



IONCELL

Sustainable textile fibre
for the future

www.ioncell.fi

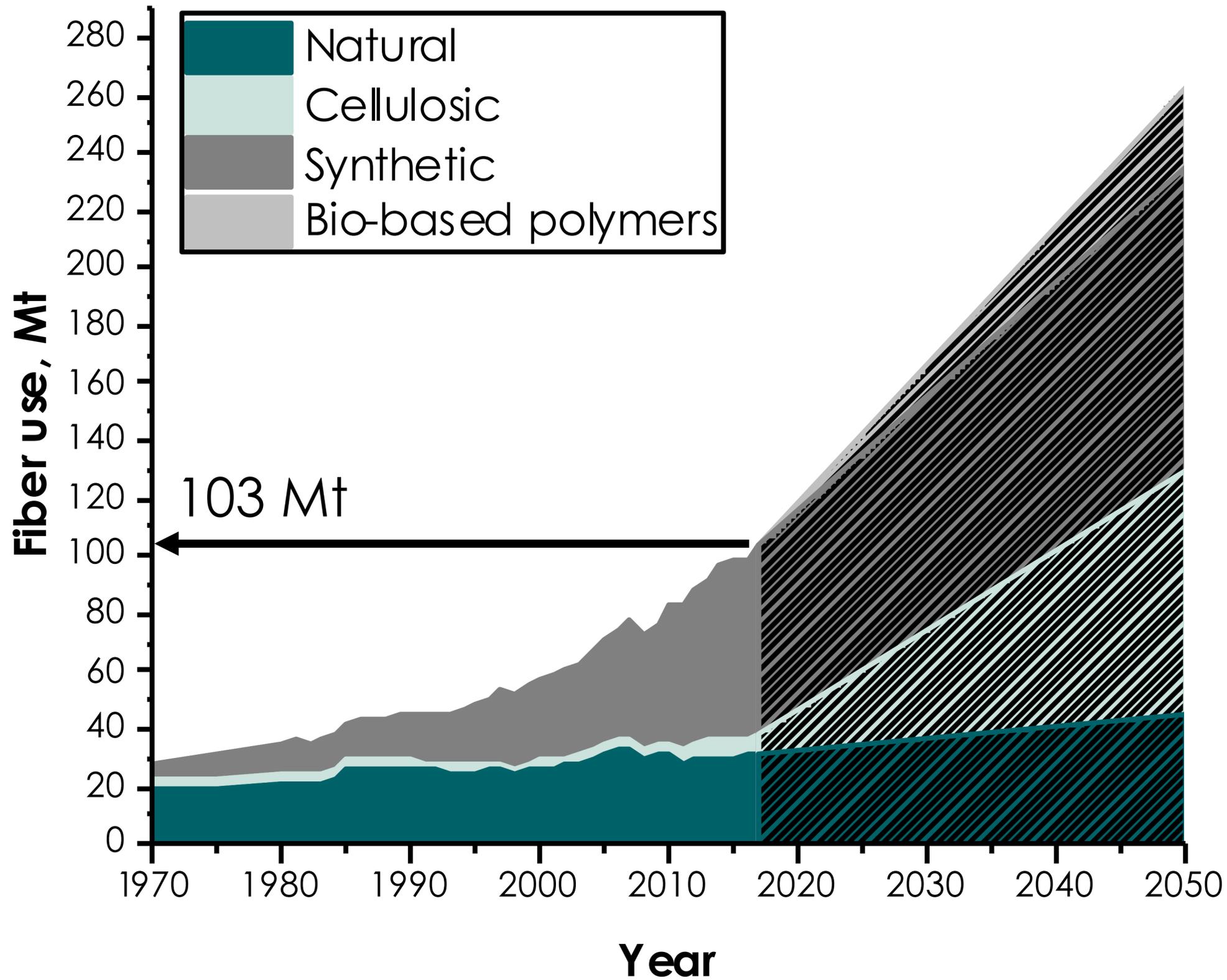
 [@IoncellFibers](https://twitter.com/IoncellFibers)



