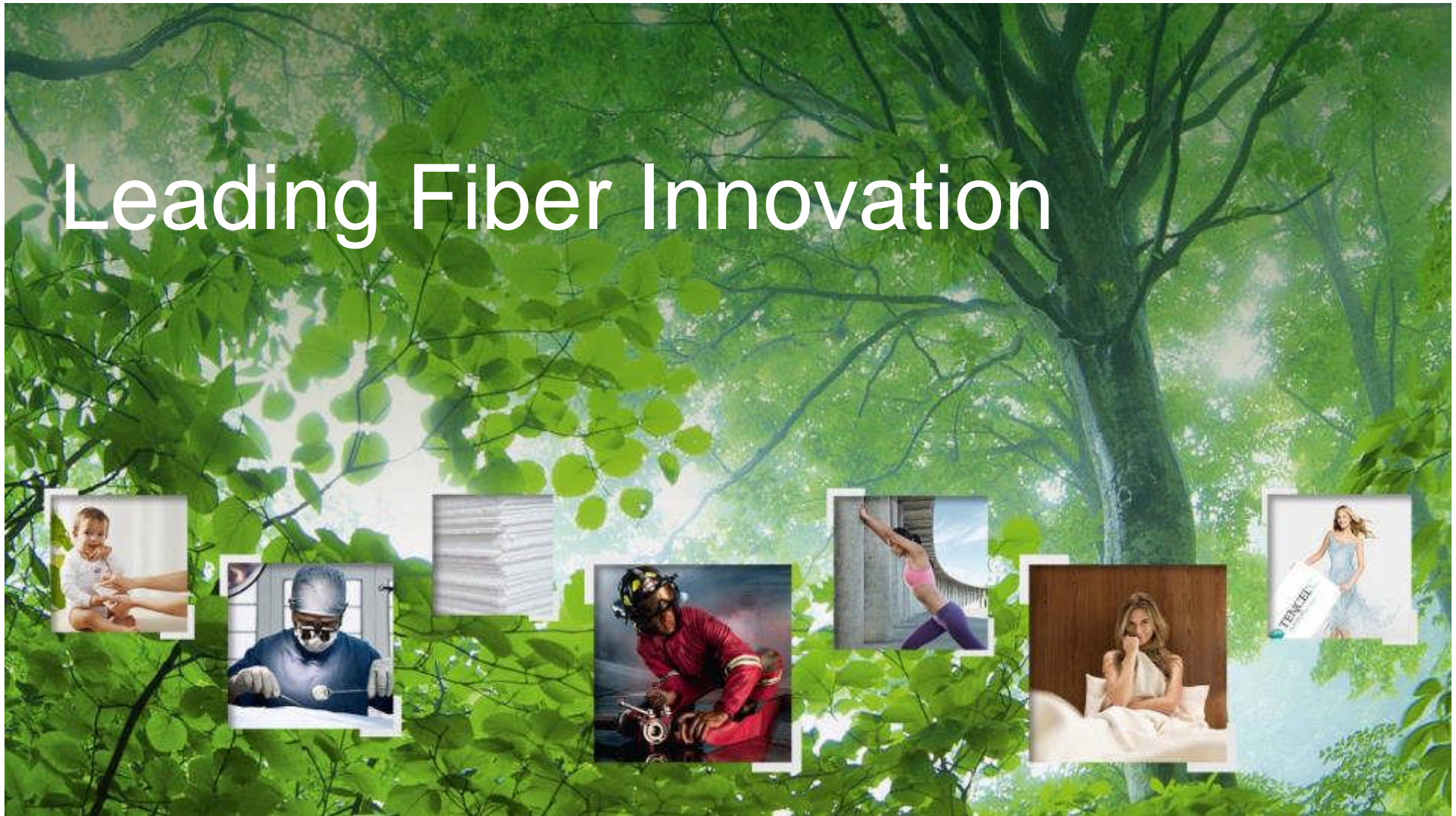


# Leading Fiber Innovation



LENZING Capital Markets Day 2013

September 19, 2013

Short-term and long-term market perspectives – Peter Untersperger, CEO

# Disclaimer

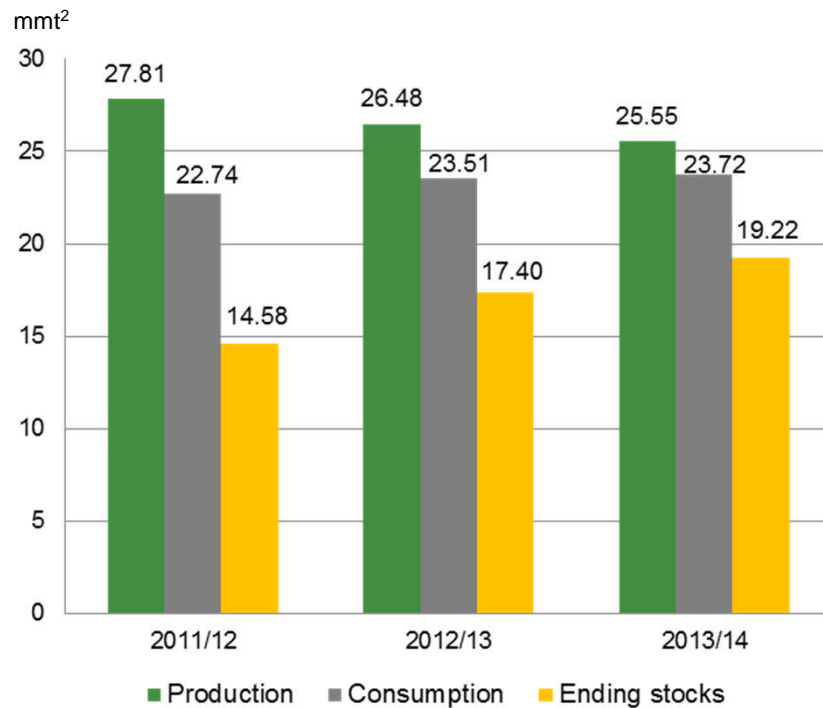
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# Update cotton market

## Two cotton realities

### Cotton production<sup>1</sup>



Source:

1) ICAC, September 2013

2) million metric tons

- Stock-to-use-ratio<sup>1</sup> 2013/14 at more than 80% of world mill use
  - China 147%
  - ROW 47%
- World cotton production in 2013/14 is estimated down 3.5% from last season
  - USA will account for most of the decline: -25% (-900 k tons)

# Conclusions on the cotton market

Short-term: we expect constant cotton prices

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Our assumptions:

- Increasing cotton consumption (China)
- Increasing cotton costs
- Less cotton production (competition to food)
- No irrational moves on the Chinese cotton price policy

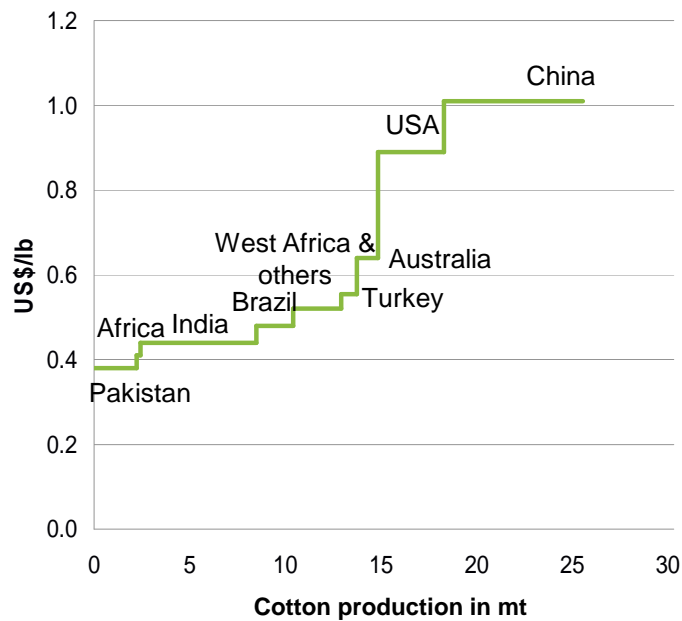


# Cotton production costs differ significantly worldwide

VSF/MMC production more and more attractive

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## Production costs of cotton 2010/2011



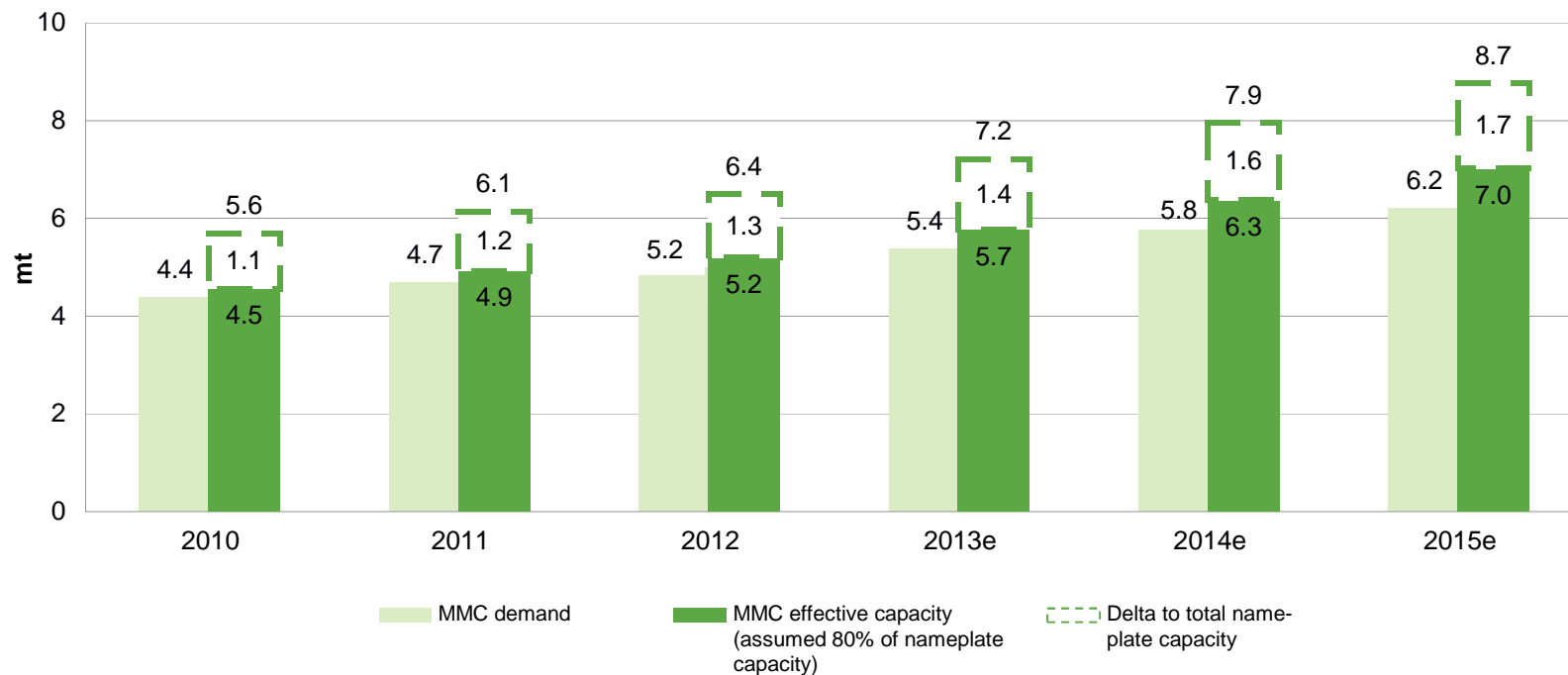
- Trend to higher cotton prices driven by worldwide rising cotton production costs (fertilizer, insecticides, pesticides, labor costs)
  - Example: main cost factor weed control<sup>1</sup>: Expenditures rose from 9 cts/kg of lint production in 2000/01 to 31 cts/kg in 2012/13
- Production costs of cotton differ significantly; the biggest cotton players with the highest costs

Source: ICAC, Lenzing Intelligence

1) ICAC, Report: Cost of production of raw cotton, September 2013

# Potential short-term overcapacities in MMC may limit pricing upside

Global MMC demand / existing and announced production capacity <sup>1</sup>



- ➔ Effective production capacity assumed at 80% of nameplate capacity
- ➔ Mothballing of 2015 capacity expansions would result in a quick recovery of operating rates

Source: CIRFS, FEB, National statistics, The Fiber Year (MMF), Lenzing (forecasts)

<sup>1</sup>) based on April estimates, note that several projects have been stalled or slowed down

