

# O&F – 2019

*Le véritable ruban français  
et 100% **BIO**!*

O&F – Solutions of 100% bio and bio based ribbon, recycled ribbon and 100% biodegradable ribbon

*Oriol & Fontanel*

ORNEMENTS TEXTILES

[www.oriol-fontanel.fr](http://www.oriol-fontanel.fr)

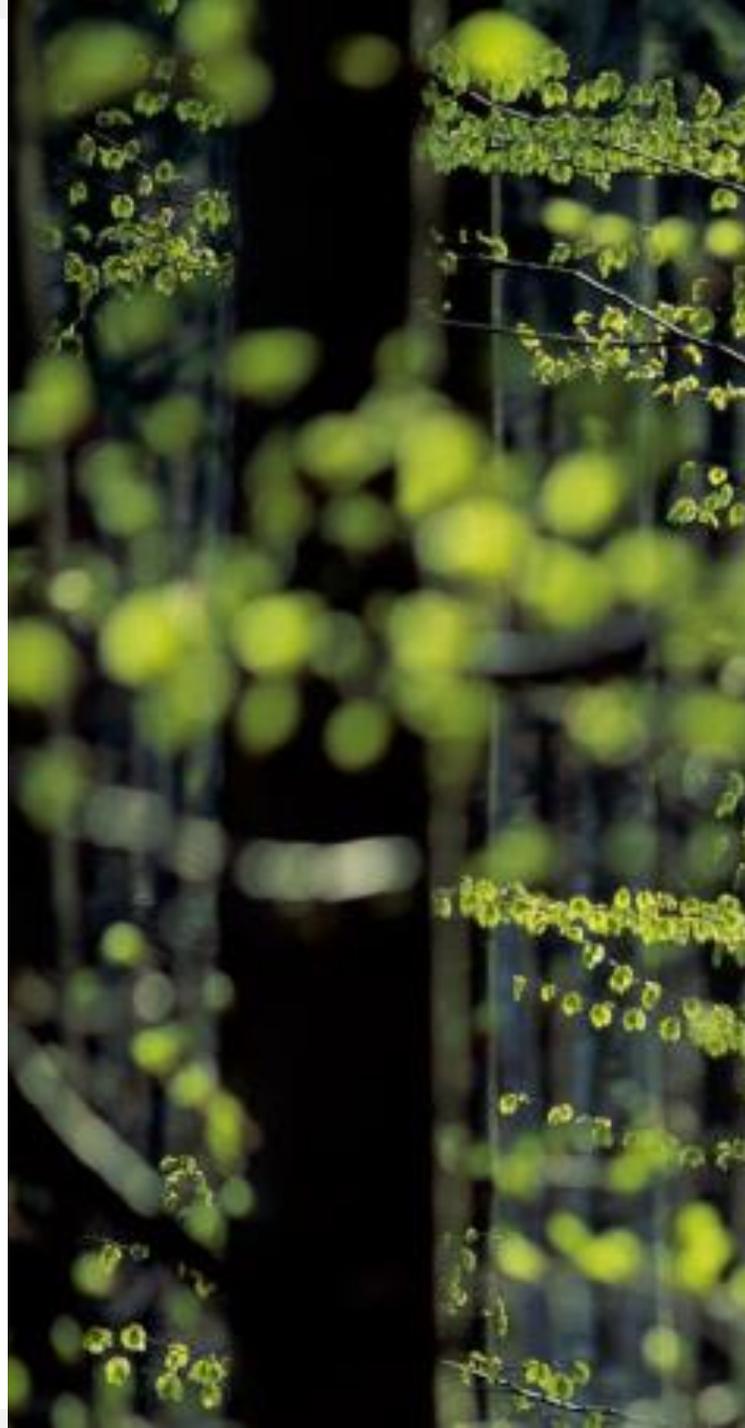
*L'habilleur de parfums*



*Oriol & Fontanel*

RUBANS DÉCORATIFS





## TENCEL AND MODAL FIBERS

- ORIGIN OF THE TENCEL AND MODAL
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- CLOSED-LOOP PRODUCTION PROCESS
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- PACKAGING RIBBON IN TENCEL