Aalto University

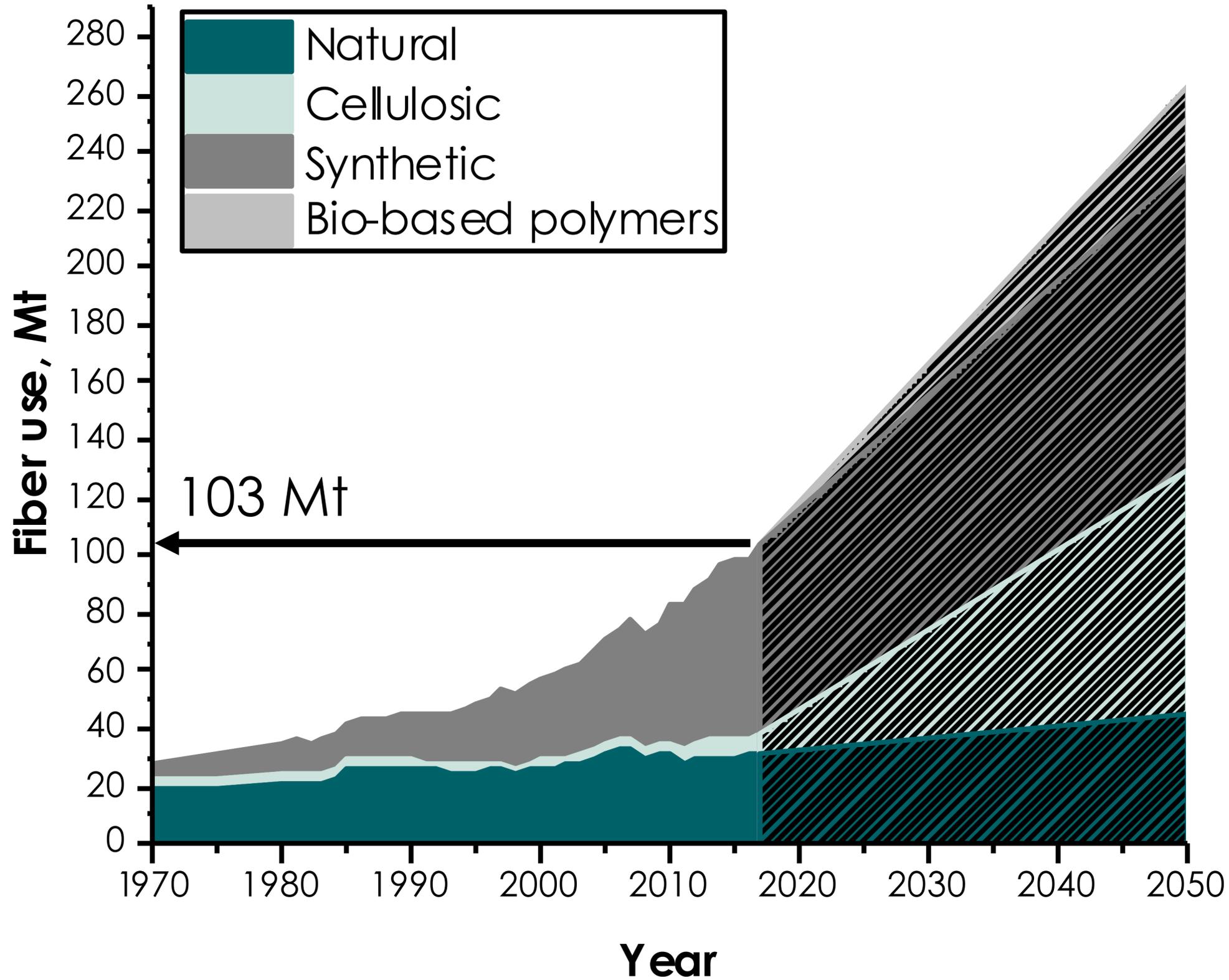


UNIVERSITY OF HELSINKI

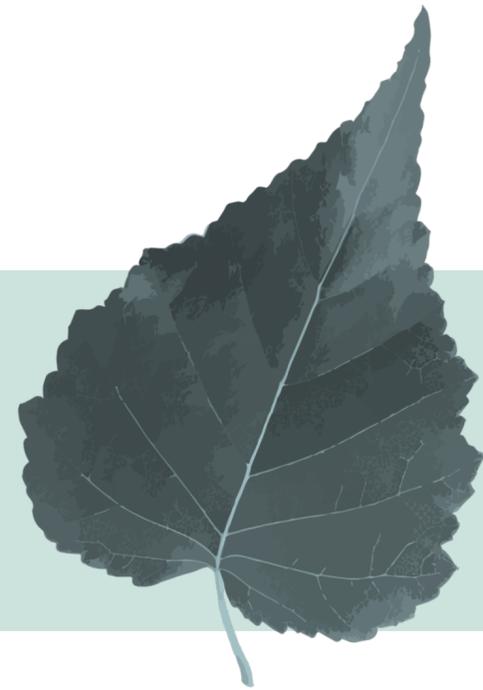