# Short-term strategy

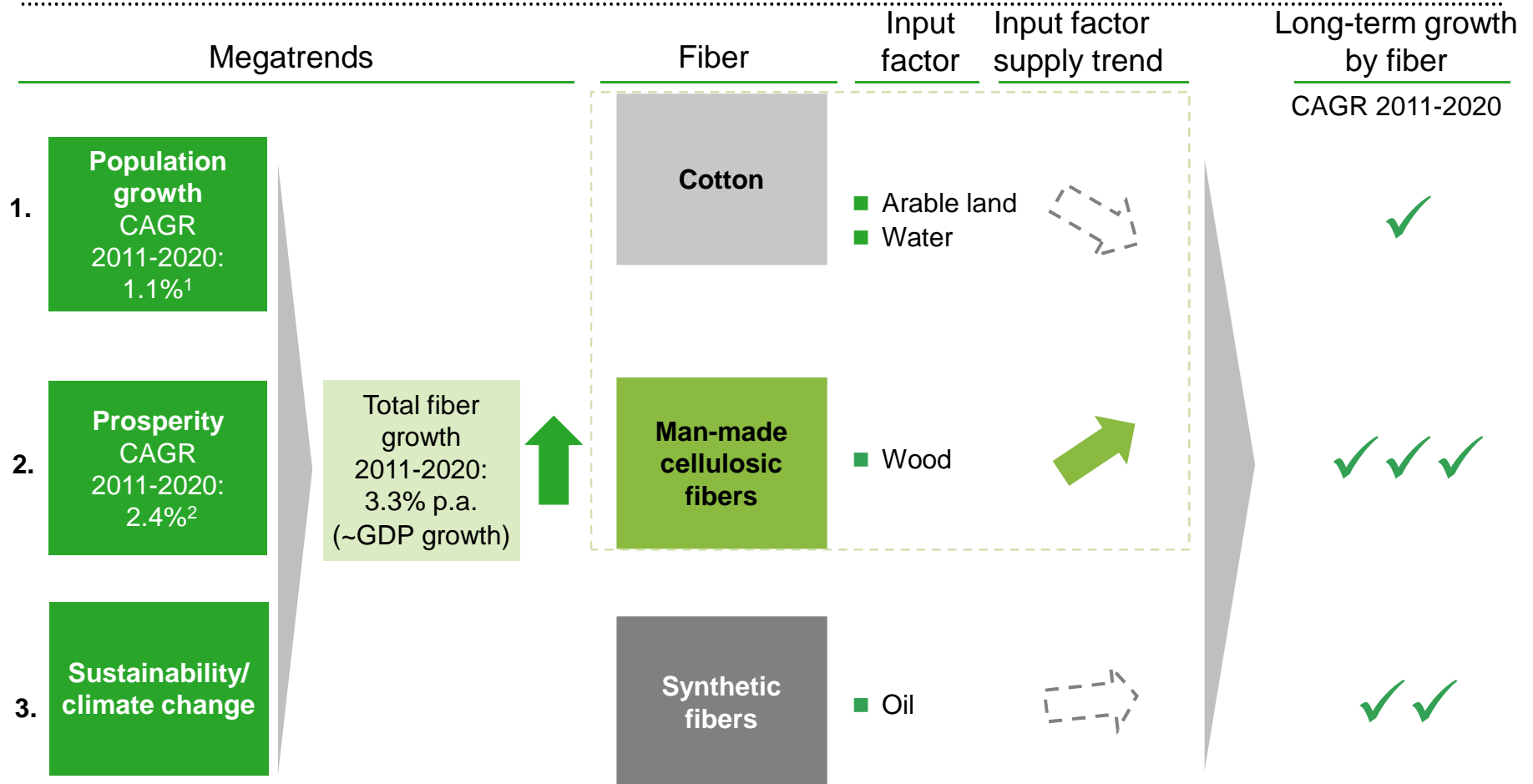
“We do not spend more than we earn”

---

- No catalysts on the **macro-economic side**
- Worldwide **fiber market continues to grow** volume-wise in a **challenging pricing environment**
- Short-term: Managing cash
  - New investments under scrutiny
    - Prioritizing the project pipeline with focus on productivity improvements
    - TENCEL<sup>®</sup> jumbo line NOT affected
  - Using the excelLENZ program to create room to manoeuvre
- Develop tailor-made strategies for all three fibers

# Long-term growth prospects

All global megatrends intact



Notes

- 1) Forecasted growth from UN Population Division
- 2) Forecasted growth of global real GDP per capita by Global Insight

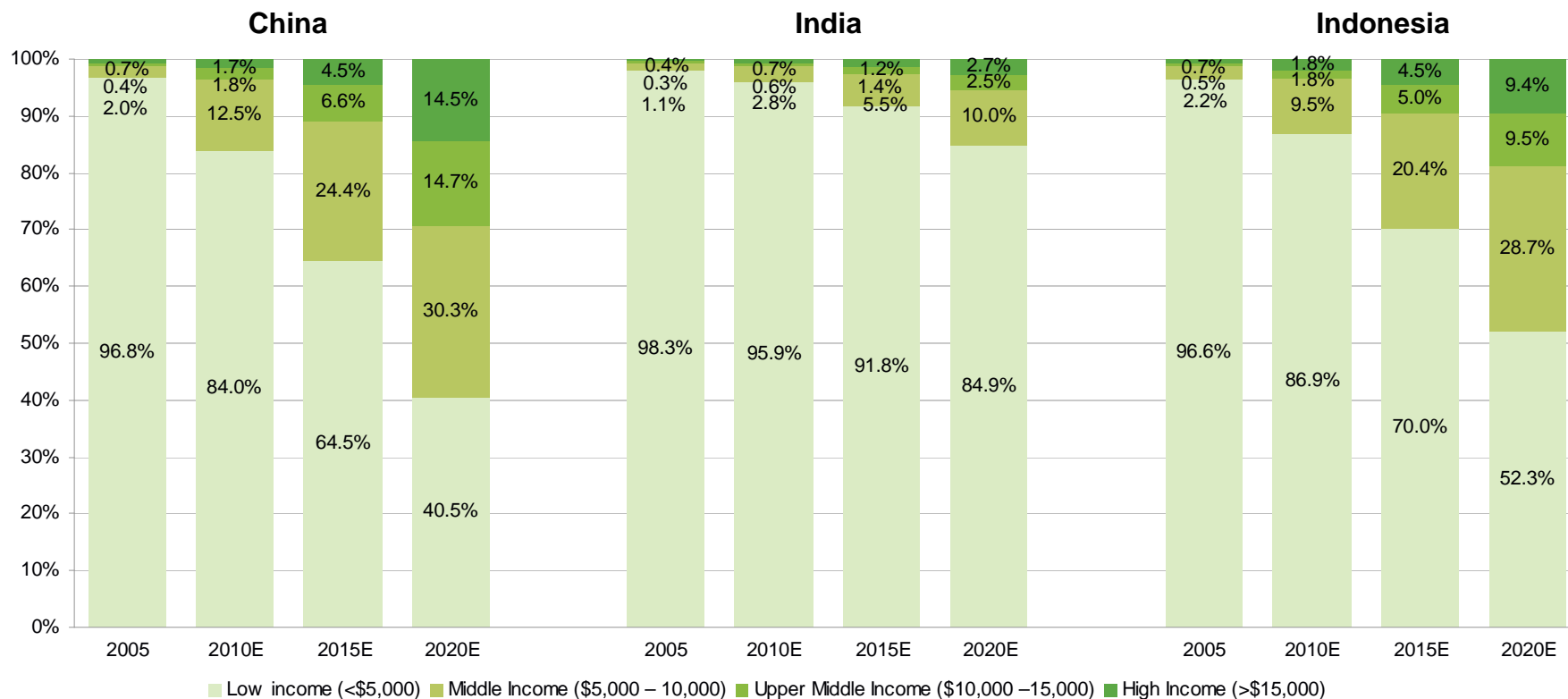
Cellulosic fibers





# In emerging countries income shift to middle class leads to higher cellulose consumption

## Income distribution 2005 – 2020E



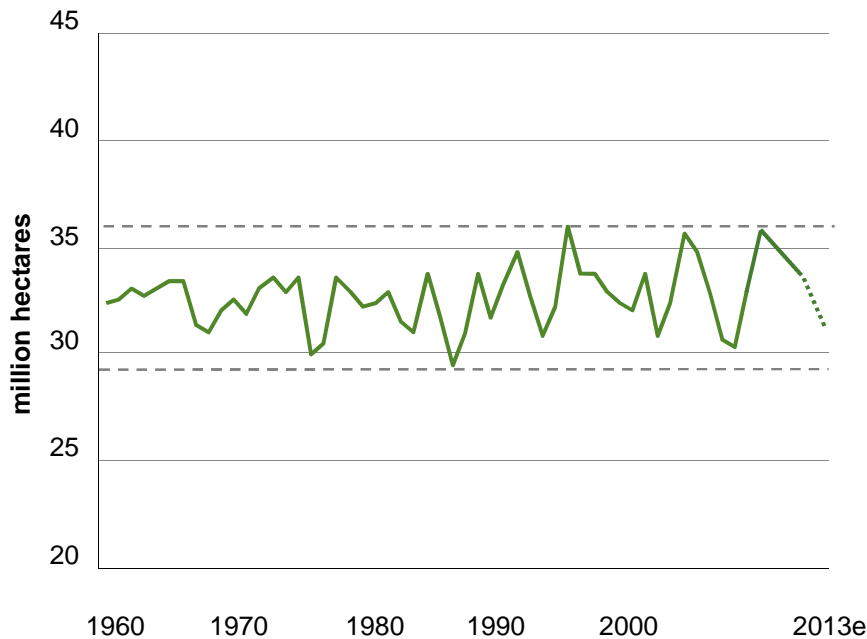
Source: Euromonitor International 2011



# Market opportunities for MMC due to structural cotton limitations

Arable land and yield increases are setting the limits

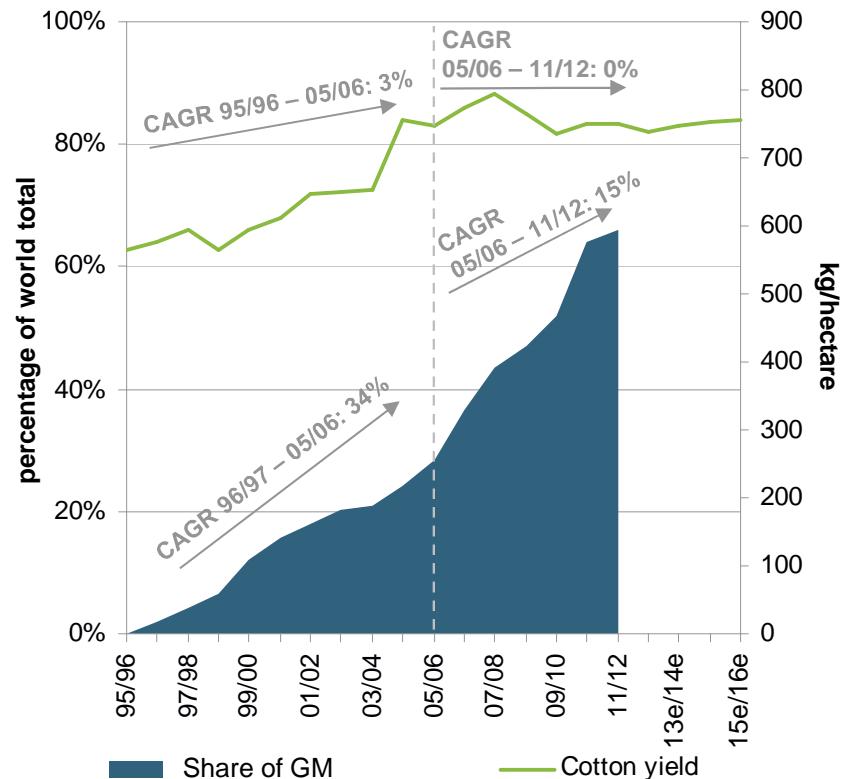
Cotton arable land development



- Competition with food and bio-fuel crop will add to limit the arable land

Source: US Department of Agriculture; ICAC, February 1, 2013  
International Cotton Advisory Committee, 71st Plenary Session, 10 August 2012

GM<sup>1</sup> cotton area and yield development



- Effects from GM driven yield expansion levelling out

Notes  
1) Genetically modified (GM)

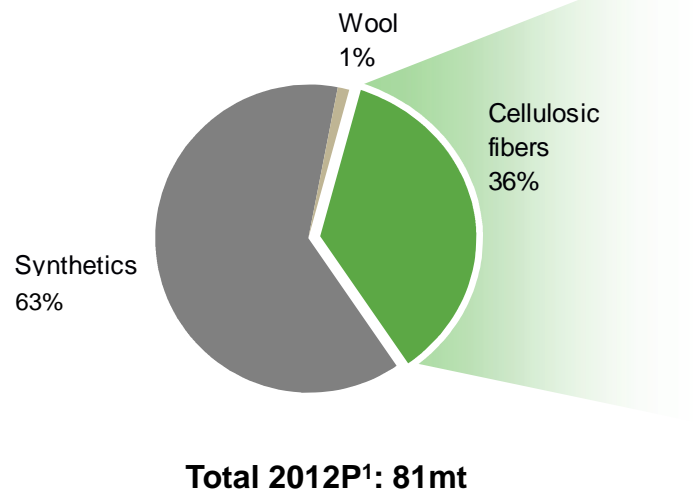


# Growth opportunities: MMC with inherent advantages vs. synthetics and cotton

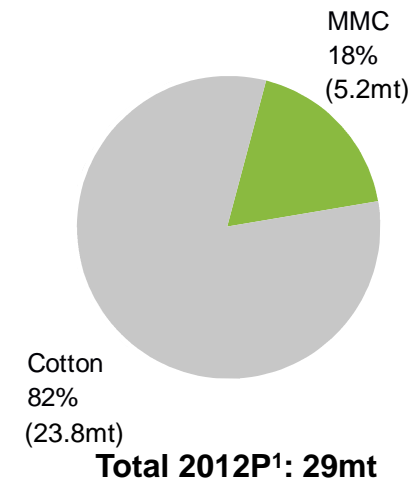
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## Global fiber demand

All fibers



Cellulose fibers



### Advantages of cellulose vs. synthetics

- Higher wearing comfort
- Moisture uptake
- Perception as “natural” product
- Synthetics with lack of sustainability and bio-degradability

