

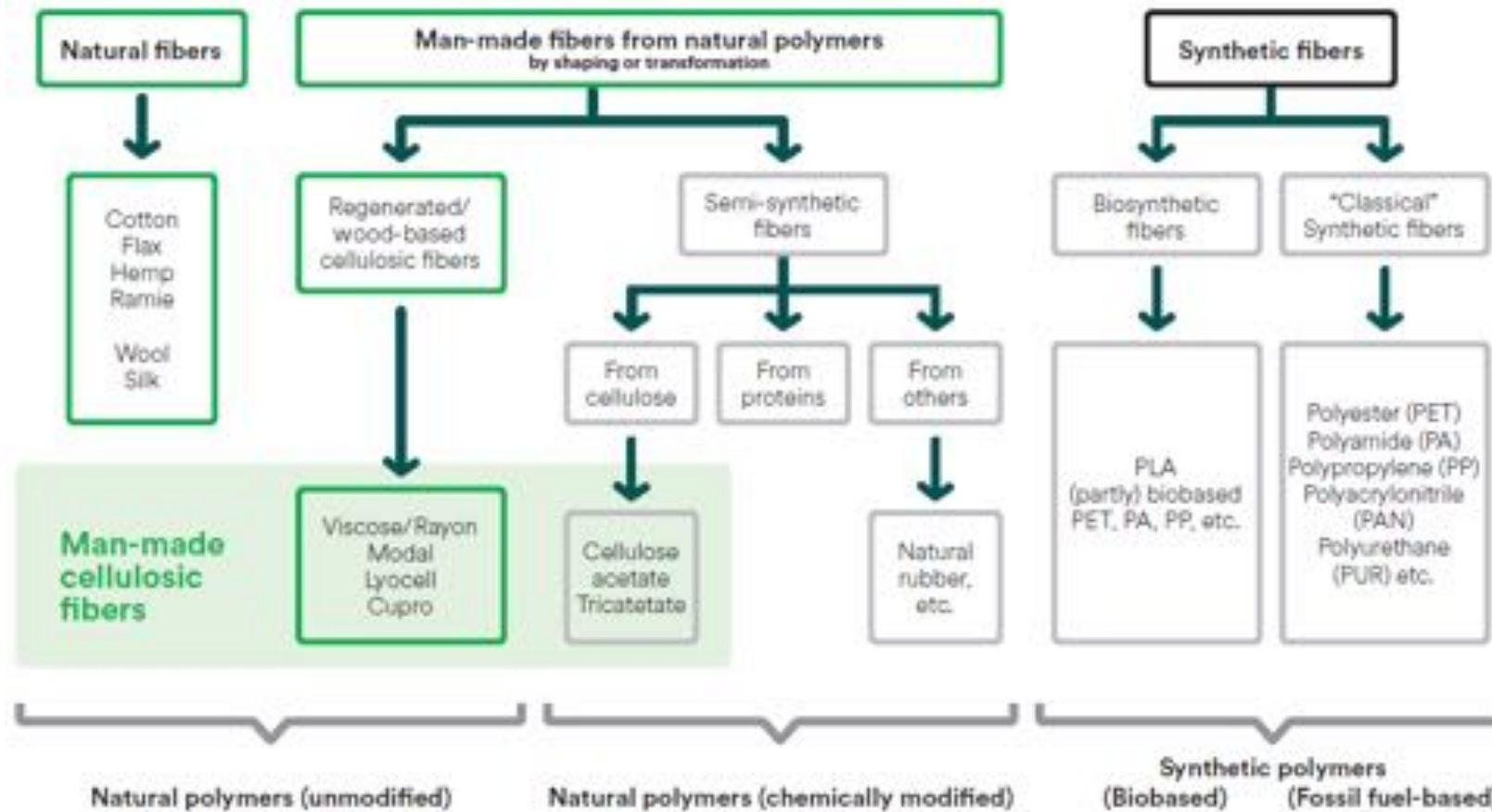
**Innovative**  
**by** *nature*

**Fibers made from Wood – our  
Position in the Circular and Bio-Based  
Economy**

Bioeconomy in our daily life – Webinar „Wear What You Talk“  
June 17th, 2020

Caroline Ledl, Lenzing AG

# Where do Lenzing fibers stand in terms of raw material

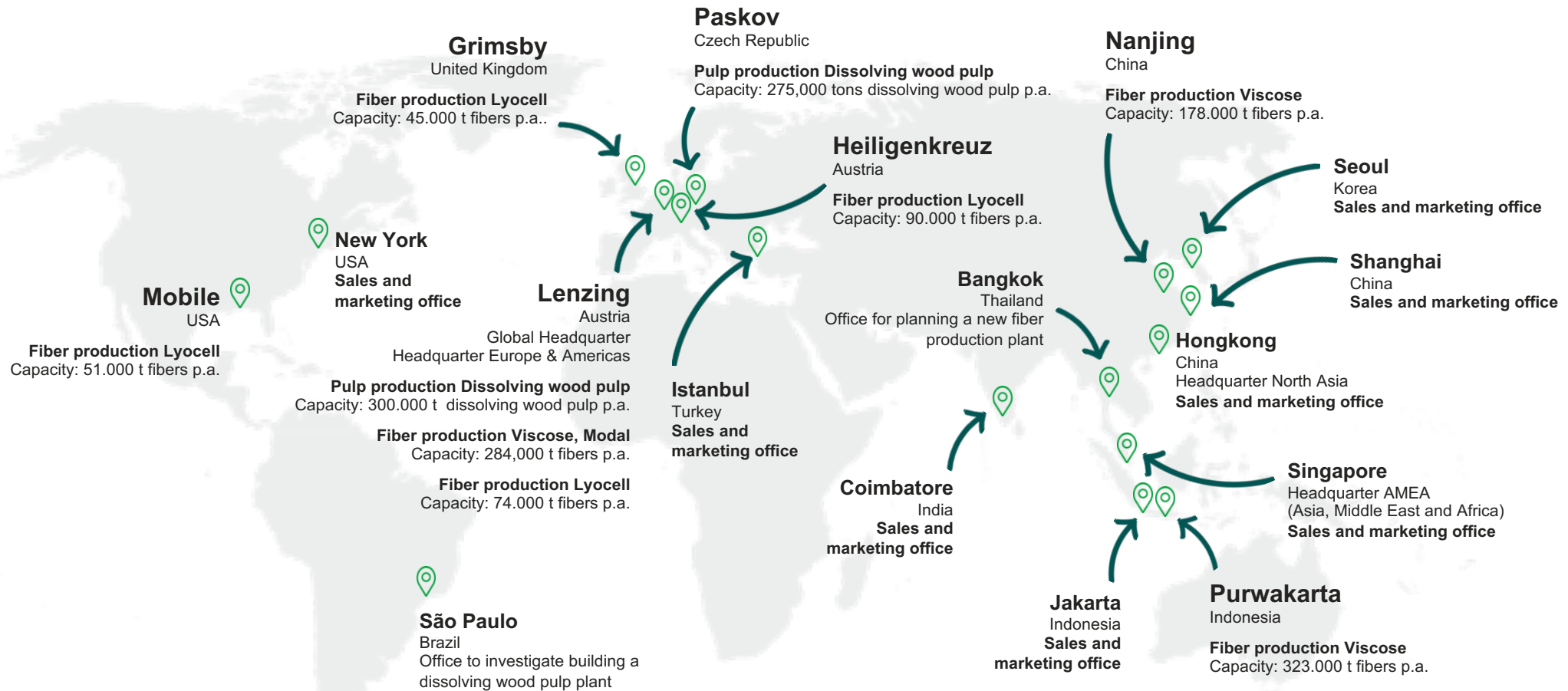


