# A GAME-CHANGER IN TEXTILE CIRCULARITY

## AUTOMATED TEXTILE WASTE SORTING AND RECYCLING WITH A VERTICAL APPROACH

MARCH 2026

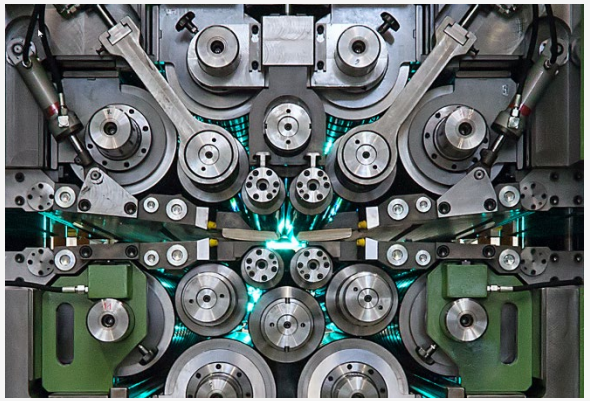
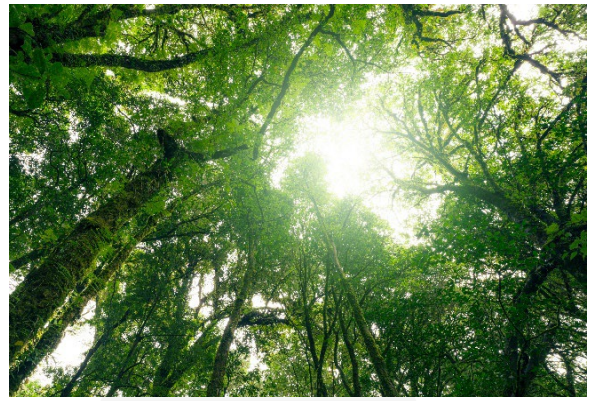
ANDRITZ

# OVERVIEW

# 01

# ANDRITZ GROUP & ANDRITZ NONWOVEN & TEXTILE

# WORLD MARKET LEADER WITH FOUR BUSINESS AREAS

| PULP & PAPER | METALS | HYDROPOWER | ENVIRONMENT & ENERGY |
|---|---|---|---|
|  |  |  |  |
| 38%* | 21%* | 22%* | 19%* |
| Pulp: **#1**<br>Paper: **#3** | Forming: **#1**<br>Processing: **#1-2** | **#1-2** | **#1-3** |

* Share of total group revenue 2025
# Global market position, estimated by ANDRITZ

# CLOSE TO OUR CUSTOMERS

**+80**
COUNTRIES

**+280**
LOCATIONS

**+30,000**
EMPLOYEES WORLDWIDE

Size of pin reflects number of ANDRITZ locations in the region

# ANDRITZ NONWOVEN & TEXTILE
# WHO WE ARE TODAY

Facts & figures

**STRONG FOCUS**
on Sustainability & Environment,
Long-term partnership,
Continuous research &
development

**ONE OF THE**
**WORLD'S LEADING**
nonwoven and textile machinery
and line supplier

**TECHNOLOGIES**
Airlay, Air-through bonding,
Bast fibers, Needlepunch, Spunbond,
Spunlace, Airlaid/Airlace,
Wetlaid/Wetlace, Dry Molded Fiber,
Converting, Textile recycling

**716**
**INSTALLED LINES**
Since 2009

**+120 YEARS**
**OF EXPERIENCE**
in nonwoven and textile

**~ 700**
**EMPLOYEES**
worldwide

**MEMBER OF**
EDANA, INDA, NWI,
VDMA, CNITA

**10**
**PILOT LINES**
within ANDRITZ for continuous
innovation and developments

**12**
**LOCATIONS**
worldwide

**7**
**RESEARCH CENTERS**
equipped with ANDRITZ
machinery at AITEX, CETI, CITEVE,
STFI, NWI, IFTH and NFT

# 02

# ANDRITZ TEXILE RECYCLING SOLUTIONS

# AUTOMATED SORTING TECHNOLOGY

- **Innovative and automated sorting** technologies to separate clothes by color and/or composition
- **Optimized fiber quality** by automated textile sorting
- The unique process is the result of a **long-term collaboration** between ANDRITZ, Nouvelles Fibres Textiles and Pellenc ST, France.