## RECYCLABLE POLYESTER YARN



## 100% BIO COTTON

**WHAT IS TENCEL  
YARN AND WHY  
USING A TENCEL  
RIBBON  
FOR YOUR  
PACKAGING ?**

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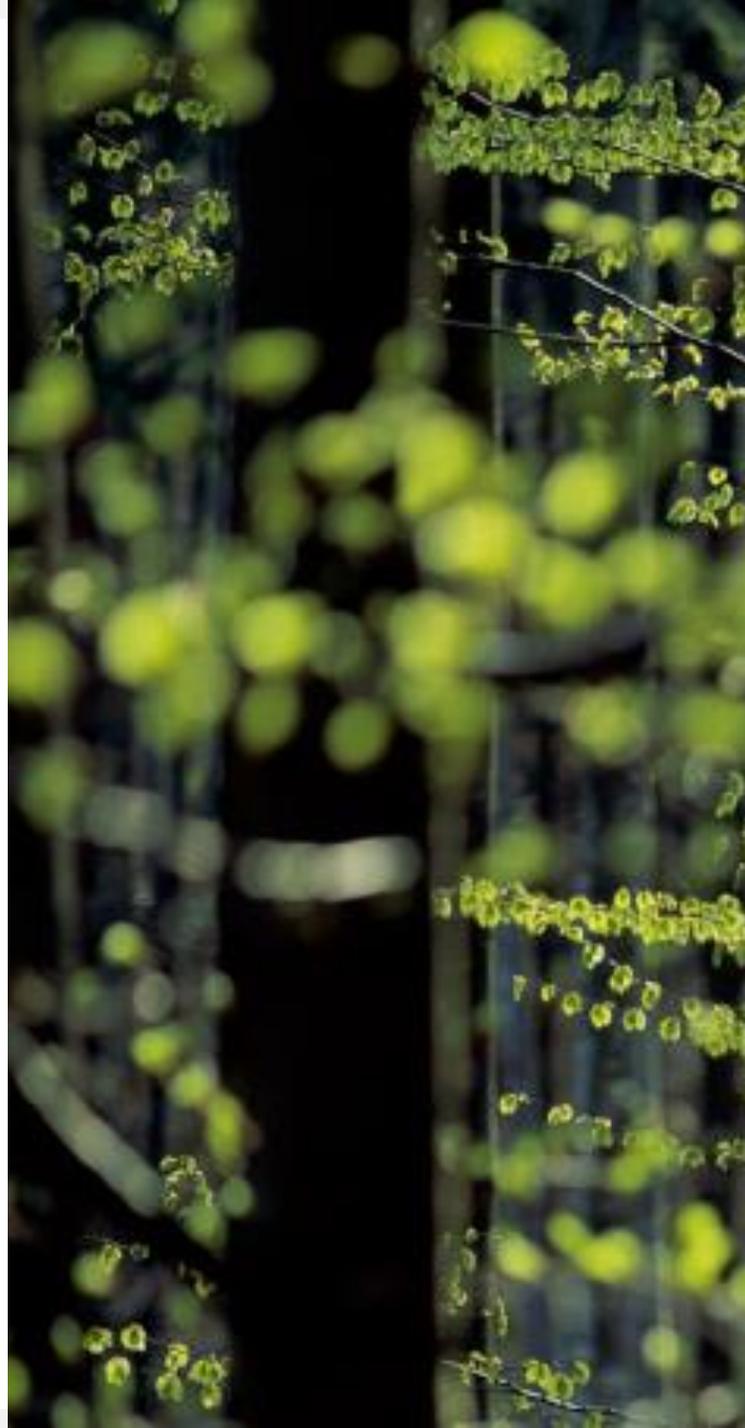
**TENCEL AND MODAL FIBERS**

LENZING™ Lyocell fibers

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# ORIGIN OF THE TENCEL AND MODAL



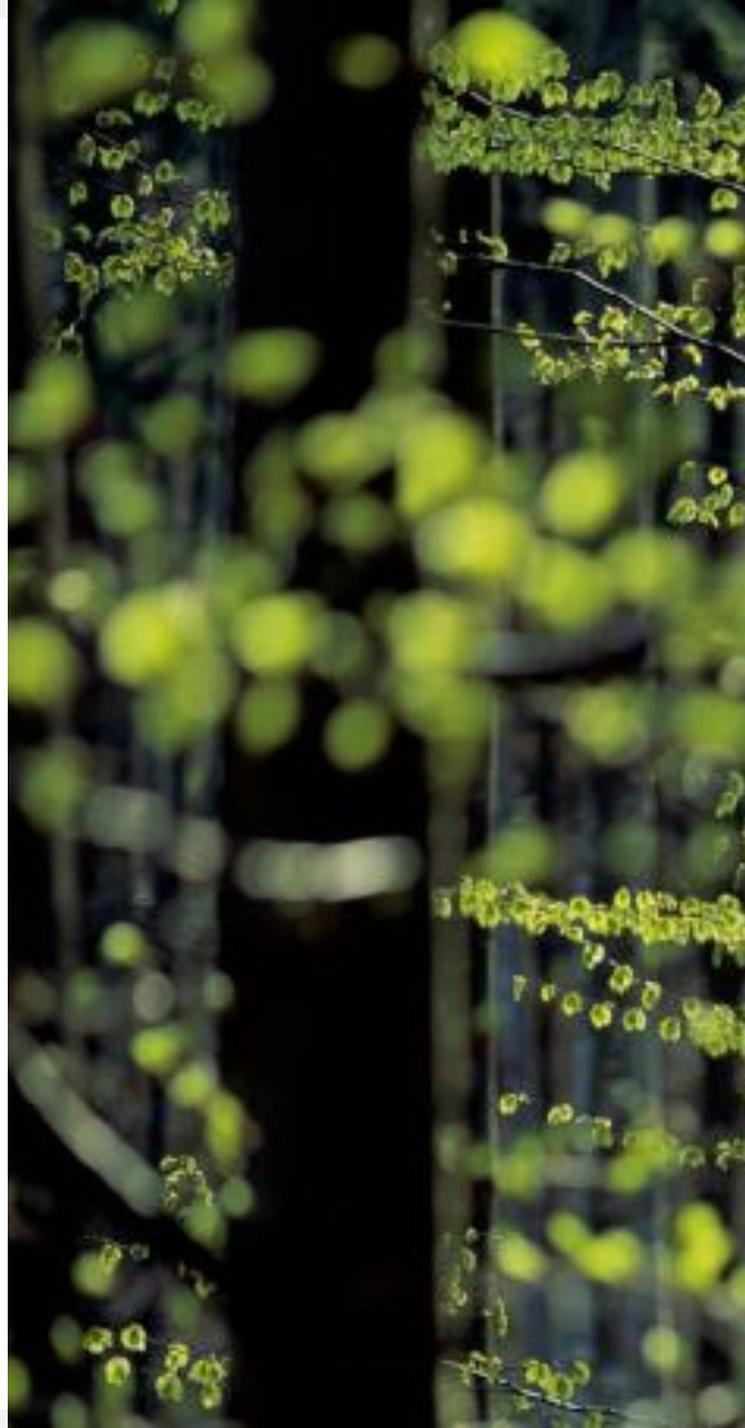
Lyocell is a form of rayon which consists of **cellulose** fibre made from dissolving pulp (**bleached wood pulp**), using dry jet-wet spinning. It was developed at the beginning of 1972 by a team at the now defunct American Enka **fibers** facility in Enka, North Carolina.