# LENZING™ fibers produced from the raw material wood





# Locations of the Lenzing Group



Nameplate capacities as at December 31, 2018

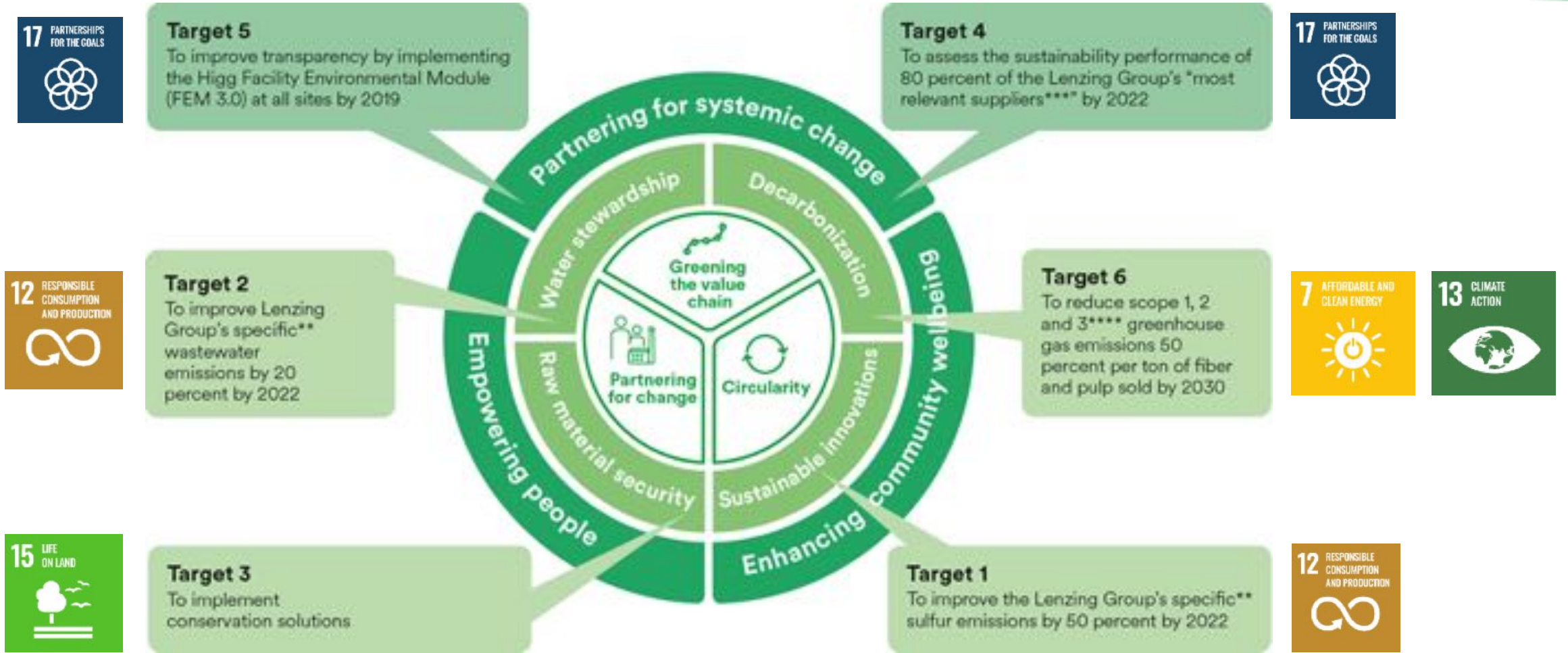
# Key sustainability challenges for Lenzing

- Responsible wood & pulp sourcing
- Sustainable production technologies
- Circular economy
- Microplastics
- Transparency, footprinting, track & traceability



# Lenzing's sustainability targets

Our contribution to SDGs



# 100% of Commercially used Wood and Pulp are certified/controlled

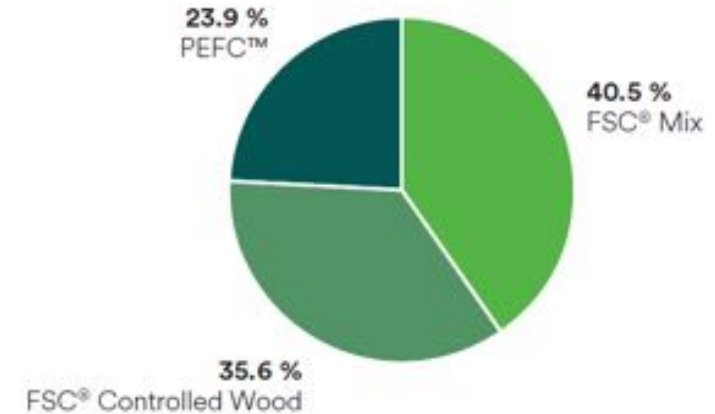
## Strict wood and dissolving pulp sourcing policy

- NO sourcing from controversial sources, including:
  - ancient and endangered forests
  - high conservation value areas