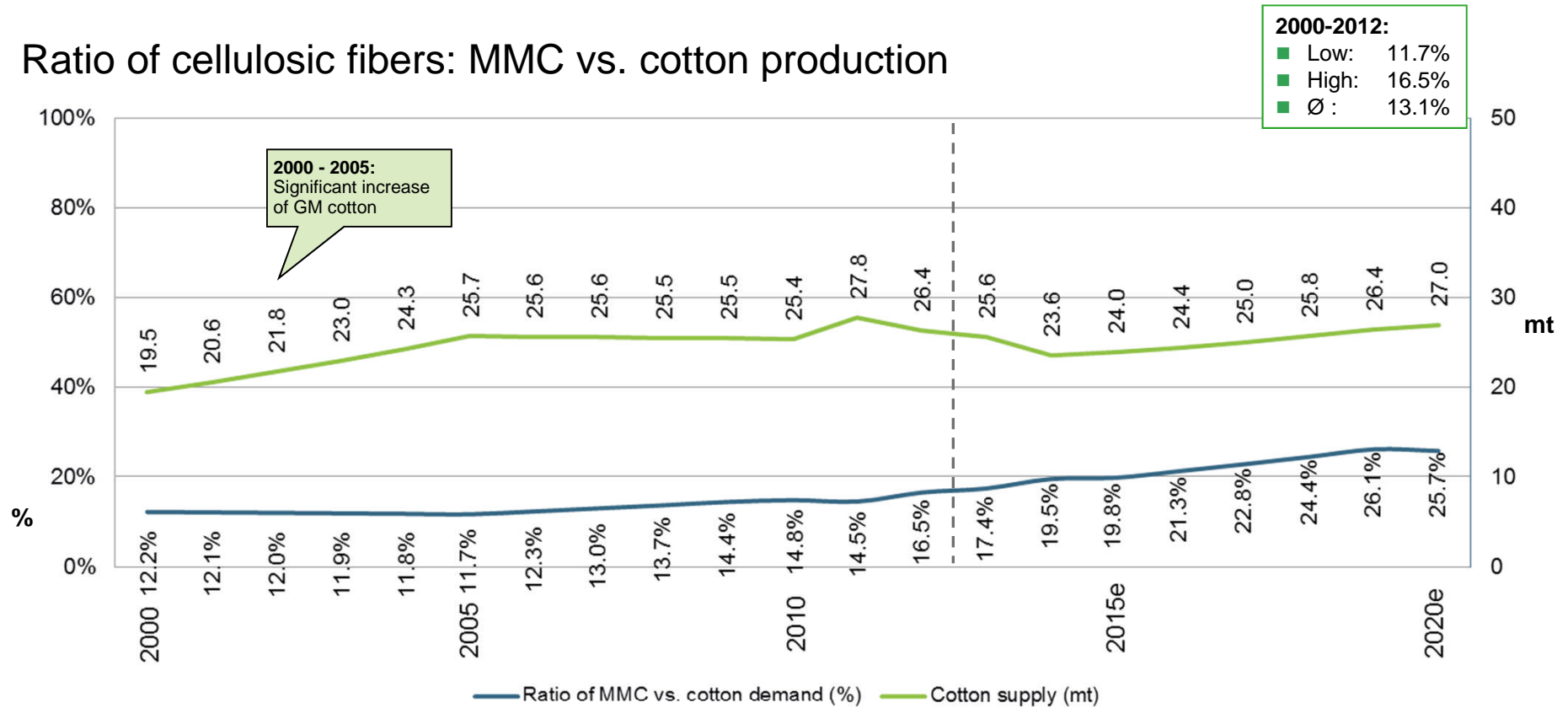
### Advantages of MMC vs. cotton

- Better performance in all “next-to-skin” applications
- Higher downstream productivity (lower waste / higher spinning speed)
- Constant quality
- Brilliant colors
- Sustainability

Source: ICAC (Cotton), CIRFS, FEB, National statistics, The Fiber Year (MMF)  
1) preliminary

# Share of MMC vs. cotton increasing in recent decade due to an established market and cotton supply limits

Ratio of cellulosic fibers: MMC vs. cotton production



➔ Movements in the fiber ratios have a significant impact on MMC demand

■ 1% change MMC vs. cotton in 2020 equals: 0.4mt additional MMC demand (c. 4% of 2020 MMC demand)

Source: CIRFS, FEB, National statistics, The Fiber Year (MMF), Lenzing (forecasts)



# MMC – a long-term growth story

Even in a cautious mid range market scenario

## MMC demand sensitivity – CAGR 2012-2020

		Cotton supply (mt)					
		25	26	27	28	29	30
Share of cellulose	40%	16%	15%	15%	14%	12%	11%
	38%	14%	13%	12%	11%	10%	9%
	36%	12%	11%	10%	9%	7%	5%
	34%	10%	8%	7%	5%	3%	1%
	32%	7%	5%	3%	1%	(1)%	(5)%
	30%	5%	3%	1%	(1)%	(3)%	(7)%

Key sensitivity assumptions 2012-2020

Total fiber growth

**3.3% p.a.**

Share of cellulose

**34-38%**

Maximum cotton supply

**26-29mt**

Implied MMC growth

**3-13%**

- Market growth responds sensitively to changes in assumptions of cotton supply and share of cellulose
- Even under bear case assumptions market growth is estimated to be above global GDP

Notes

Assuming constant cotton supply and share of cellulose between 2012 and 2020

# Leading Fiber Innovation



LENZING Capital Markets Day 2013

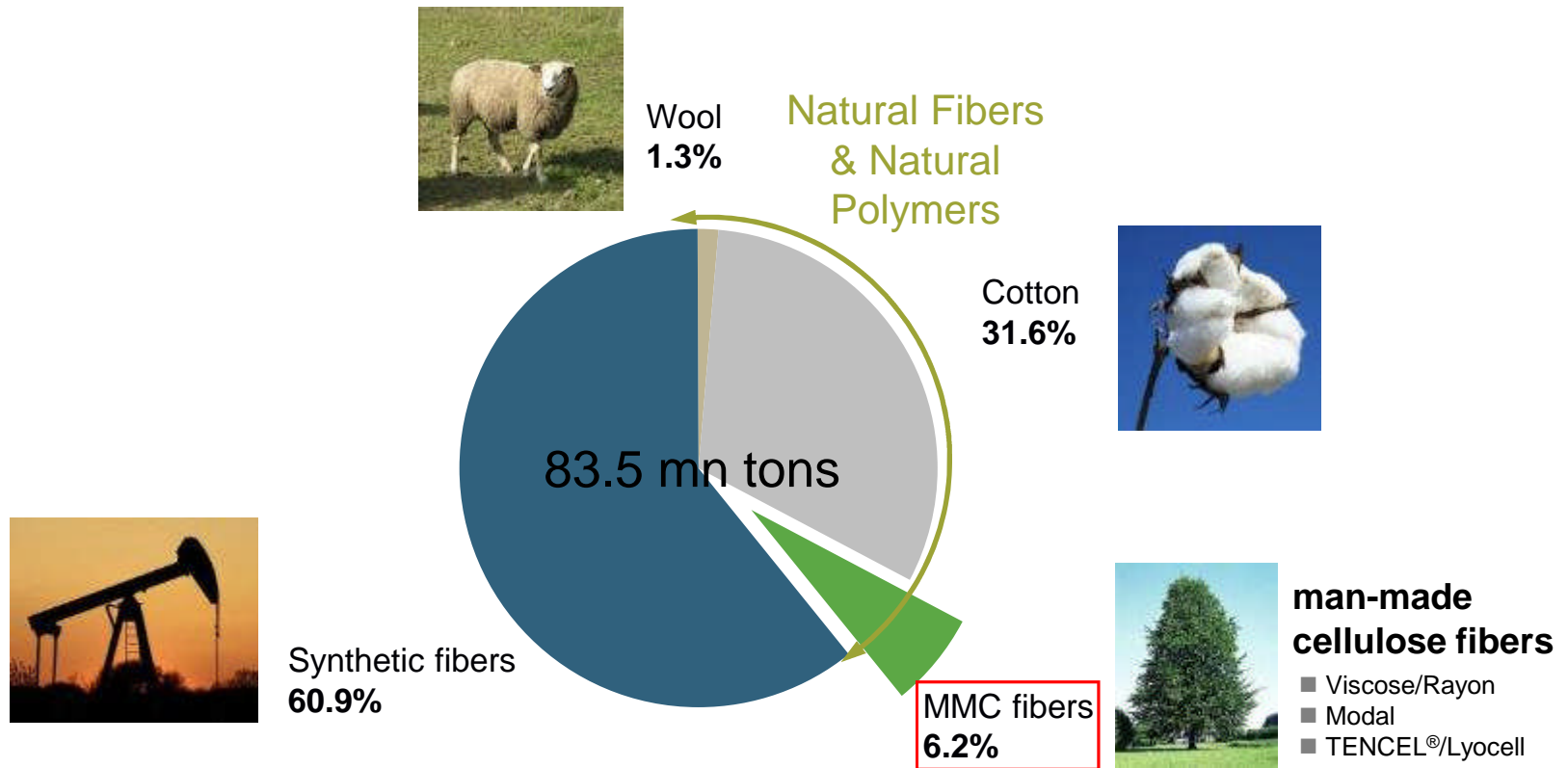
September 19, 2013

MMC fiber market conditions – Friedrich Weninger, COO

# Global fiber market at a glance

2012 preliminary production numbers

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Source: Lenzing estimates

# Fiber strategy recalibrated

As a reminder

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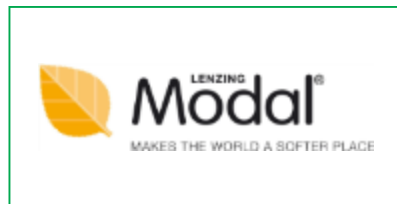
## Strategic measures

## Strategic direction



- Focus on differentiation
- Investments in selected markets with above industry returns

**Differentiated commodity**



- Expansion of selected high end target markets / applications
- Hold premium by further specializing (MicroModal, ProModal etc.)

**Niche**



- Priority focus area of Lenzing's growth strategy
- Gain market share in applications/regions by scaling up Textile and Nonwoven applications
- Exploit first mover advantage

**Scale**





# VSF market

Shows dynamics of a commodity

---

## Key characteristics

- VSF is currently the dominant MMC fiber globally used for textile and nonwoven
- Global market; customer base mostly in Asia
- China dominates the market with regards to capacities for VSF and local demand
- Price / cost driven competition with limited room for differentiation
- Supply / demand balance is key business driver; currently overcapacities that might continue in the future

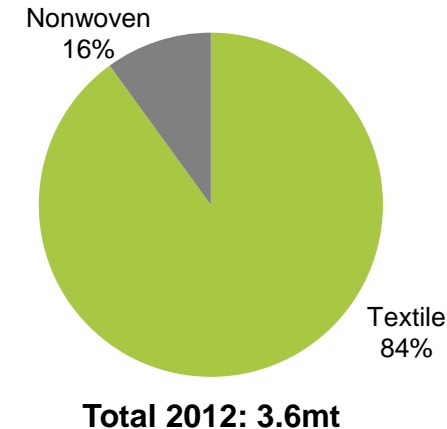
## ■ Long-term perspectives:

Largest growth opportunities in absolute terms  
(+4.6 mt till 2020<sup>1,2</sup>)

1) global demand

2) excl. cigarette filters, acetate tow and viscose filaments

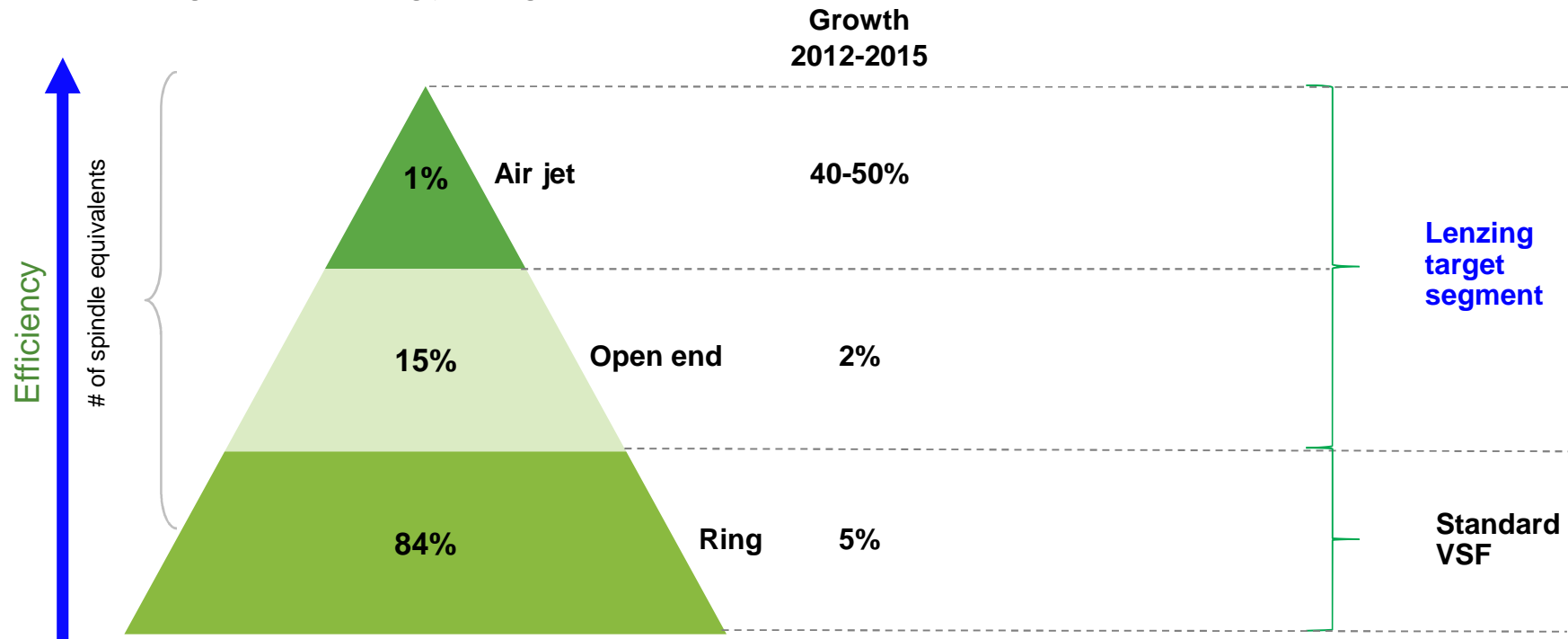
## Global market



# Differentiated commodity strategy

Lenzing's fibers excellently positioned in all spinning technologies segments

## Spinning technology segments 2012



### Customer purchasing decision drivers:

- Price
- Quality (consistency, processibility, fewer imperfections)
- Supply certainty / service