*Tencel is a trade mark of a new generation of artificial fibre called Lyocell. This artificial fibre comes from the same family as Fibrane, rayon/viscose and acetate.*



Lyocell, better known as **Tencel**, is a sustainable and natural fiber, made from the wood pulp of trees that are grown and replaced in specialized tree farms.

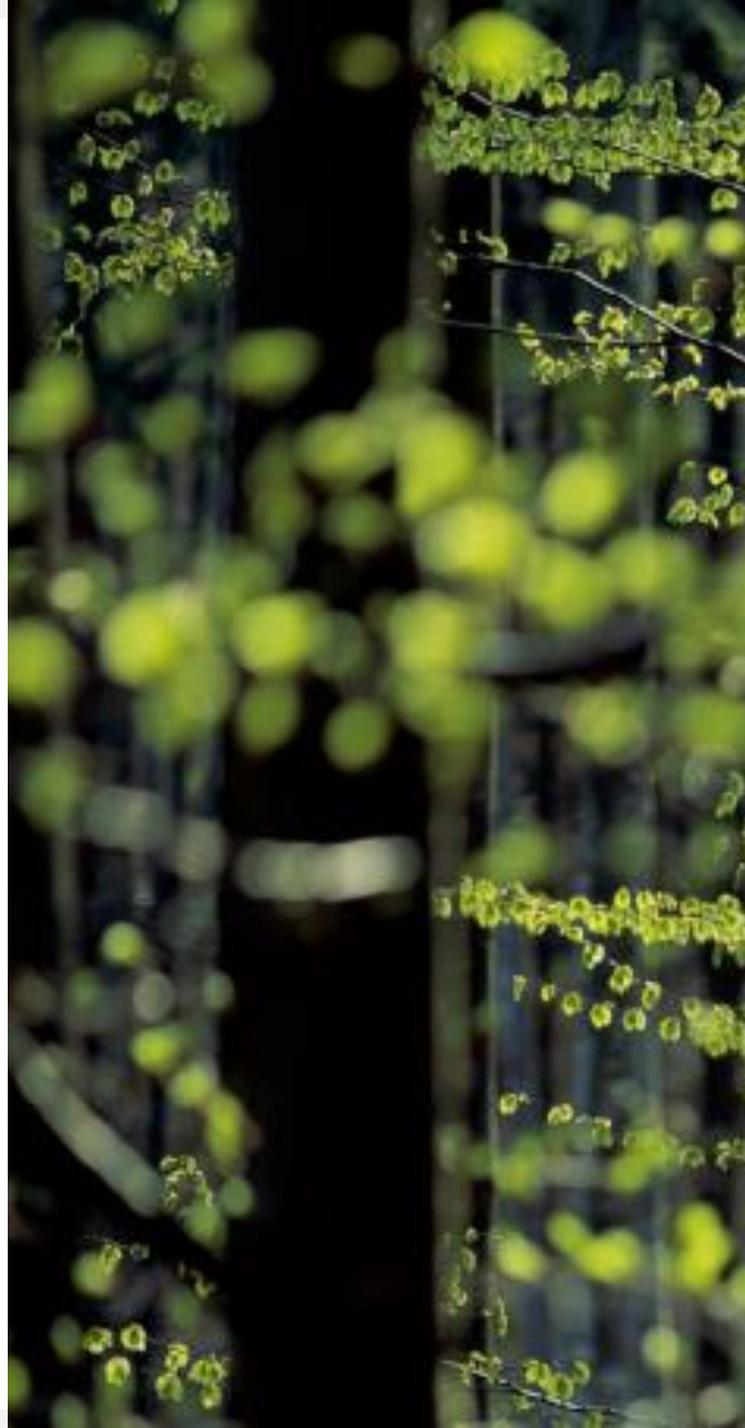
# SUSTAINABLE FIBER



Unlike most **cellulosic** fabrics, Tencel is produced by using **recyclable**, Earth-friendly solvents and “regenerated cellulosic fibers”, due to the manner in which they are manufactured.

Tencel® fibers originate from the renewable raw material wood created by the natural process of photosynthesis. The 100% organic Tencel® fibers are biodegradable and compostable, and can fully revert back to nature.