## All Lenzing production sites are FSC® certified

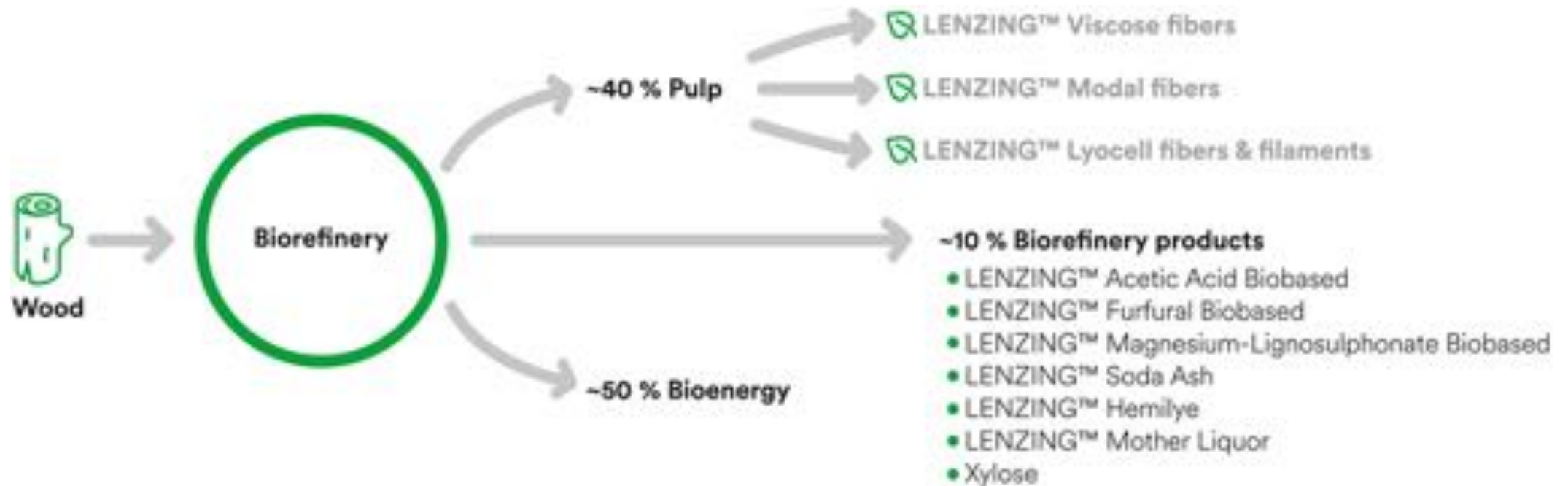
- Dissolving wood pulp uses < 1% of global harvested wood
- Lenzing's dissolving pulp is made from beech, spruce, eucalyptus

## Wood certification status (2019)



# The Lenzing Biorefinery

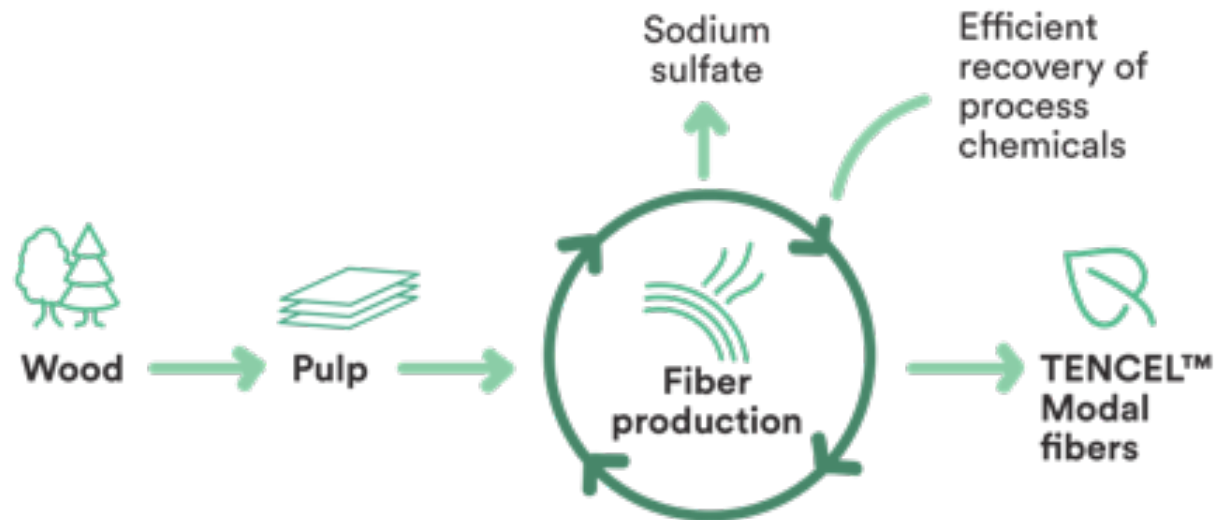
Highly efficient use of the raw material wood in the Lenzing Group's biorefineries