### Air jet considerations:

- Fiber consistency is key in order to realise efficiency gains

Source: Air jet: Gherzi for 2012, Murata and Rieter for 2013 onwards

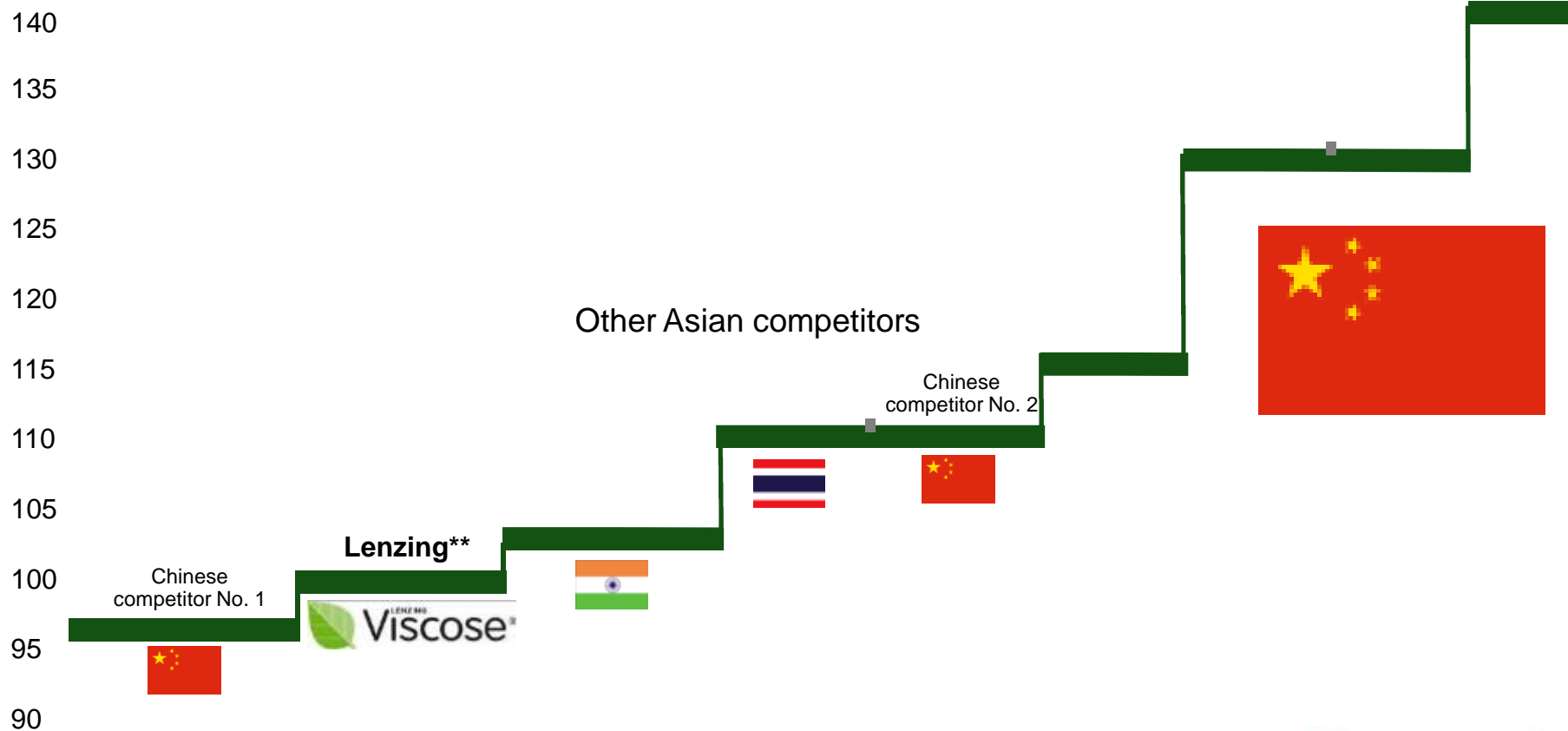


# Viscose fiber industry cost curve

Best in class cost base is key - Lenzing in an excellent position\*

Index 100 = Lenzing\*\*

Other Chinese competitors



\* Based on publicly available information (Sales minus EBIT divided by Volume) or obtained information and estimates

\*\* Average of Lenzing Viscose sites (incl. Indonesia, Austria and China)



# Modal market

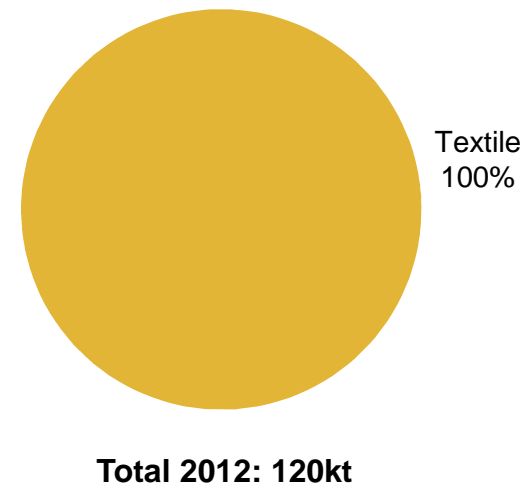
Limited scalability – find premium niche applications

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## Key characteristics

- Softness – unbeatable wearing comfort next to skin
- Natural softener for fabrics
- Can be blended with cotton
- Positioned against more expensive long staple cotton
- Capital intense production
- Lower production speed (up to 50% of Viscose output)
- **Long-term perspectives:**  
Even with competition adding capacity, Modal is going to stay a niche product

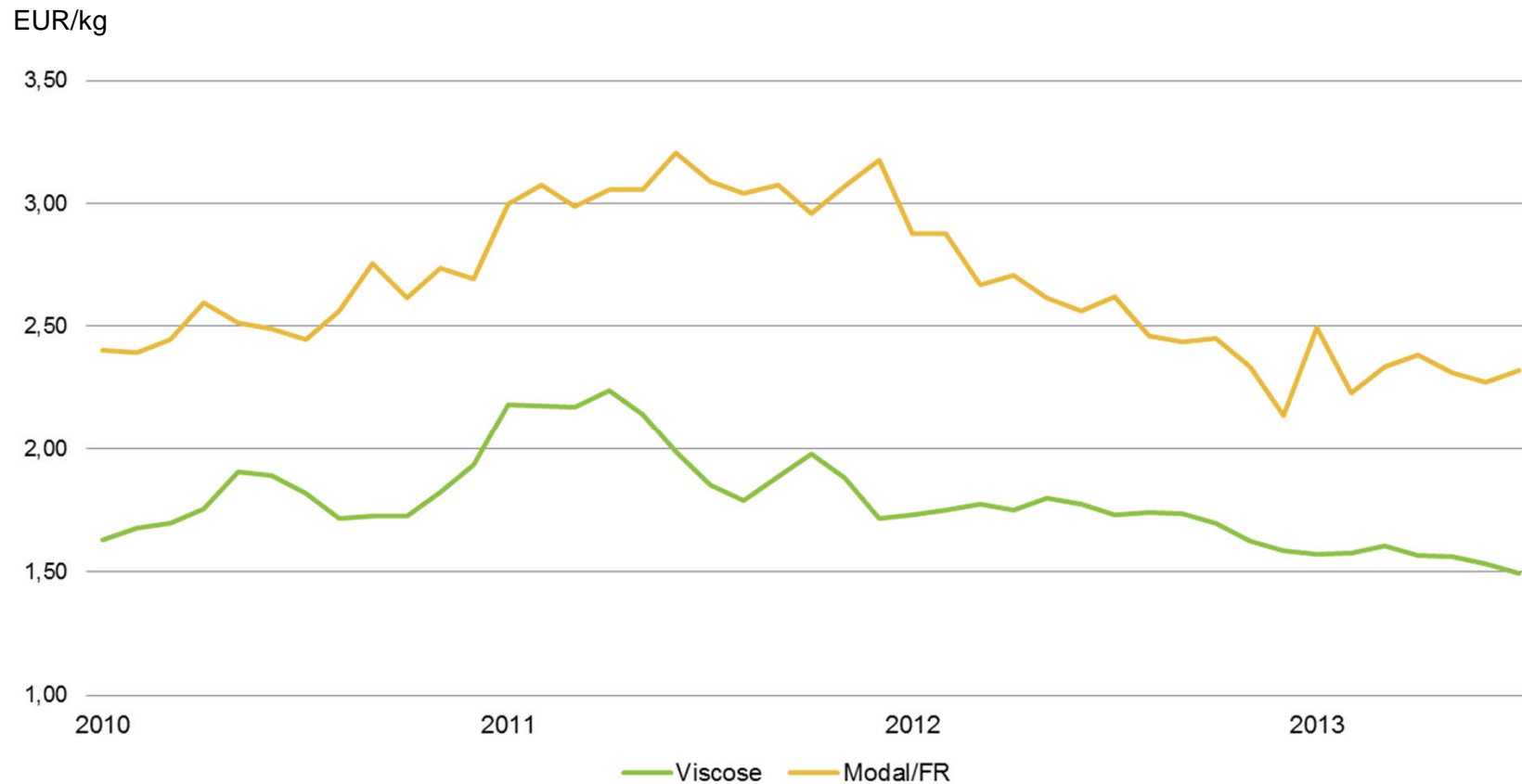
## Global market



# Customers are willing to pay a premium for best Lenzing quality

Historic Modal premium over viscose in a 40 – 50% range

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# TENCEL® market

Latest fiber technology with highest growth potential and strong green footprint

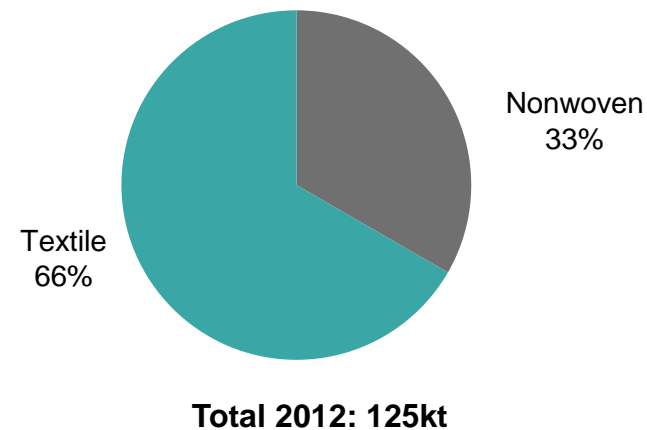
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## Key characteristics

- Only substitution for broad range and large volume cotton textile **and** nonwoven applications
- Potential also in technical applications
- Most sustainable fiber: latest technology with only small use of chemicals
- Lenzing can benefit from first mover advantage and build the market
  
- **Long-term perspectives:** Strongest growth potential estimated with up to 20 % CAGR till 2020<sup>1</sup> due to superior product and production characteristics

1) global demand

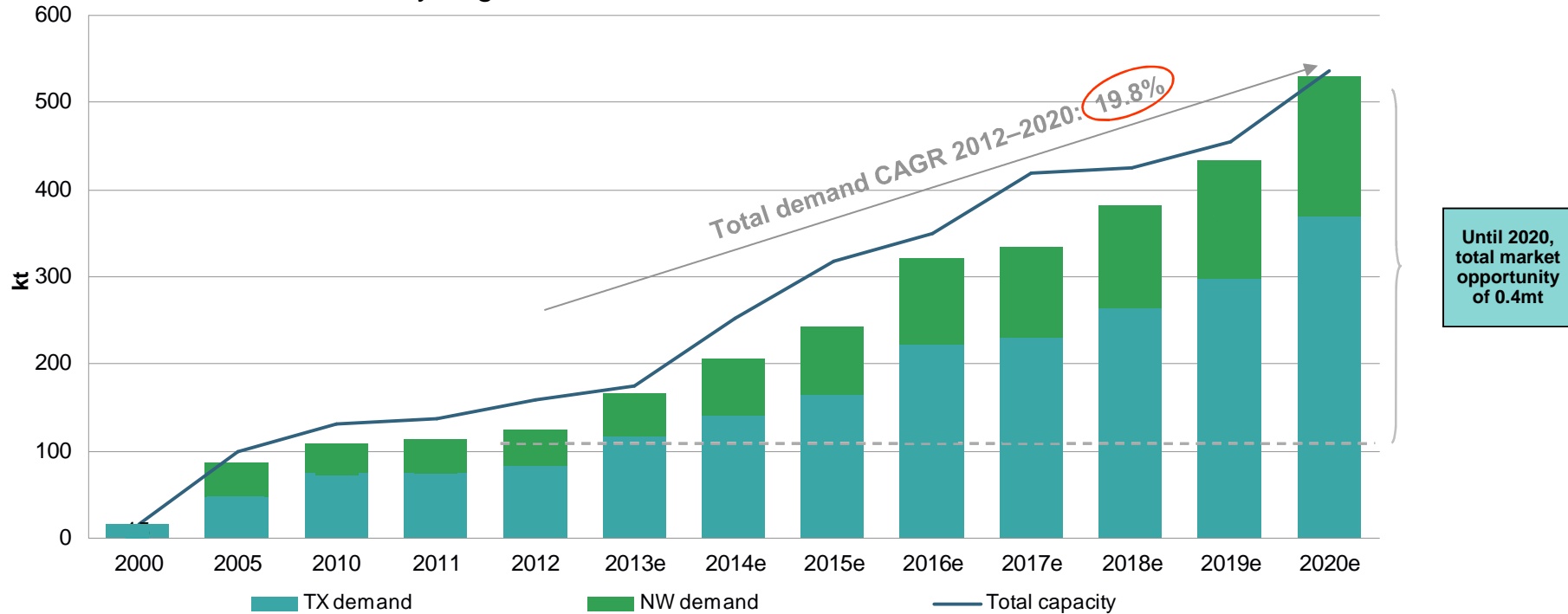
## Global market



# TENCEL® – Scale strategy

- Lenzing is currently the only large scale producer of TENCEL® with new market entries expected in the short- to mid-term

Global TENCEL® demand by segment



Notes  
From 2016 onwards assume significant market entry from competitors in TENCEL®



# Summary – TENCEL®

The new age fiber

	TENCEL®	Cotton	Viscose	
Product characteristics	✓✓✓	✓✓✓	✓✓	<ul style="list-style-type: none"> <li>■ TENCEL® has superior product characteristics ➔ Strength / skin sensoric/ breathability / absorbency</li> </ul>
Branding	✓✓✓	(✓) <sup>1</sup>	✓	<ul style="list-style-type: none"> <li>■ TENCEL® is the only lyocell brand in the market</li> </ul>
Downstream efficiency	✓✓	✓	✓✓	<ul style="list-style-type: none"> <li>■ TENCEL® can be used as blending partner with cotton</li> </ul>
Sustainability	✓✓✓	✓	✓✓	<ul style="list-style-type: none"> <li>■ TENCEL® is the most sustainable fiber</li> </ul>
Cost/ productivity	✓✓✓	✓	✓✓	<ul style="list-style-type: none"> <li>■ TENCEL® jumbo line at the beginning of the learning curve</li> </ul>