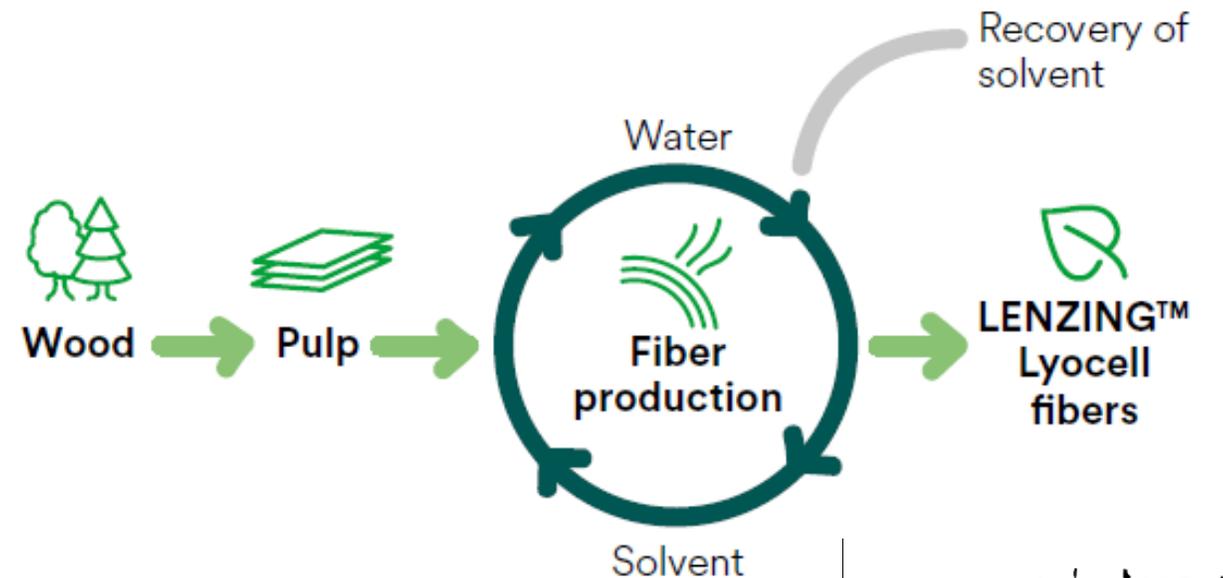
# CLOSED-LOOP PRODUCTION PROCESS



The fiber is economical in its use of energy and natural resources. It is produced in a closed-loop system\* which has a minimal impact on the environment and maintains economical use of energy and water. This solvent-spinning process recycles process water and reuses the solvent at a recovery rate of more than 99 percent.

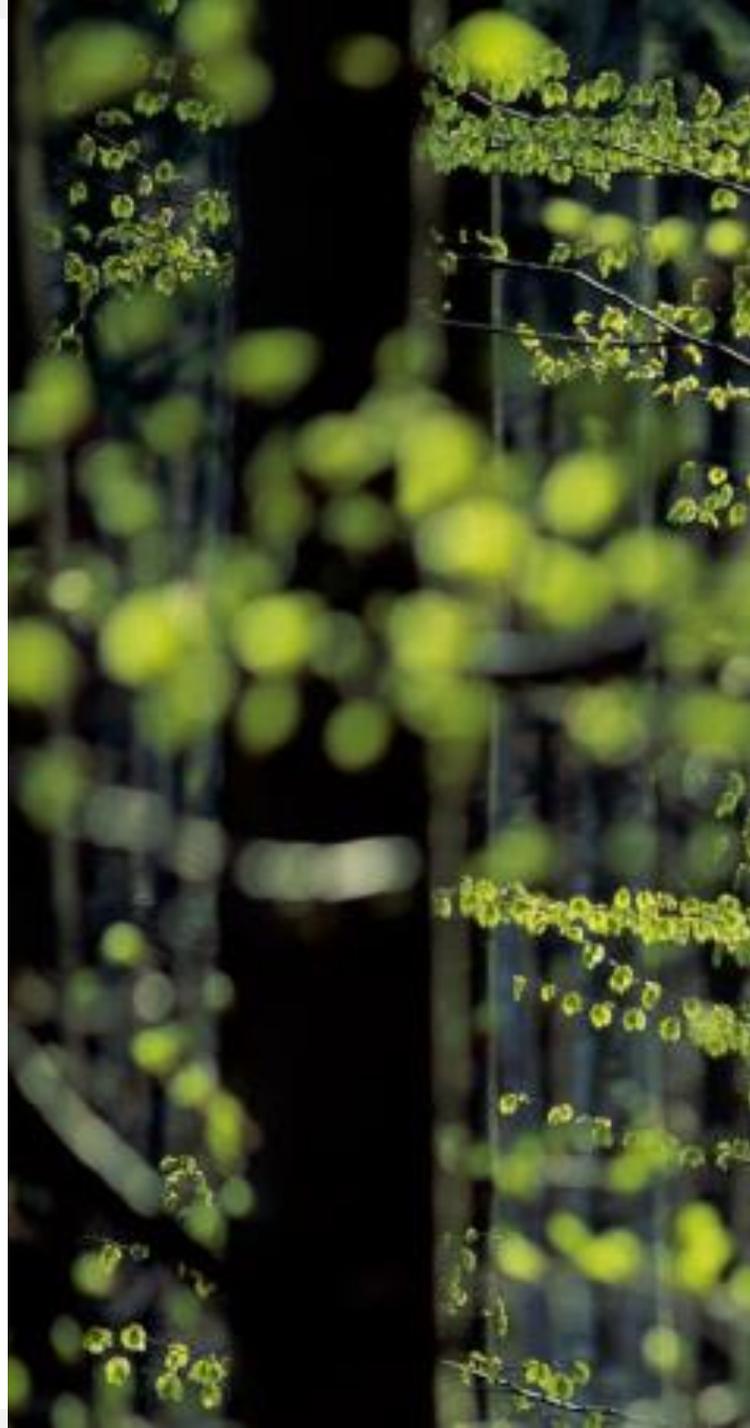
\* The closed-loop production process transforms wood pulp into cellulosic fibers with high resource efficiency and low ecological impact.