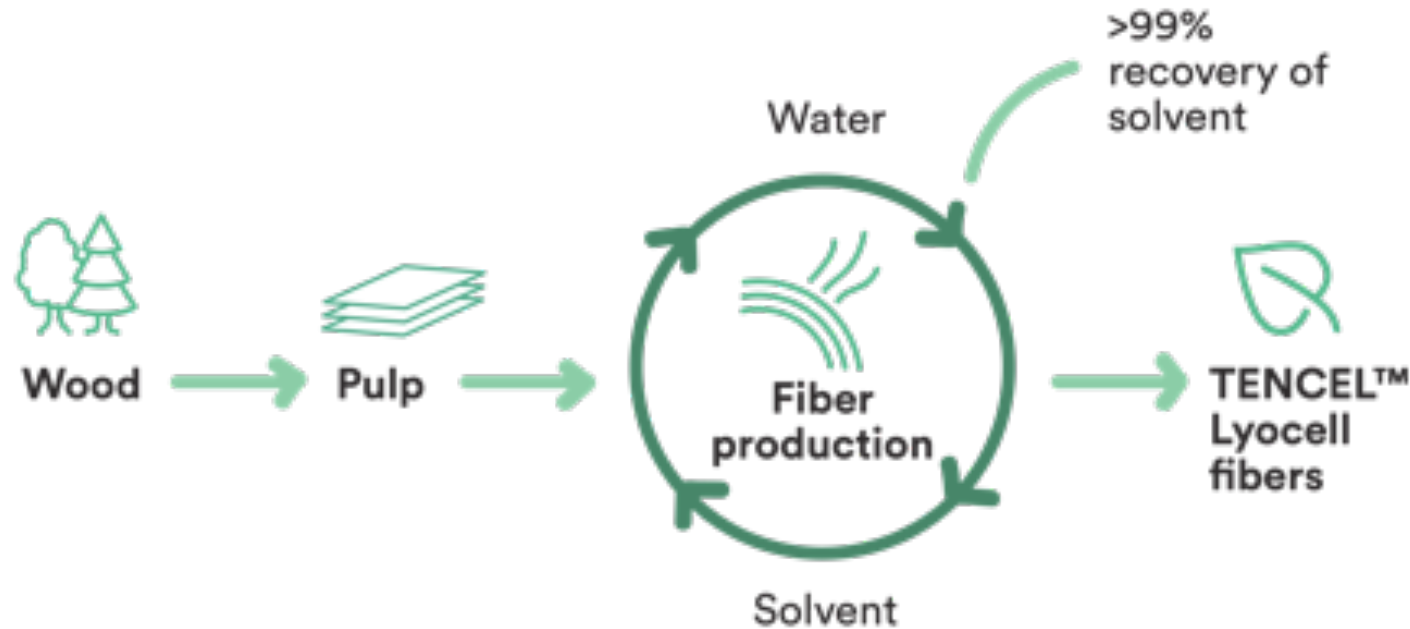
# TENCEL™ Modal fibers production

- TENCEL™ Modal is exclusively produced at Lenzing in Austria
  - Integrated production site for pulp and fiber production
  - Pulp production generated energy supply for the site



# TENCEL™ Lyocell fibers production

- TENCEL™ Lyocell fibers are produced in Austria, UK and US
- Lyocell process uses an organic solvent NMMO for the fiber production
  - Solvent is reused in the fiber production
  - Water is also reused