## Sustainability approach

- Regenerating fibers out of post-industrial and pre/post-consumer textile waste
- Re-use of textile waste, creation of new products and reduction of waste


**WIDE RANGE OF END-PRODUCTS**
woven and knitted products within the textile sector, and automotive, technical nonwovens, building insulation, bedding, furniture, etc. for the nonwovens area

# PREDICTIVE FIBER QUALITY CONTROL

## ANDRITZ teXscan analyser

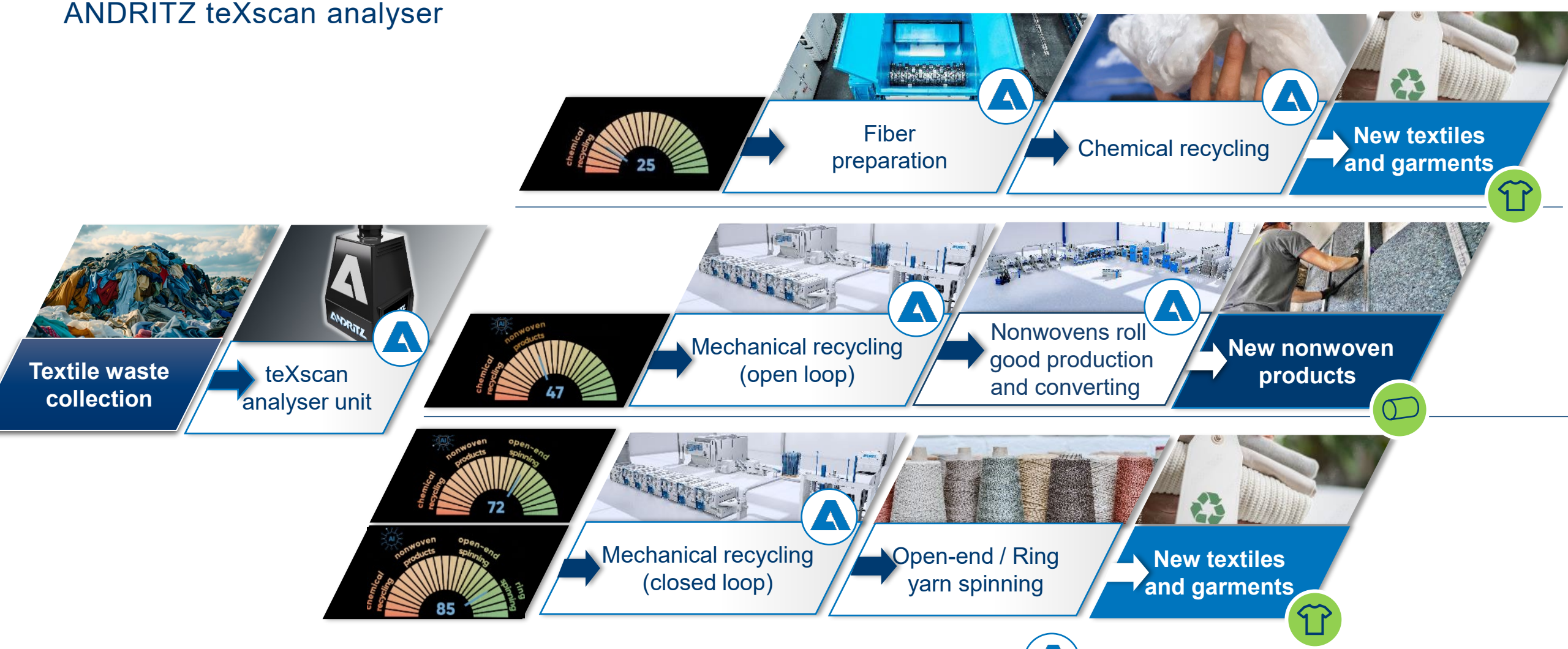
- **Innovative, AI-powered** system to **predict the fiber quality** of any textile prior to recycling.
- Real-time analysis of **material suitability** for chemical recycling, nonwoven processing, open-end-, or ring spinning with a clear 1–100 score
- Rapid and reliable results for textile reuse decisions. That enables smart value driven selection of feedstock matching appropriate recycling process/method.

### Sustainability approach

- True textile-to-textile circularity, eliminating the gap between ecological and economical viability.