## LENZING™ Lyocell production process figure 4/5

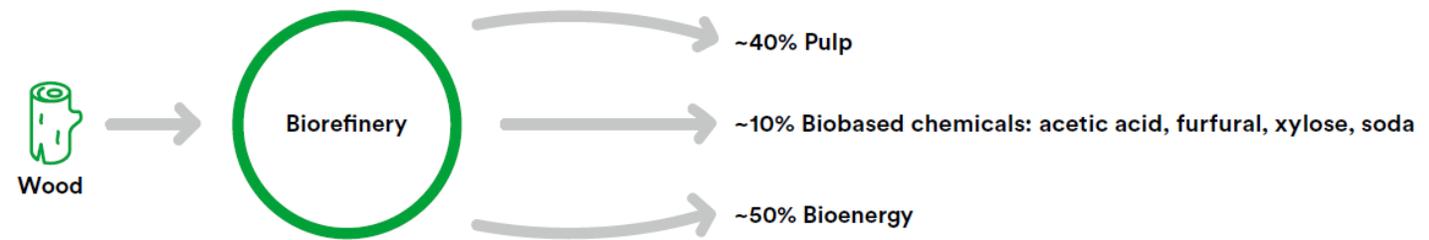


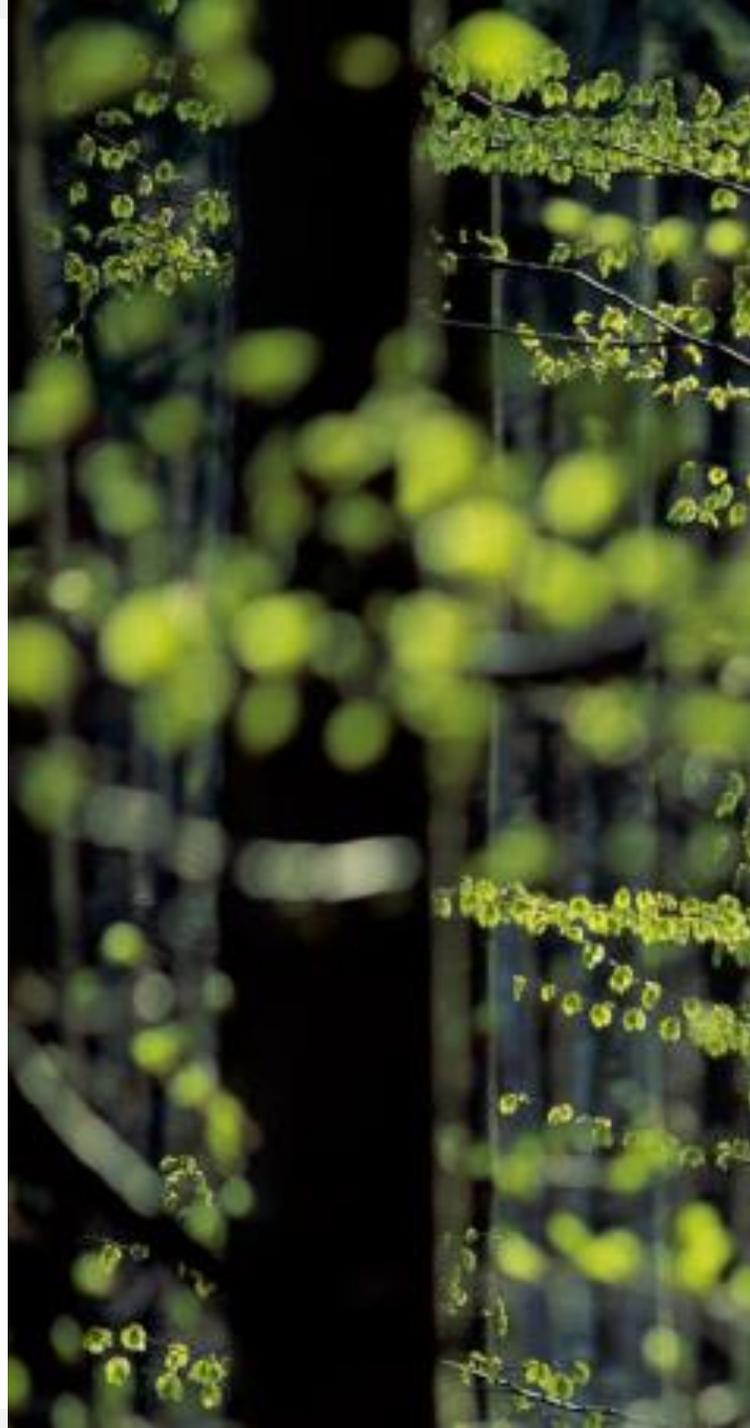
**CHEMICAL\***

\*Non-corrosive and non-toxic natural solvent.



Highly efficient use of the raw material wood at the Lenzing Group's biorefineries  
figure 4/2

