to high quality fibres to garments...

UNLIKE PACKAGING, SYNCHRONISING SCALING
ACROSS THE TEXTILE EU VALUE CHAIN IS
CRUCIAL TO BUILT AN EU ROBUST
INFRASTRUCTURE.



- While managing additional short term regulatory issues(current state and global collaboration for EU alignment on simultaneous scalable solutions to review the EU Commission)
- Producers responsibility : Where do we stand? They are our future partners ! It will affect the collection & sorting due for 2025...
- Collection targets: reverse logistic strategy, take back programs...
- Incentivising sustainable choices: DRS, discounts on purchasing...
- Recycled content : requirements for recycled material standards and calculation of incorporations rates.



Additional short term regularity issues:

- End of waste (EoW) regulations: Cessation of waste for materials.
- Harmonised, clear and favorable waste shipment rules.
- Clear labelling standards: implement transparent labelling.
- Monitoring and enforcement mechanisms.
- ...

Conclusion

Despite the complexities which engenders the
Green Deal

Circularity & Competitiveness is the next
priority

Let's work on it together!



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Annual Conference 2024

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Communications Campaign

www.recycletheone.com



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