# PREDICTIVE FIBER QUALITY CONTROL

## ANDRITZ teXscan analyser

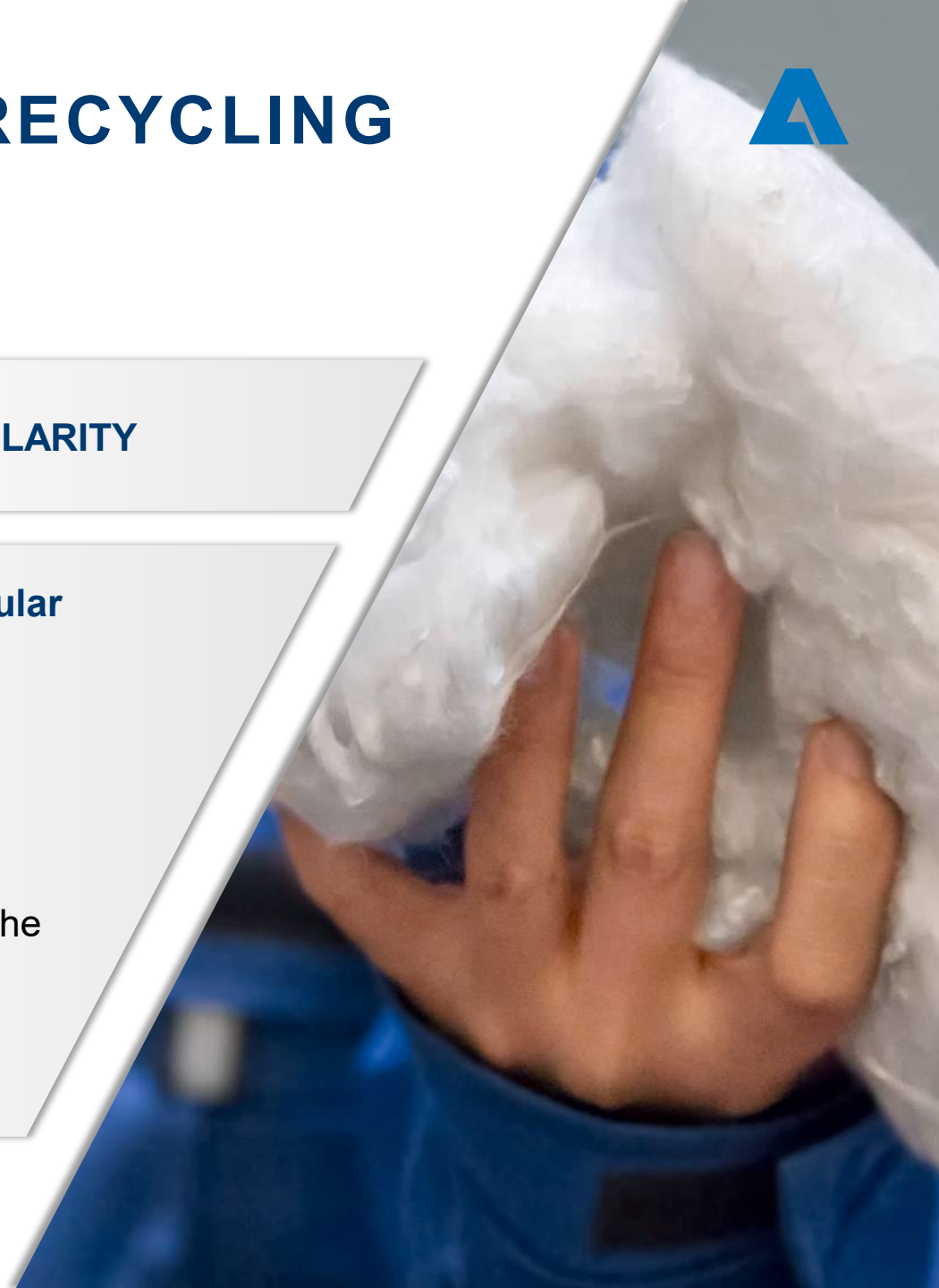


# BE INNOVATIVE WITH CHEMICAL RECYCLING

## Production of new man-made textile fibers

### CHEMICAL RECYCLING FOR TEXTILE-TO-TEXTILE CIRCULARITY

- **Chemical recycling process** - textile fibers are separated on a **molecular level** from the original textile.
- Dyes and other unwanted components - chemically removed, cellulose fibers modified to be dissolved and spun into new textile fibers **without losing fiber properties**.
- **Mechanical properties** of the new fibers - **equal or surpass** those of the original textile.



# MECHANICAL RECYCLING BY MEANS OF TEARING

The spot-on mechanical recycling process

## NUMEROUS FEATURES

- Capacity from **50 up to 3,000 kg/h**
- Applicable to almost all types of **pre-/post-consumer** waste textiles, and **soft and hard** textile waste
- **Maintaining the nature of the original fibers** by maximizing fiber length, strength and feel
- Today **Ne30** yarn counts use **100% recycled cotton fibers** in some blends
- Mechanical recycling process uses: **Less water**, **very limited chemicals, a reduced machinery installation footprint**.