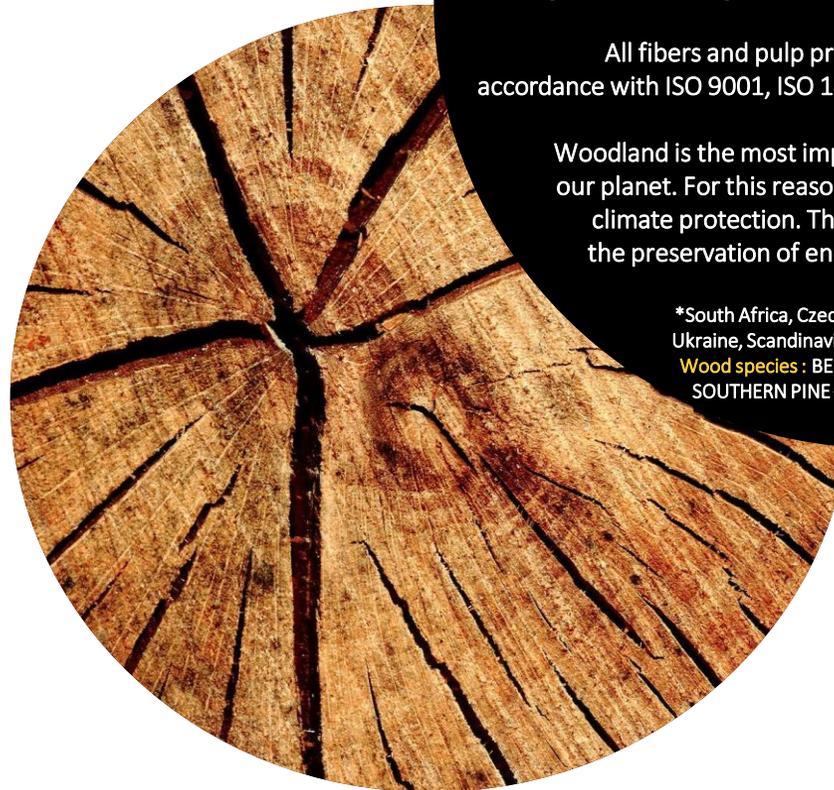
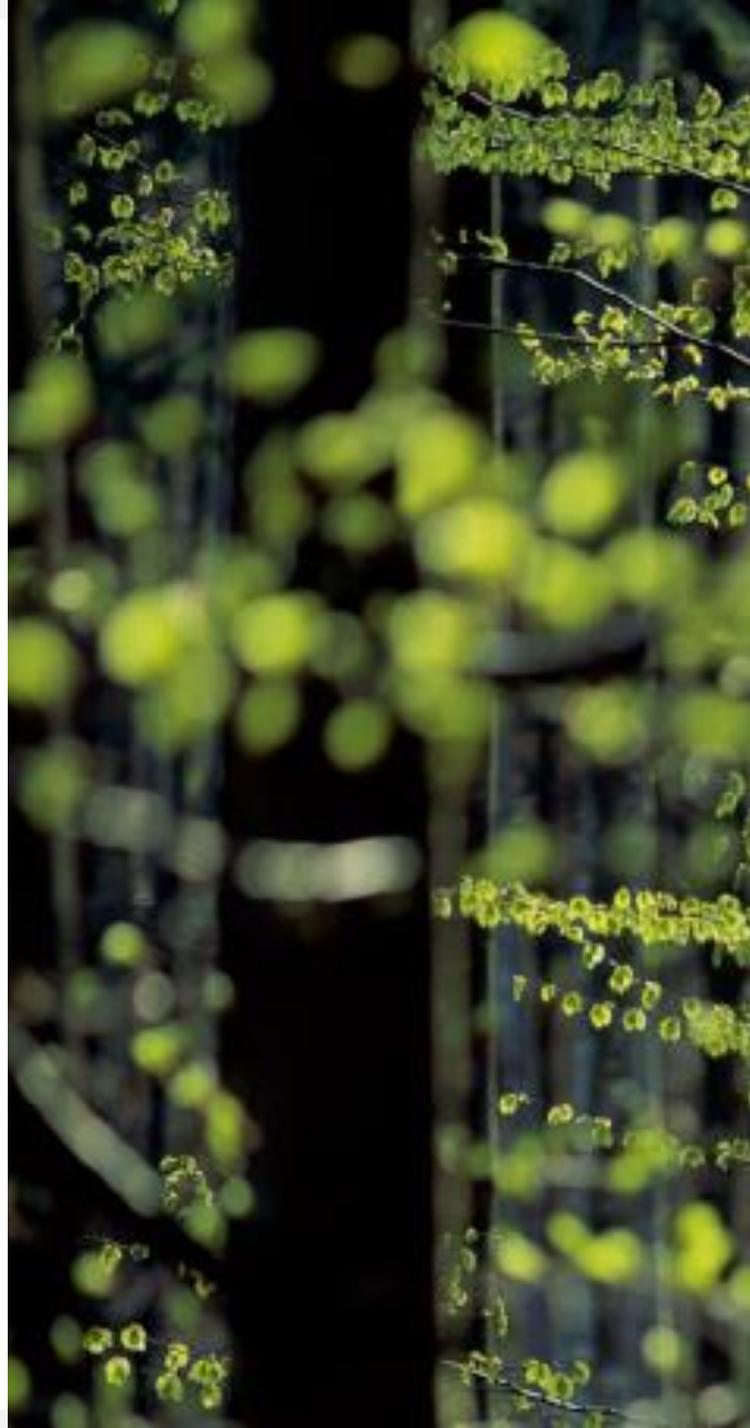




Tencel® consumes **only 3%\*** of the scarcity water used for conventional cotton cultivation.

Tencel®'s production from Eucalyptus is satisfied with **natural rainwater**.

\*According to the **Higg Index MSI**, the water scarcity used for the cotton fiber is **1,4409 m3** VS **0,0461 m3** for the Tencel fiber



More than 99 percent of the wood is sourced from **sustainable forestry operations\***. It is certified or inspected according to the **FSC®** and **PEFCTM** standards.