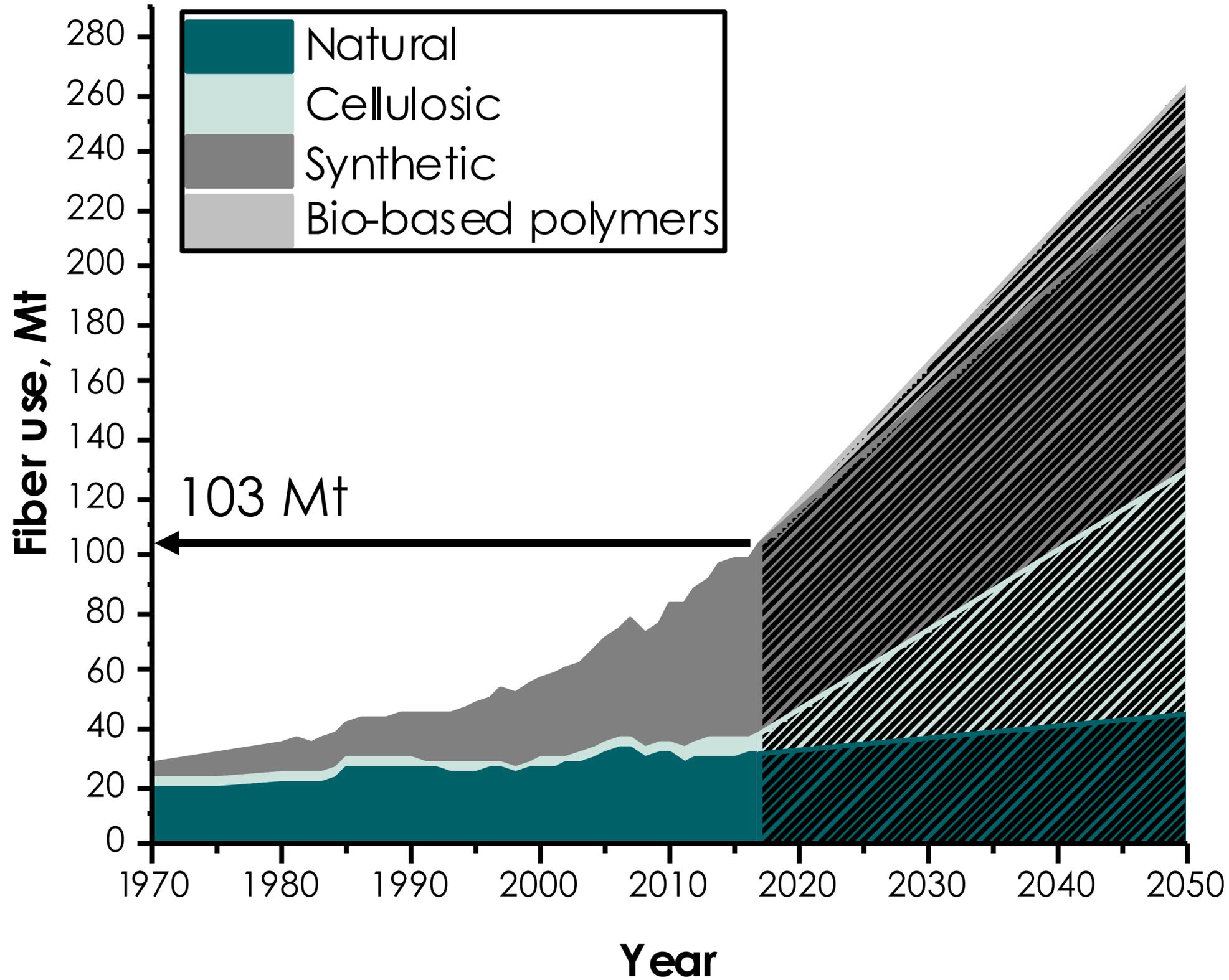
 Non-renewable, oil-based Microplastics released in washing