It is **the least energy demanding process** for textile recycling solutions.


**DISCOVER OUR MECHANICAL RECYCLING BROCHURE**

# ANDRITZ R&D – CREATING TOMORROW'S SUCCESS

A worldwide network of pilot plants and technology centers

**ANDRITZ Recycling Technology Center**
**AUSTRIA**

**Chemical recycling R&D**
**FINLAND**

**Mechanical recycling technical center**
**FRANCE**

**Fiber R&D Center**
**UNITED STATES**

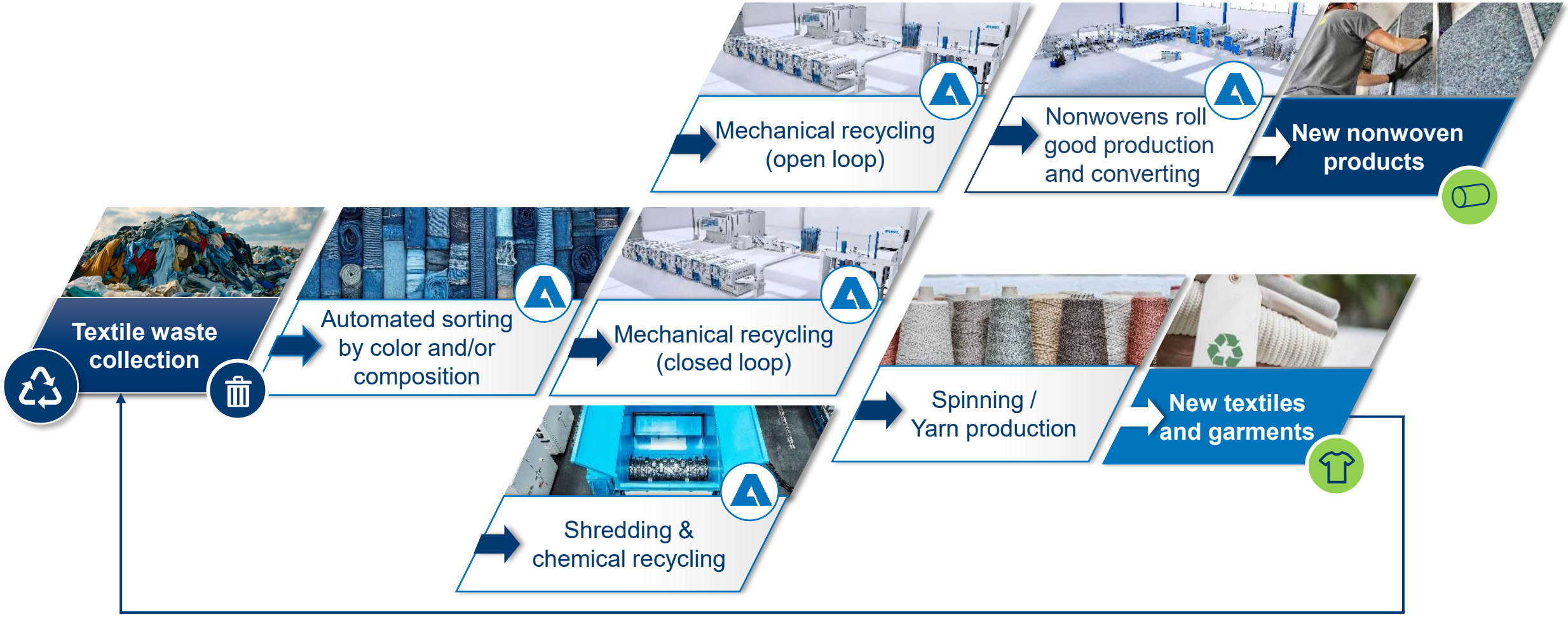
**Technical center CETI**
**FRANCE**

# 03

# CONCLUSION

# ANDRITZ TEXTILE RECYCLING RANGE
# CIRCULAR RECYCLING APPROACH

One-stop-shop by ANDRITZ



# YOUR CONTACT

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# ANDRITZ CAPABILITIES IN RECYCLING

**Rejects from the paper industry**

**E-scrap & Battery recycling**

**Refrigerators**

**Waste-to-value – RDF production**

Automotive parts

Organic waste

Wood and waste wood

Plastic waste

Textile waste

Metal and special waste

# ANDRITZ.
# FOR GROWTH
# THAT MATTERS.

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