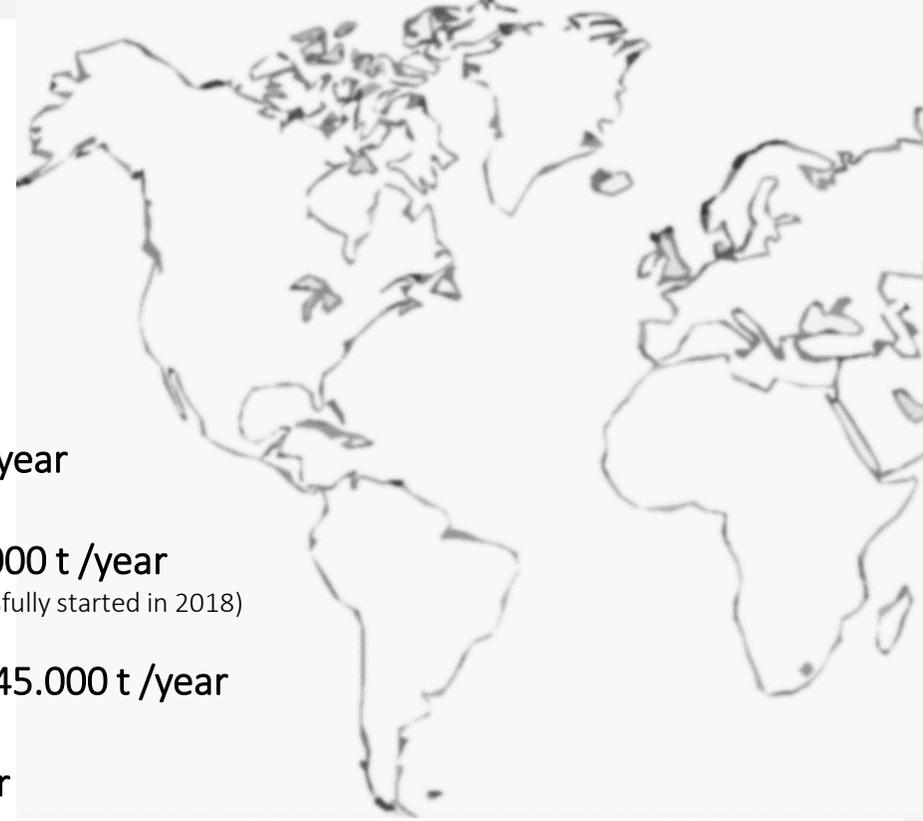
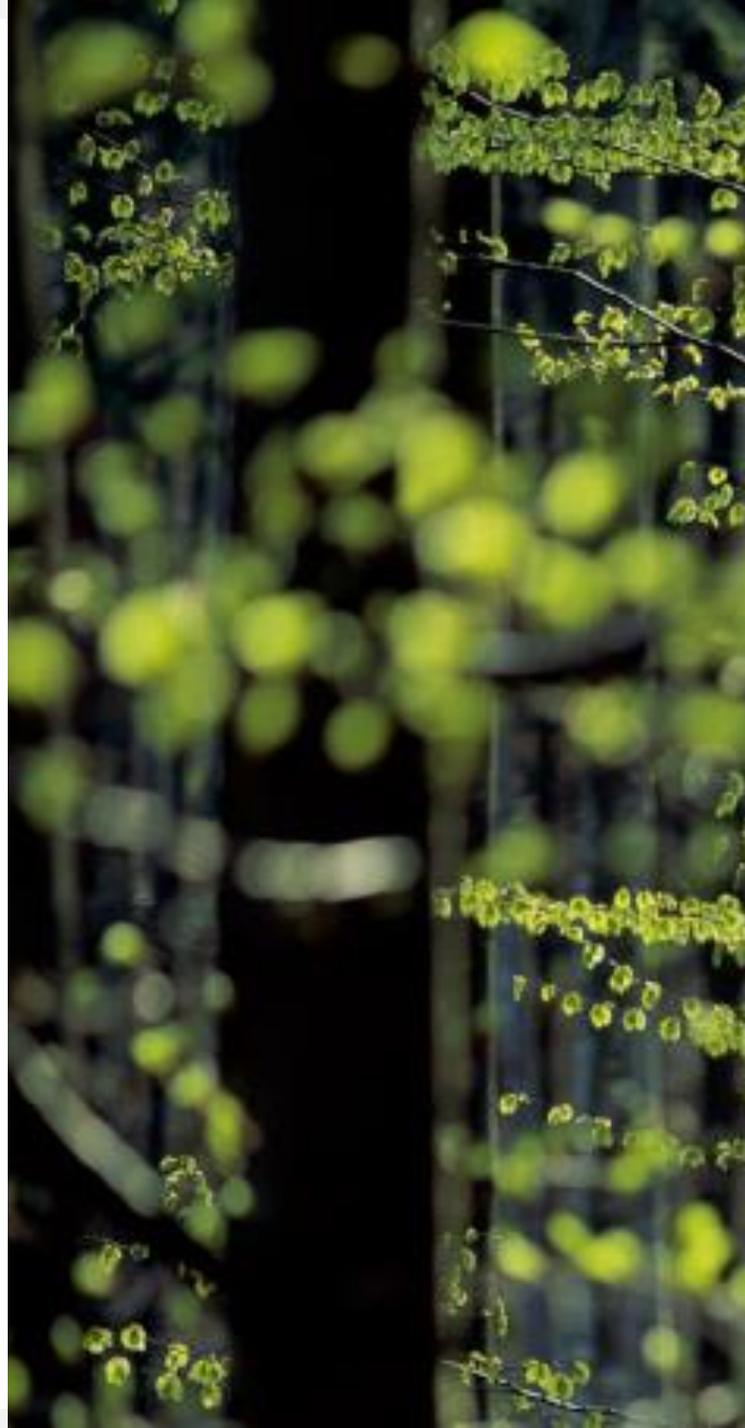
LENZING™ Lyocell Fibers are manufactured at this present time using dissolving pulp derived from wood as stated below and can be manufactured at these production sites: **Lenzing (Austria), Heiligenkreuz (Austria), Grimsby (UK) and Mobile (USA)**.