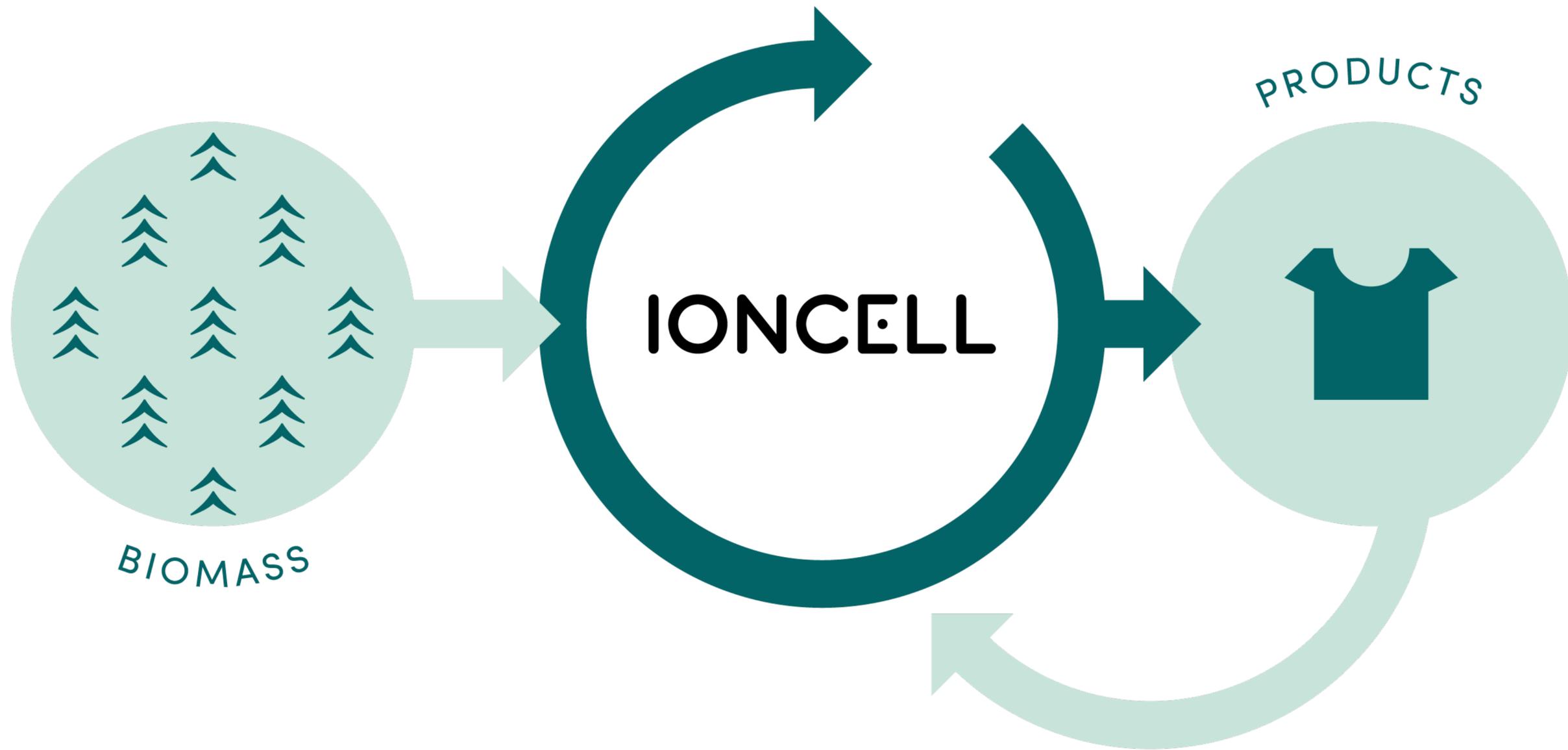
Cotton cultivation requires a lot of water, chemicals and arable land 