1) supima®, Cotton USA



# Leading Fiber Innovation



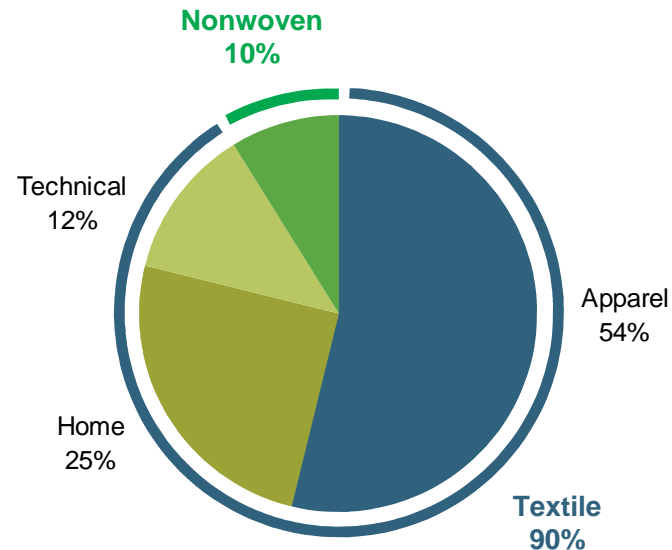
LENZING Capital Markets Day  
September 19, 2013  
Relevant markets for Lenzing fibers  
Implementing the strategy

LEADING FIBER INNOVATION



# World fiber market demand by applications

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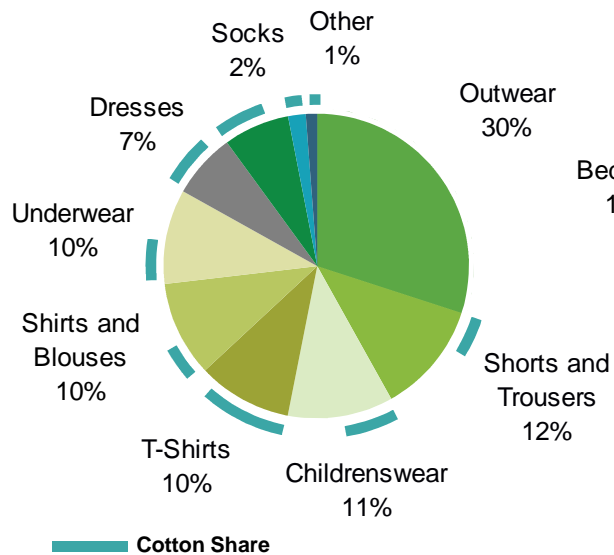
Total 2012P<sup>1</sup>: 81mt

- World fiber market dominated by Textile applications
- Downstream production is centered in Asia

Source: Euromonitor, Lenzing estimates  
1) preliminary

# World textile market by segment

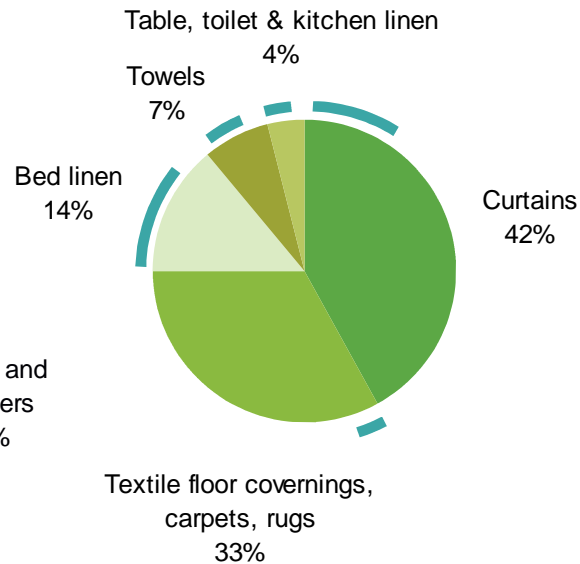
## Apparel (36% cotton)



Total 2012: 43mt

- Apparel biggest market with 59% out of 73mt in 2012
- Outwear strongest with 30%

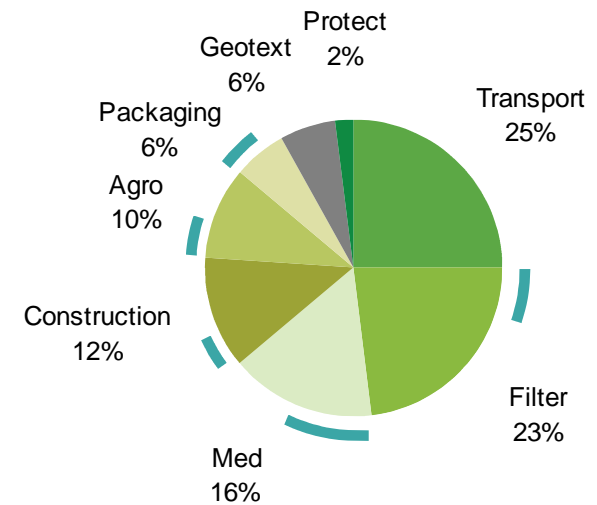
## Home Textile (30% cotton)



Total 2012: 21mt

- 75% of home textiles market in curtains and flooring
- 25% as in immediate potential (5mt) for Lenzing fibers

## Technical (18% cotton)



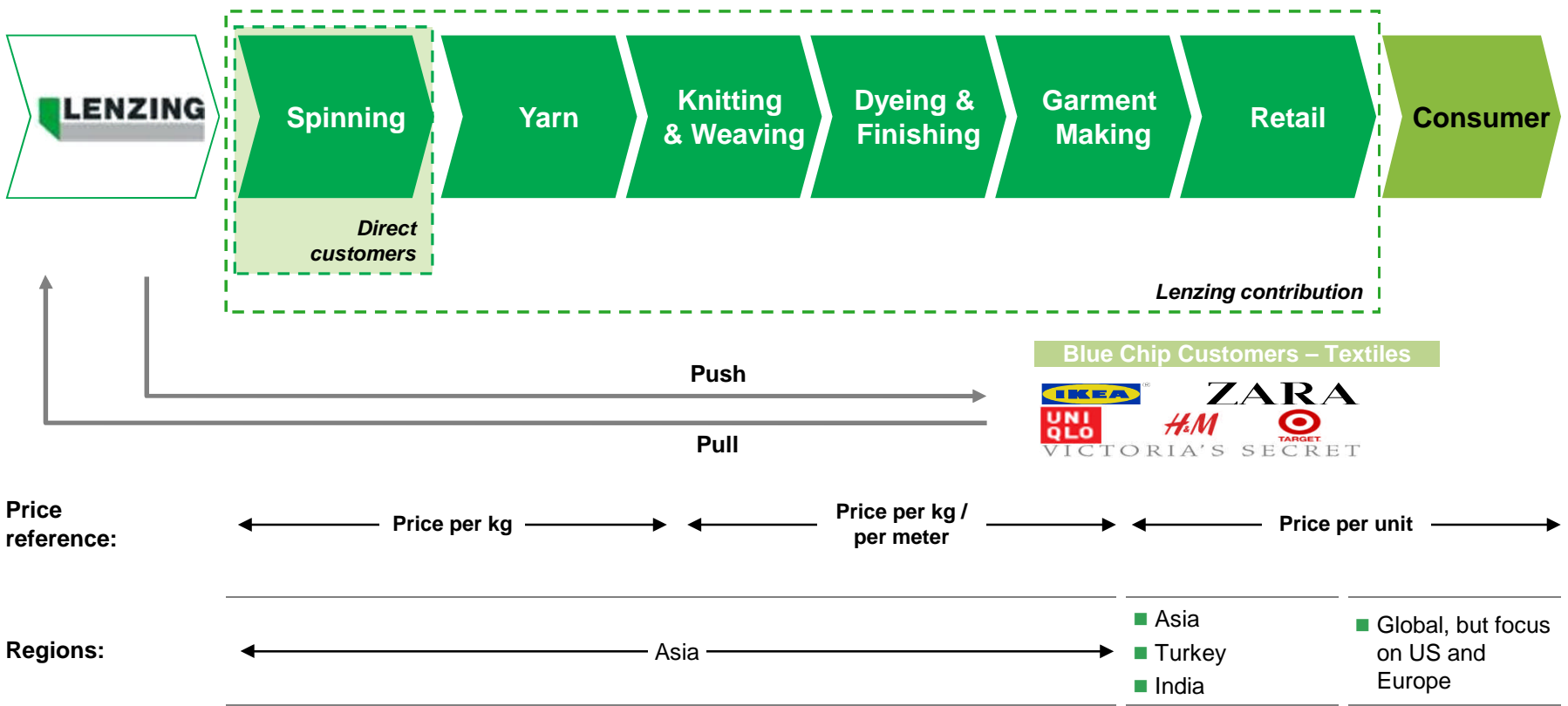
Total 2012: 9mt

- Largest applications in transport (e.g. conveyor belts) and filters

Source: Euromonitor, Lenzing estimates

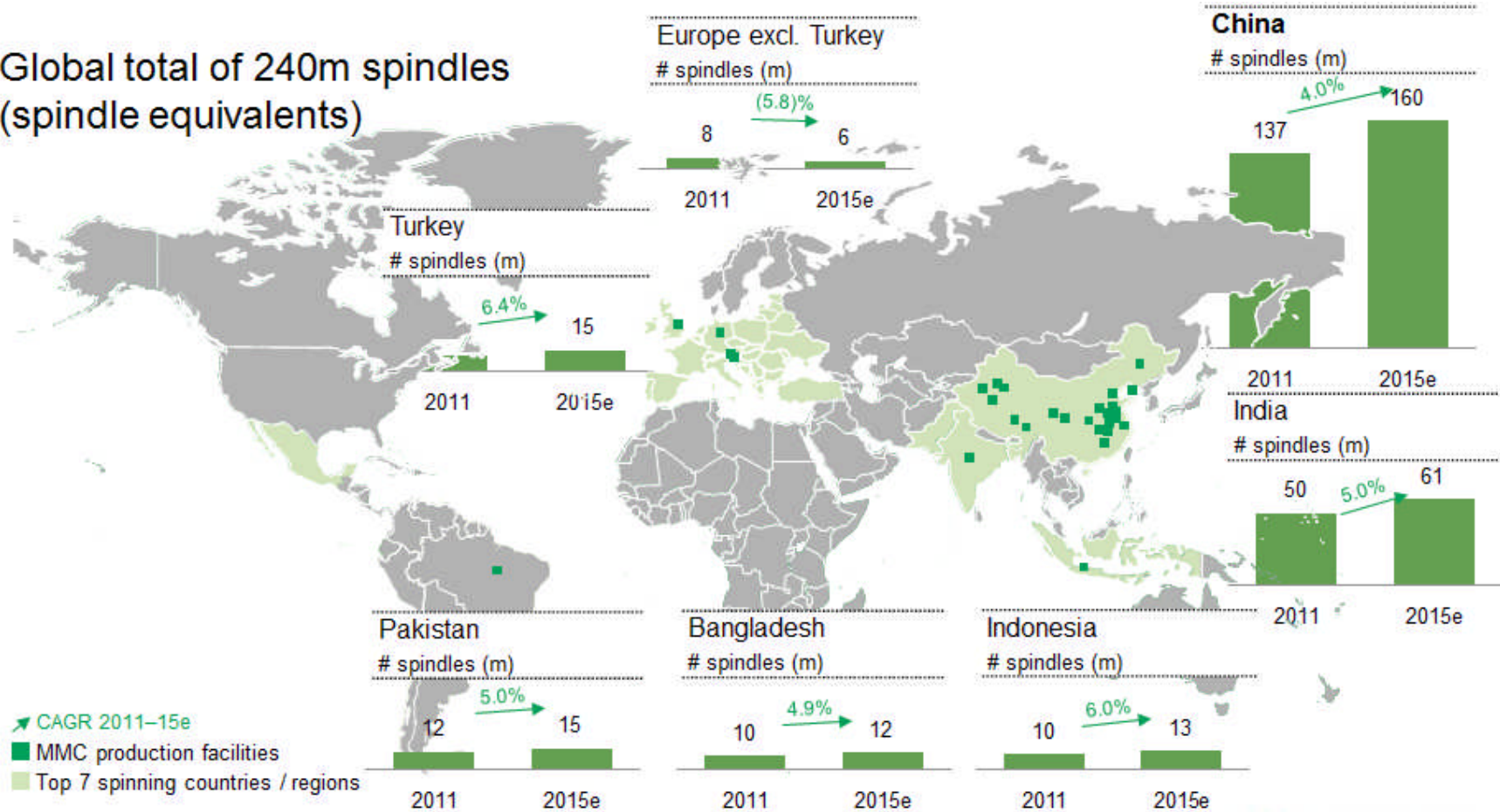
# Long textile value chain

Lenzing with push and pull strategy



# Asia is and will be the primary market for Lenzing's customers in Textile

Global total of 240m spindles (spindle equivalents)