All fibers and pulp production sites are certified in accordance with ISO 9001, ISO 14001, OHSAS 18001 system certification.

Woodland is the most important storage facility for CO2 on our planet. For this reason, healthy forest areas are vital to climate protection. That's why we actively engage in the preservation of endangered and primeval forests.

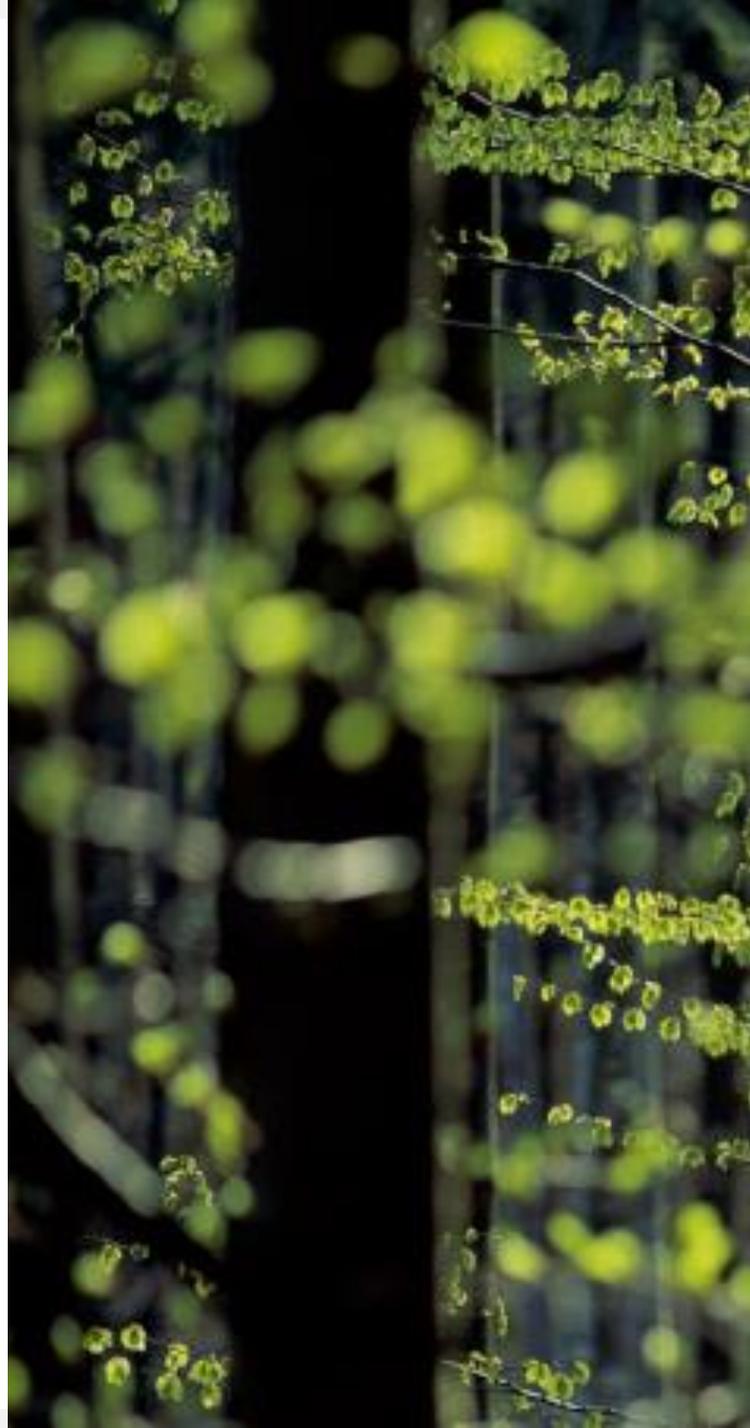
\*South Africa, Czech Republic, Slovenia, Slovakia, Ukraine, Scandinavia, Baltic countries, Russia, USA  
Wood species : BEECH – BIRCH – EUCALYPTUS – SOUTHERN PINE – SPRUCE – ASPEN – ACACIA

# LENZING™ LYOCELL PRODUCTION CAPACITIES



- Lenzing, Austria – 71.000 t /year
- Heiligenkreuz, Austria – 65.000 t /year  
(additional 25 kt lyocell ramp-up successfully started in 2018)
- Grimsby, United Kingdom – 45.000 t /year
- Mobile, USA – 51.000 t /year
- **Prachinburi, Thailand** – Next location to build a state-of-the-art facility to produce lyocell fibers by the end of 2020\*

## WHY HAVING A PACKAGING RIBBON IN TENCEL®?



Because, as explained above, Tencel® is **more eco-friendly** than cotton, which uses a lot of water, etc...

Moreover, **Tencel®** was created to allow a wide range of colours, thanks to the fibre's high absorbency. The ribbon can be dyed according to high quality standards.

Ribbon can be made with 100% Tencel®, but can also be mixed with other types of fibre.

**Oriol & Fontanel** is working on his internal process, in order to minimize the overspend of the fibre compared to cotton, and has a high hope to reach the same level of price and allow our customers to switch from cotton to Tencel®.

Do you want to try?

*Oriol & Fontanel*

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# RECYCLABLE POLYESTER YARN



Used polyester fibers

For recycled ribbon O&F

Coming of reprocessed plastic bottle



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100% BIO COTTON

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- Use of organic fibers as raw materials
- Clean and sustainable production
- French production



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