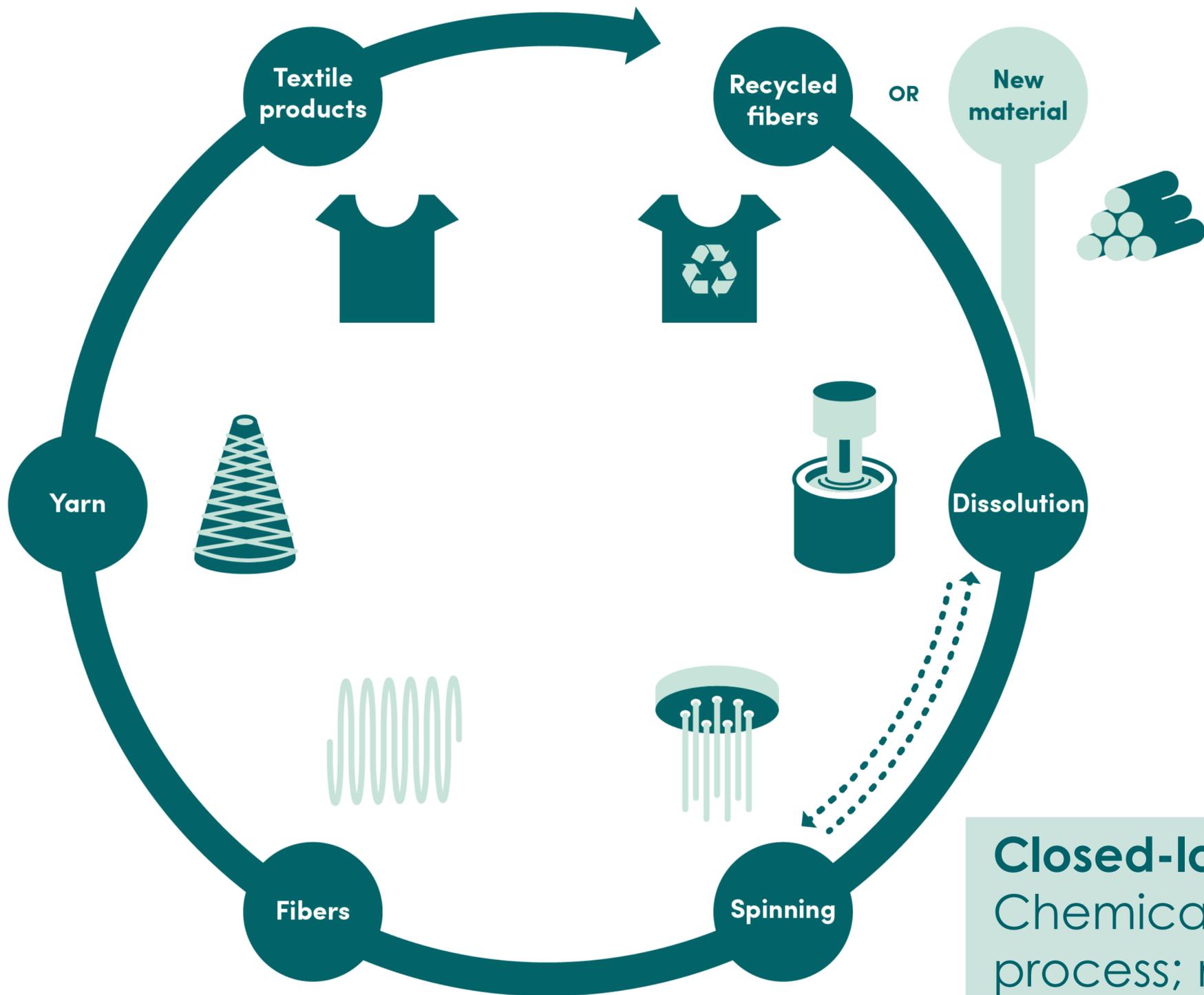


**Sustainable
Renewable
Biodegradable**









Our process

Ioncell is a technology that turns used textiles, pulp or even old newspapers and cardboard into new textile fibers without harmful chemicals.

Closed-loop operation

Chemicals are re-used in the process; no emissions or losses



Ioncell fiber properties

- Durable and strong
- Moisture absorbing
- Soft
- Bright lustre
- Biodegradable



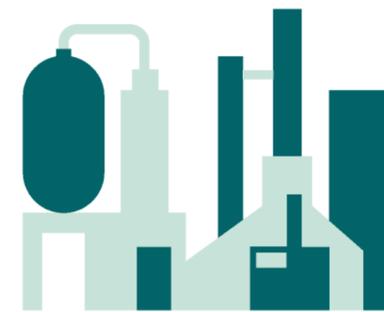
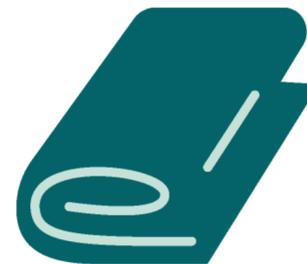
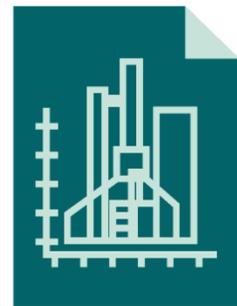
Ioncell fiber properties

	Tenacity (cN/tex)	Elongation (%)
Ioncell	50	12
Tencel	40	13
Modal-viscose	35	13
Cotton	30	8

Tensile strength values of cellulosic fibers

Source: Ioncell-F: unpublished data; Cotton Incorporated, U.S. Upland cotton 2016, <http://www.cottoninc.com/fiber/quality/Crop-Quality-Reports/Final-Cotton-Crop-Quality-Summary/2016-Final-Crop-Quality-Rpt.pdf>; Lenzing Fibers, Lenzing Modal® Data sheet, 2015

IONCELL



2018

Technology and product development
Design of pilot

2019

Technical concept ready and proven in lab scale
Construction of pilot

2020

Piloting

2021

Proof-of-scalability

2022

Technology ready for industrialization

2025

Commercial production starts

Jenni Haukio, spouse of Finnish President Sauli Niinistö, will wear an Ioncell evening gown to this year's Independence Day reception on 6 December.

Thank you!

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 @IoncellFibers

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