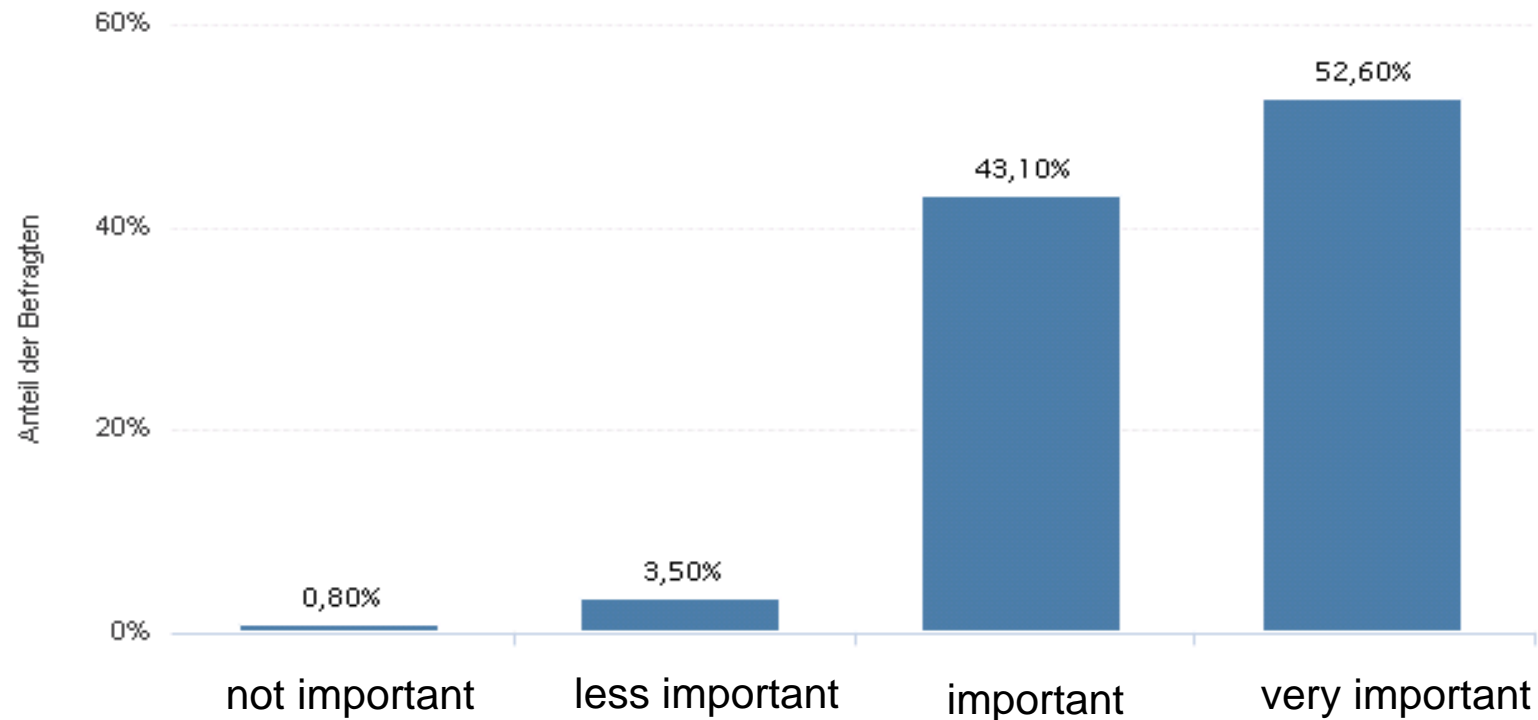


Source: Gherzi, Rieter



# Consumer wants comfort

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**i** Deutschland; 14-69 Jahre; 5.671 Befragte; Dialego AG, ISBA Informatik Service-GmbH; April 2011 bis August 2011

Quelle: Manager Magazin; Spiegel

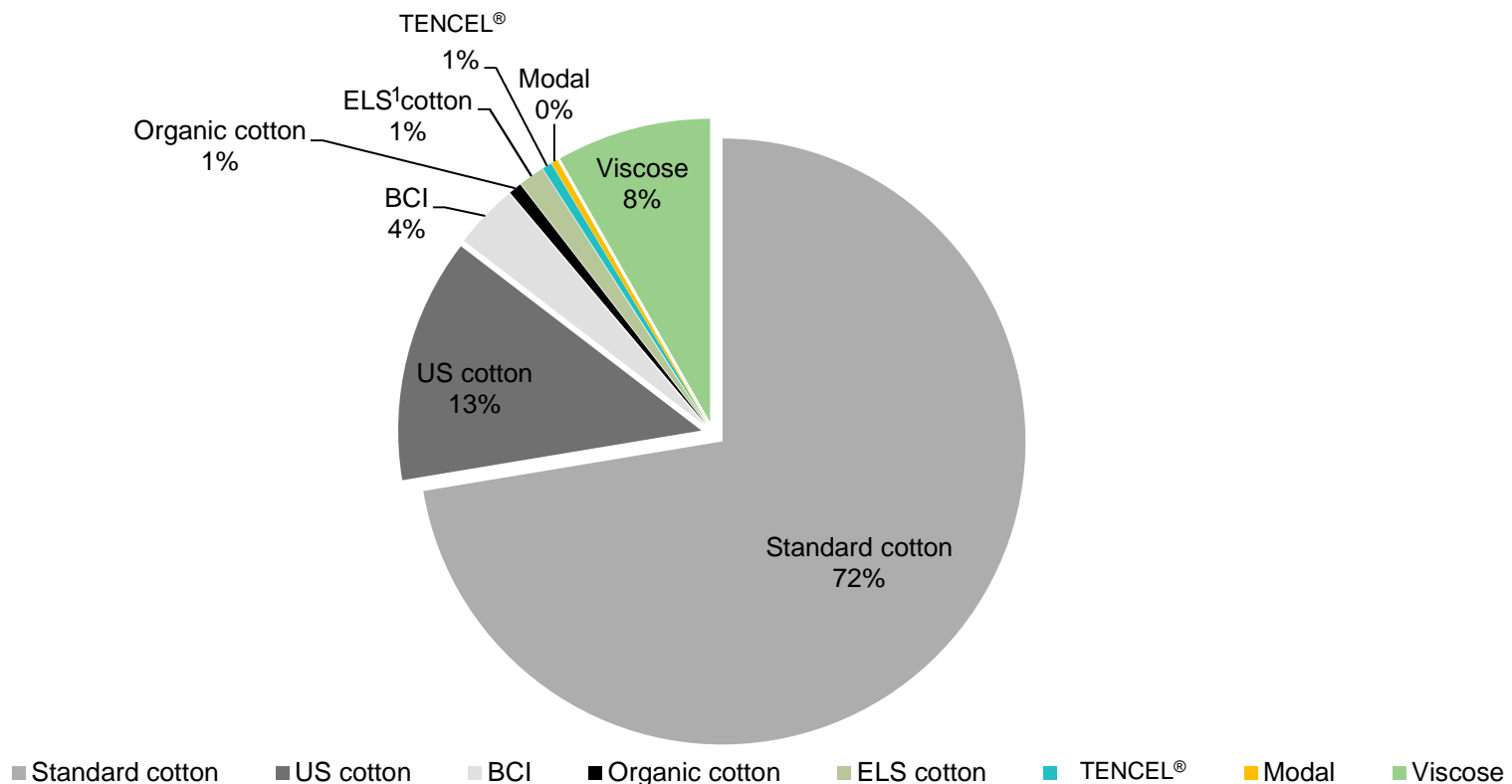
© Statista 2013



# Man-made cellulosic still a niche in the cellulose staple fiber market

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## Cotton and MMC

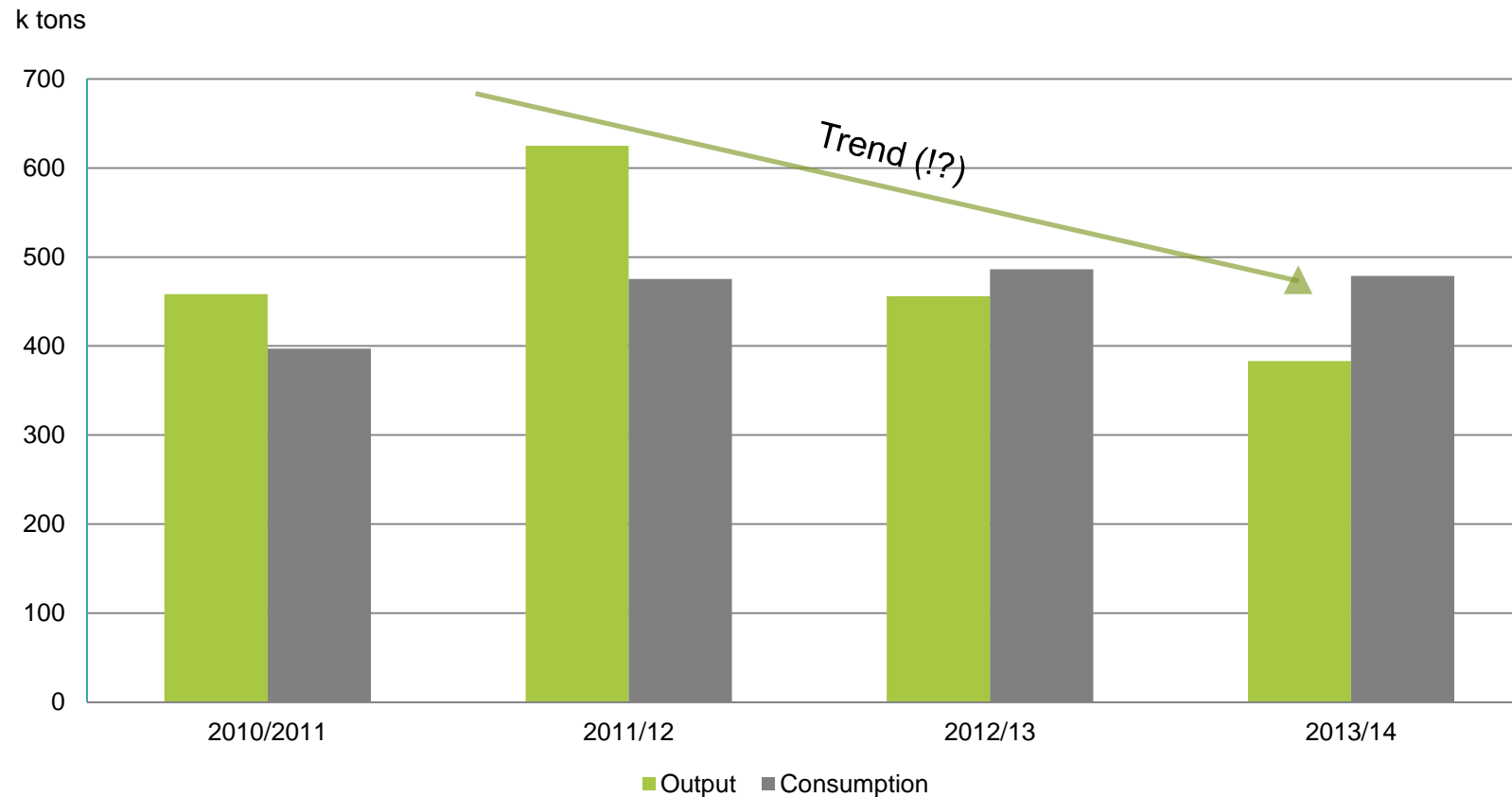


Source: Lenzing market intelligence  
1) ELS: Extra long staple cotton

# A shortage of long staple cotton<sup>1</sup> seems to be on the horizon

World output vs. consumption

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Source: Cotton Outlook, August 2013