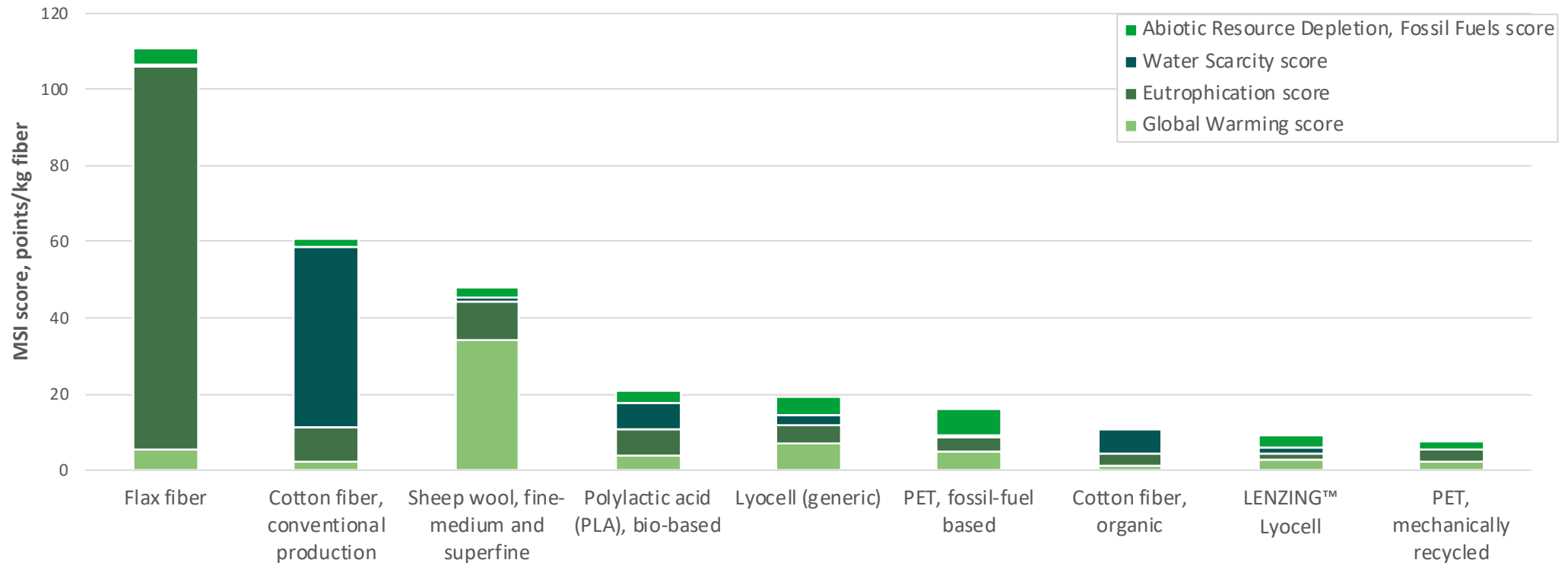
# TENCEL™ x REFIBRA™ Lyocell fibers



TENCEL™ Lyocell fibers with REFIBRA™ technology feature up to **30% of recycled raw material content**, where some **pre-consumer cotton textile waste is used** a part of the raw material.

Lenzing's **five-year vision** is to raise the industry bar by producing fibers with REFIBRA™ technology by having **up to 50% recycled content from post-consumer cotton textile waste** to make textile waste recycling as common as paper recycling.

# LENZING™ Lycoell fibers show improved environmental impact compared to other fiber types



Note: These results were calculated using the Higg Material Sustainability Index (Higg MSI) tools provided by the Sustainable Apparel Coalition. The Higg MSI tools assess impacts of materials from cradle-to-gate for a finished material (e.g. to the point at which the materials are ready to be assembled into a product). However, this figure only shows impacts from cradle to fiber production gate. LENZING™ branded fibers' Higg MSI scores were calculated based on Higg MSI database (status: October 2019). Higg MSI data for fossil-fuel based synthetic fibers (i.e. PET) represents the production of flakes/granulate material only – additional efforts to produce PET staple fibers (extrusion / staple fiber spinning) are estimated on the basis of Higg MSI data for subsequent processing.



# Certificates and recognitions of Lenzing fibers

## Wood sourcing



## Environmental



## Product safety



**Disclaimer:** Customers should note that the third party certification and use of logos only relates to the fiber, and that final products would need recertification. There is no implied right for the customer to use any of the logos described herein.

Thank You

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