1) PIMA + GIZA cotton



# Comfort factors for textile fibers

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Touch



Moisture  
Management



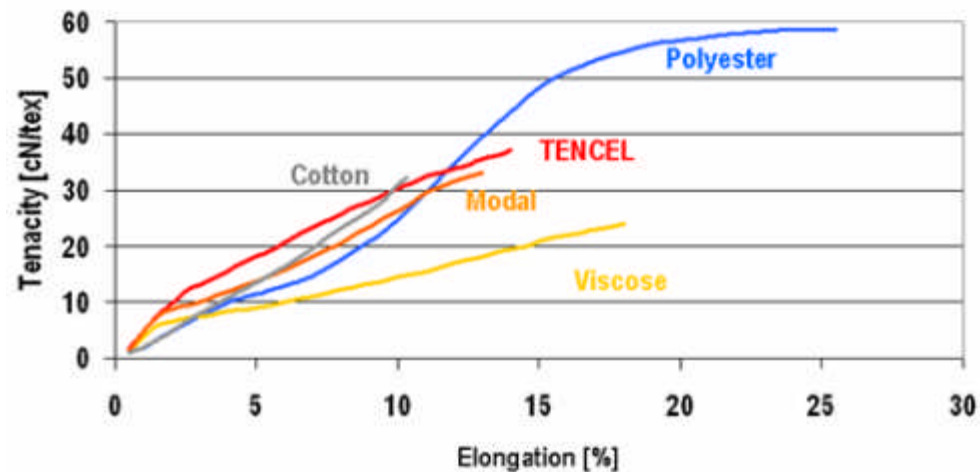
Drape



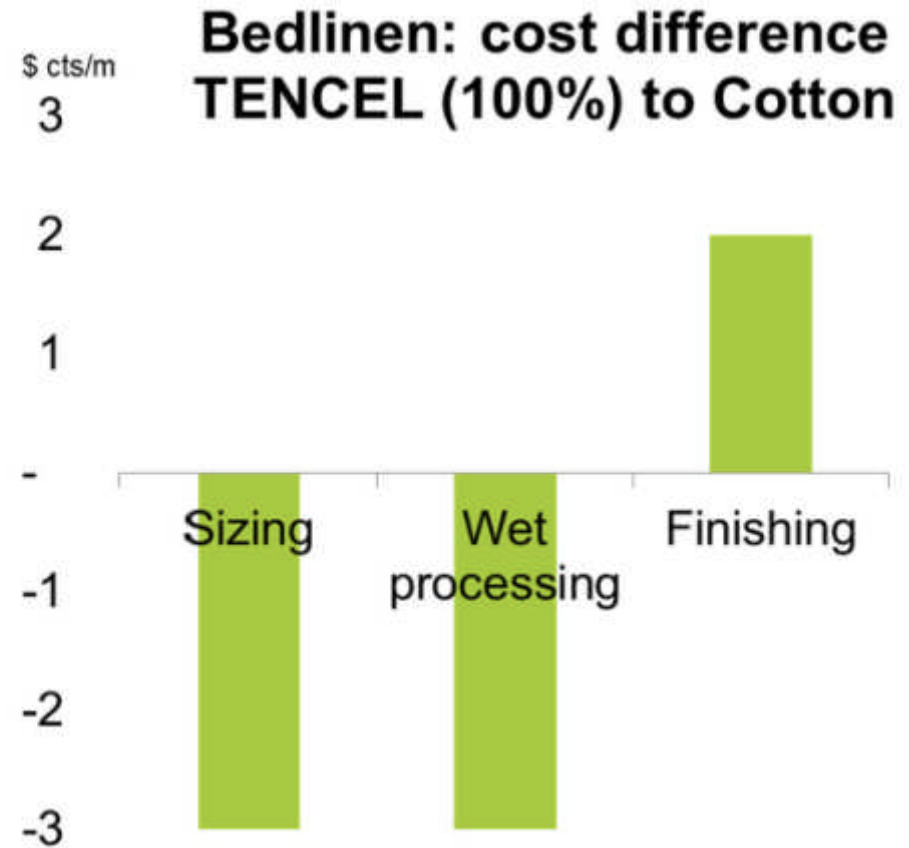
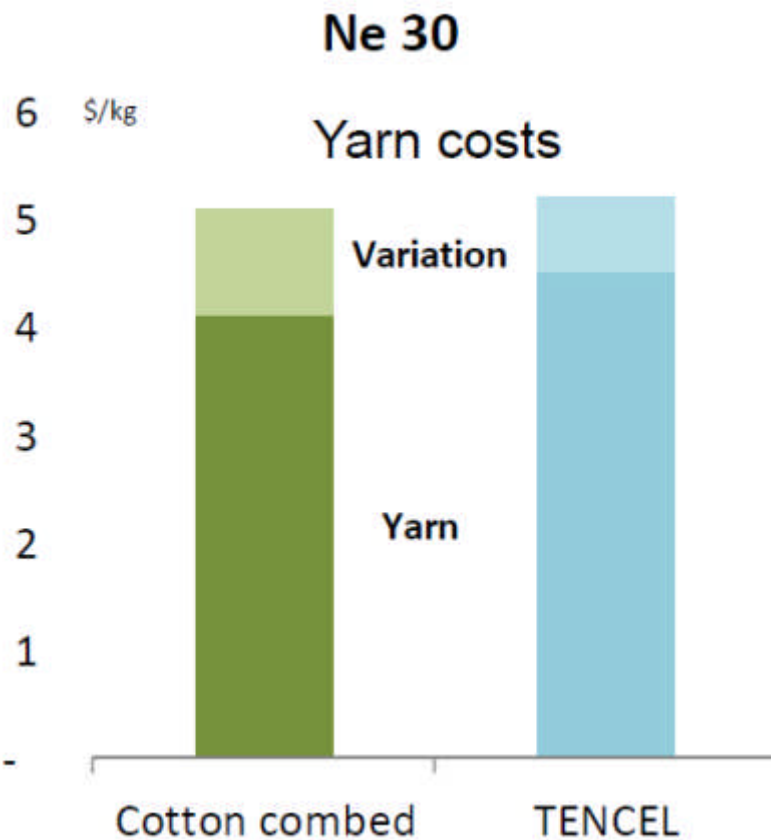
Sustainability

# Cotton and TENCEL® - a perfect fit

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# TENCEL<sup>®</sup> is from a cost point of view on a comparative level



# TENCEL<sup>®</sup> expansion in traditional cotton markets

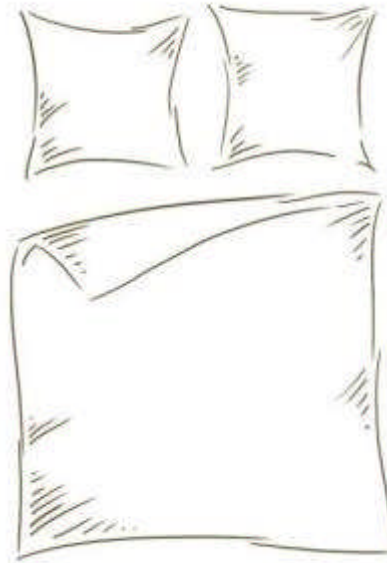
Potential in woven applications

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Target applications for cotton and TENCEL<sup>®</sup>



Denim



Bed linen



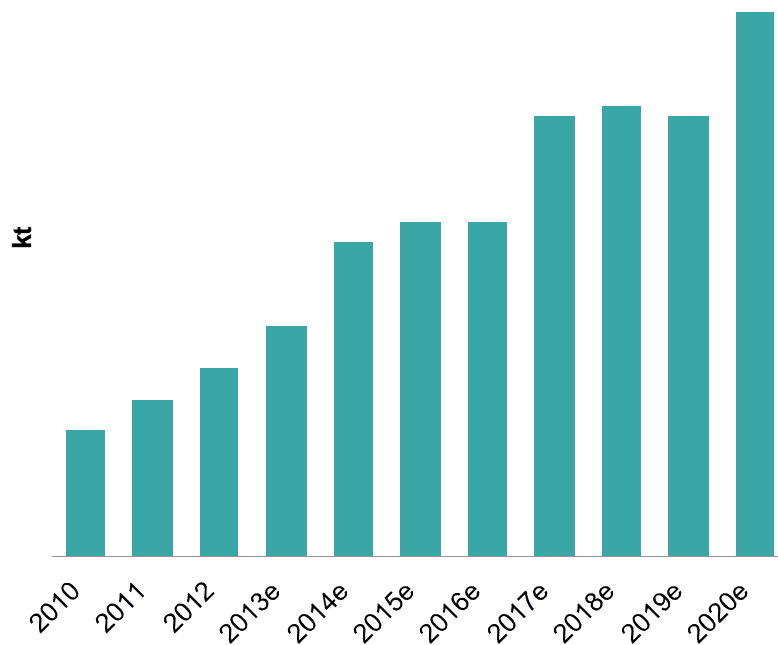
Shirting

# Implementing the TENCEL® strategy

## Example – jeans / trousers

---

### Volume development TENCEL®



Source: Lenzing estimates

1) Development of innovative fabrics with textile mills

- Denim for ladies wear: softness as a key for fit&comfort
- Sustainability
- Expansion based on product introduction on brand level
- Supply chain creation in target countries
- Facilitate innovation on fabric level<sup>1</sup>



# TENCEL® in Denim

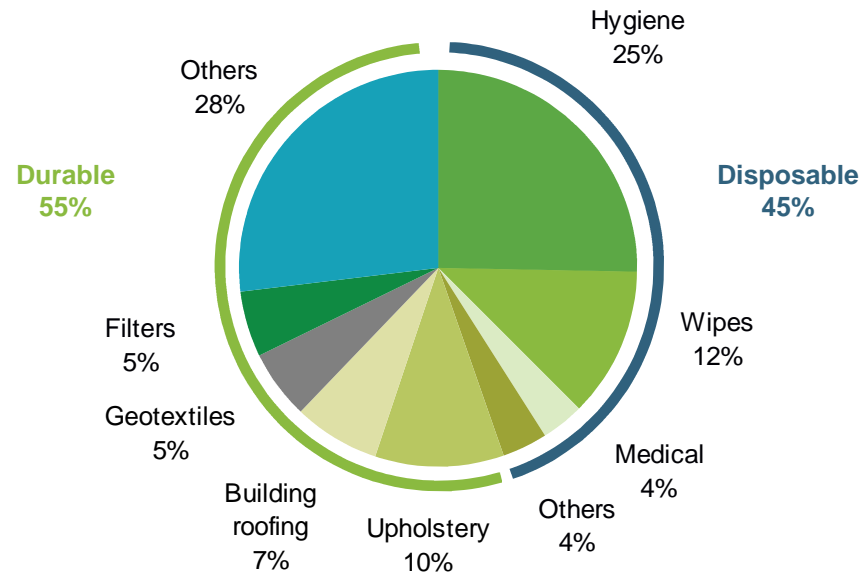
Munich Fabric Start Bluezone – Customer feedback

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# World Nonwoven market by segment

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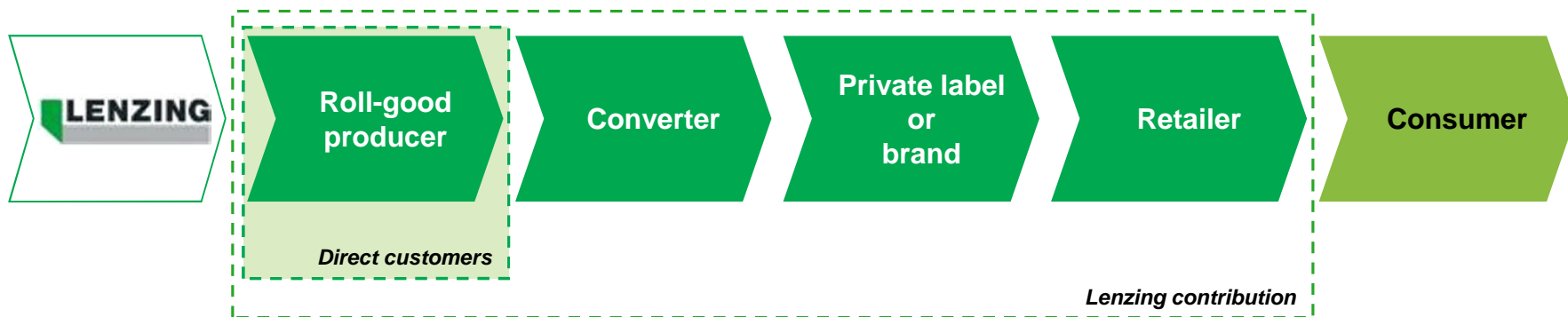


Total 2012P<sup>1</sup>: 8mt

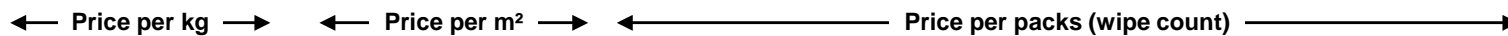
- Nonwoven market can be separated in **disposable and durable segments**
- **Lenzing is focused on disposable products** due to high absorbency and biodegradability characteristics of MMC fibers
- **Technical applications** being the only exposure to the **durable market**

Source: Pisa, Euromonitor, Lenzing estimates  
1) preliminary

# Nonwoven value chain



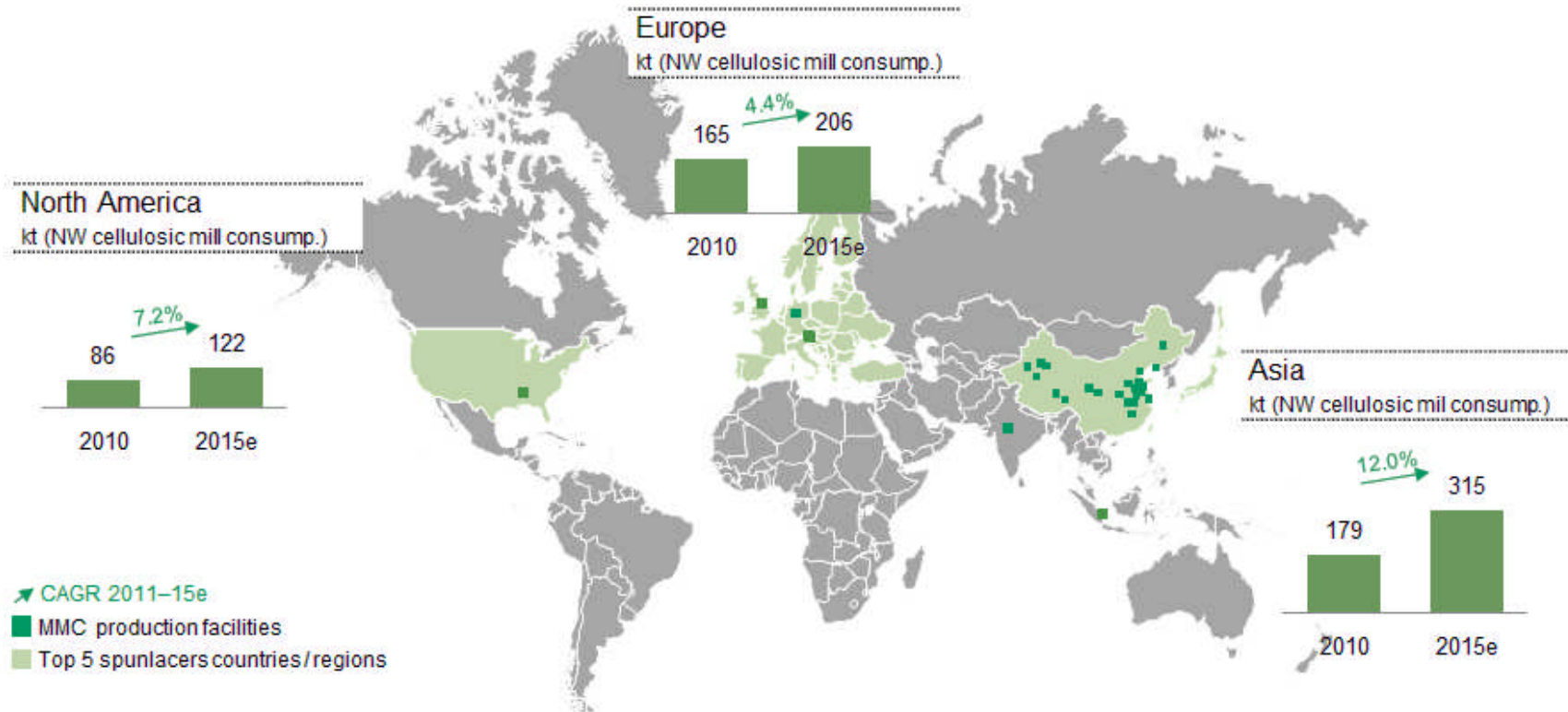
Price reference:



➔ Lenzing is very close to the customer due to short value chain and significant certification requirements



# Europe and the US are the primary mill markets with Asia catching up



- ➔ Downstream value chain and end customers in nonwovens currently centred in Western countries
- ➔ Transportation cost in the next part of the value chain (from roll-good producer to converter) for nonwovens higher than for textile, hence customer proximity critical

Source: Study „The Future of Global Markets for Nonwoven Wipes to 2017“; Lenzing estimates

# Implementing the TENCEL® strategy (Nonwoven) – Scale

TENCEL® with a broad range of applications

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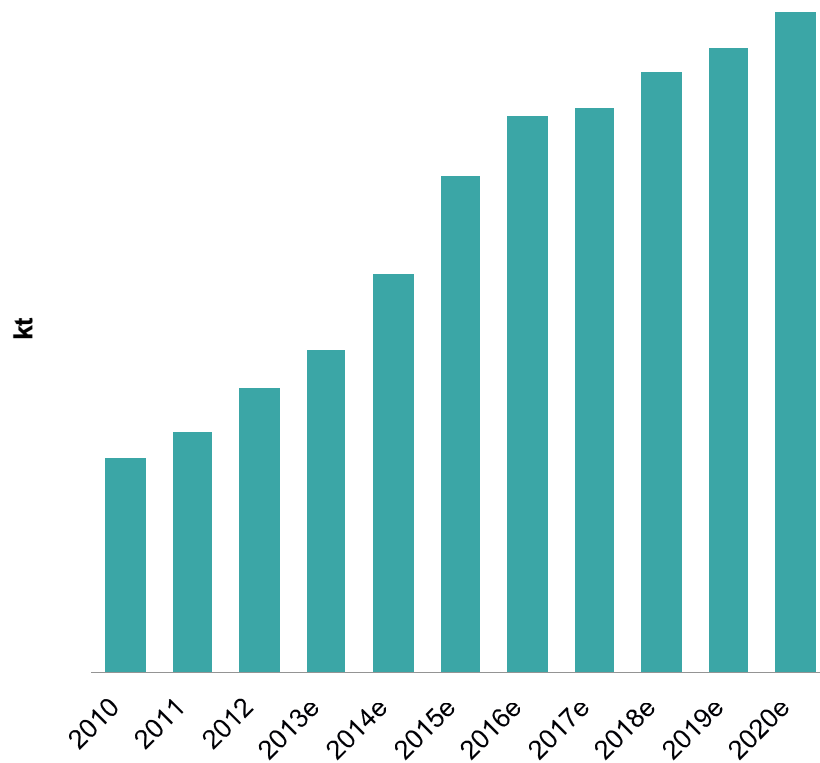
- Sustainability including wood certification increasingly gains importance for retail
- Biodegradability as key argument for disposable products
- Absorbance and softness as USP elements
- Create pull through further expand branding strategy  
(TENCEL® has indirect influence on consumer decision to buy wipes and hygiene products)
- TENCEL® with outstanding properties in technical niches (mechanical strength, porosity, microfibrility)



# Example – Wipes

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Volume development TENCEL®



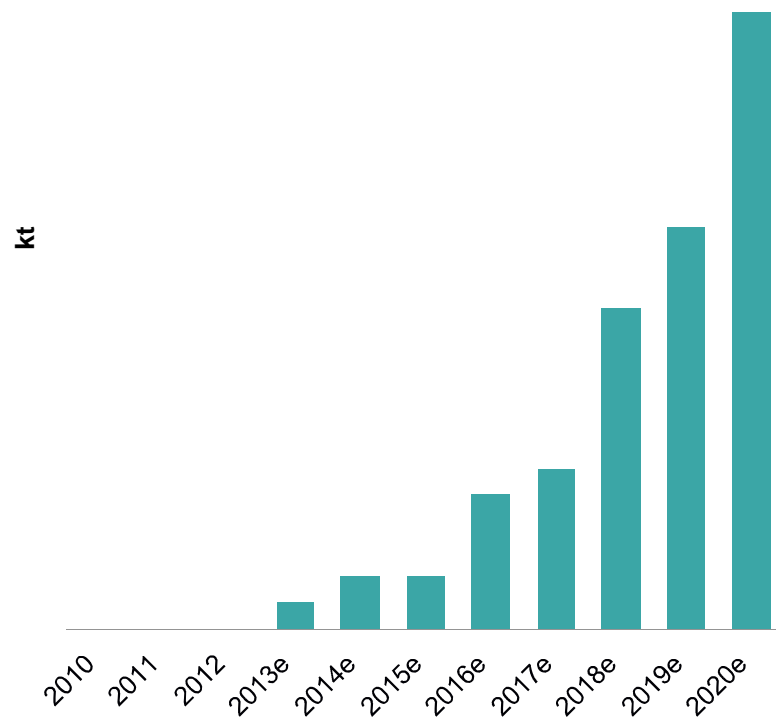
- Increase in downstream activities
- Product innovations
- Increase in branding
- Expanding business to Asia



# Example – Hygiene

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## Volume development TENCEL®

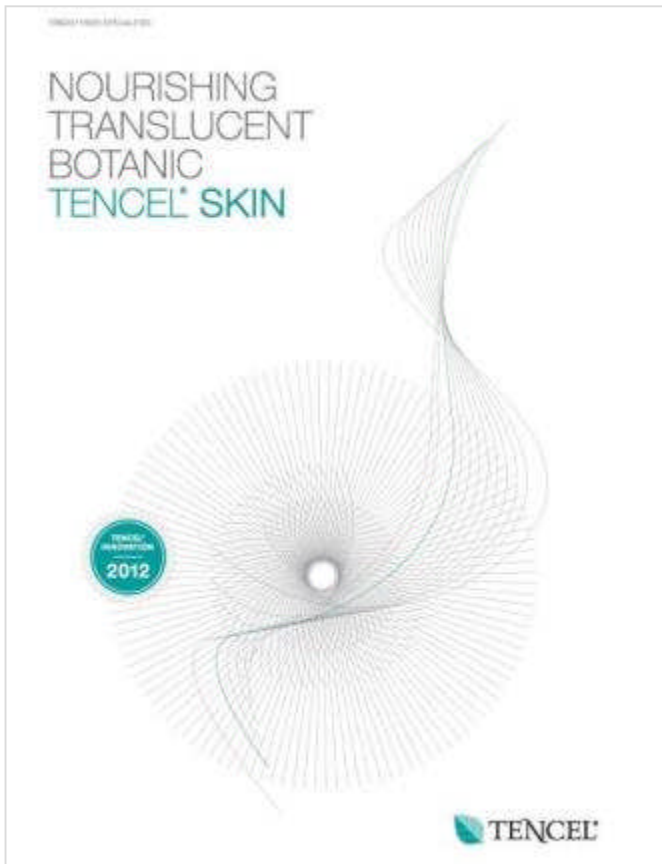


- Focus on skin friendliness
- Package deals
- Biodegradability main argument against synthetics
- Main project in the pipeline: TENCEL BIOSOFT®



# TENCEL<sup>®</sup>Skin for facial masks

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# Translucency

## Comparison of different facial masks

(showcase)

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TENCEL®Skin



Commercial viscose mask

# Brand recognition – Examples of co-branded products

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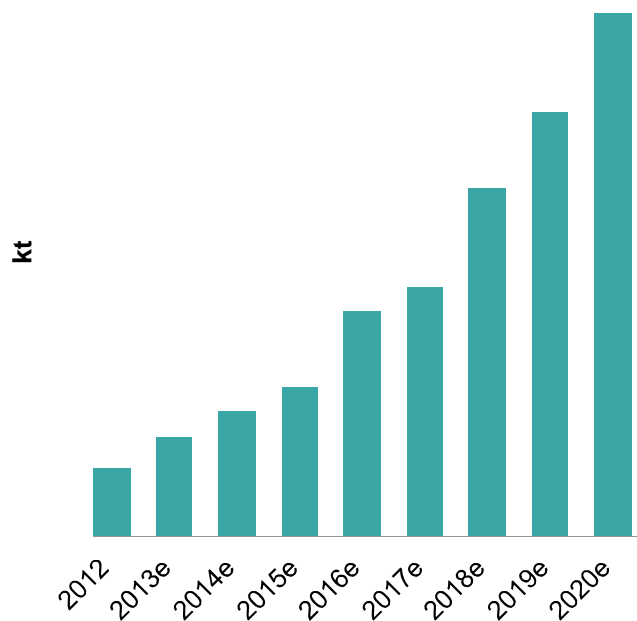
NBC Facial masks



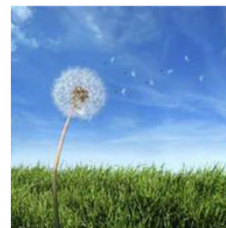
# Example – Technical

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Volume development TENCEL®



- Joint developments with customers
- Product is only sold based on its measurable technical performance
- Perspectives in selected markets as
  - Filtration: automotive and beverage
  - Electrical separator papers: capacitor and batteries
  - Carbon precursors: industrial insulation
  - Other: TENCEL® for FR bedding, TENCEL® in color catcher (showcase)



Filtration



Separator papers for batteries and alternative fuel vehicles



Carbonization



# TENCEL<sup>®</sup> in color catcher

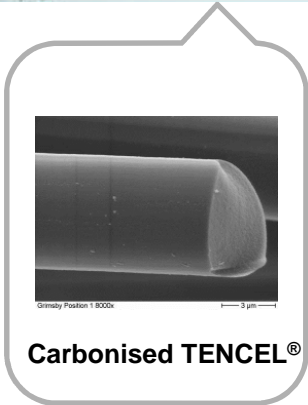
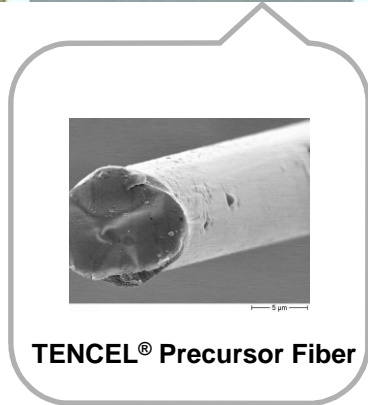
(Showcase)

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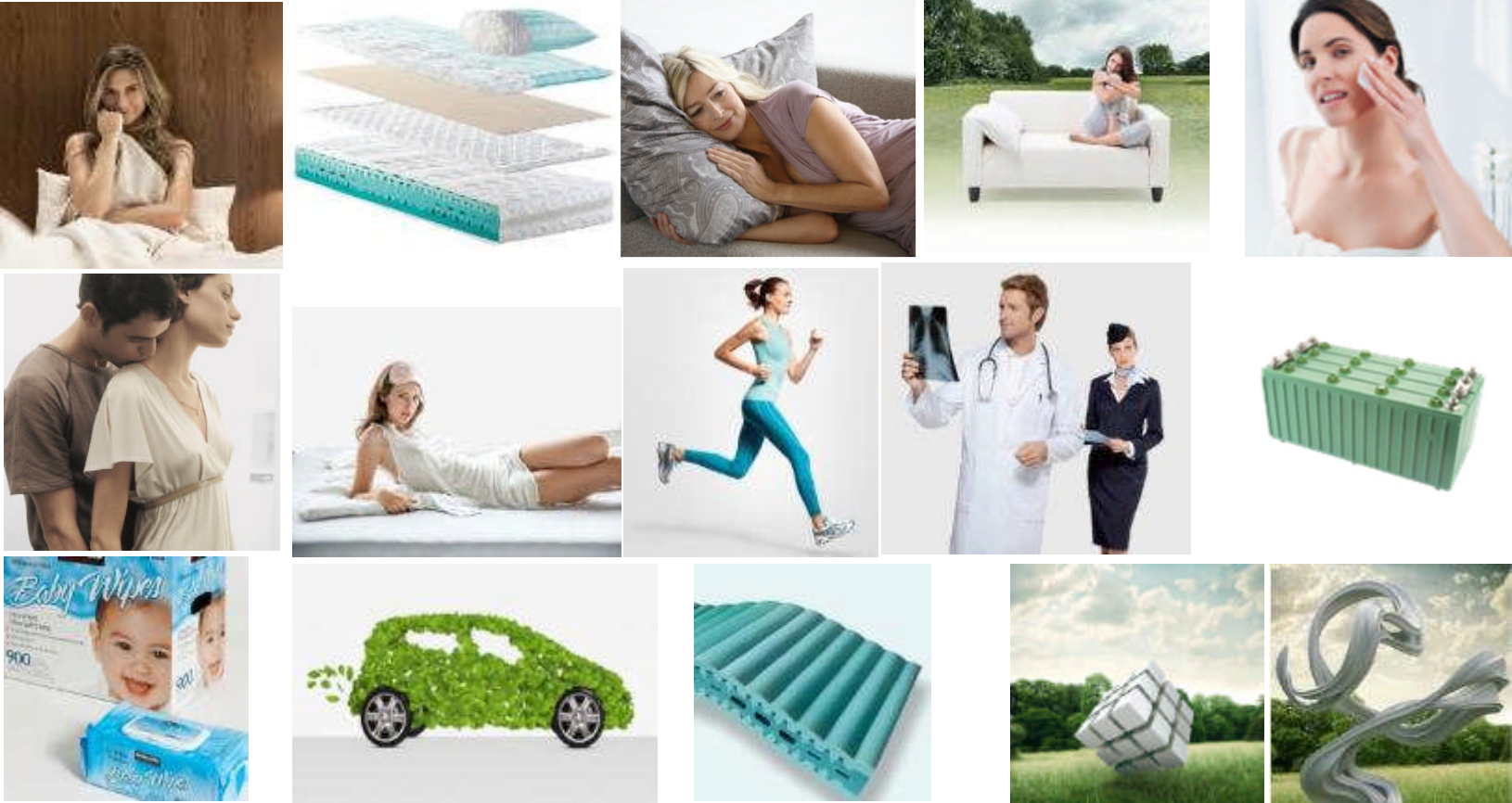
# Lenzing innovation: TENCEL® – Precursor for carbonisation

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# Growth potential with application innovations:

TENCEL® in new enduses



# TENCEL<sup>®</sup> jumbo site in Lenzing:

TENCEL<sup>®</sup> is the future of innovation

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# Leading Fiber Innovation



LENZING Capital Markets Day  
September 19, 2013  
The finance wrap-up – Thomas G. Winkler, CFO

# Financial consequences

## Defining the financial envelope

- **Hedge short-term market risk** (2013 – 2015)
- **Support long-term profitable/organic growth** (2016 – 2020)
- **Accommodate**
  - High price sensitivity
  - Wide spread in the MMC market's growth perspective
  - Need for financial flexibility
  - Need for optionality
- **Contribute to solid shareholder return**
  - Minimum dividend policy of EUR 1.75
- **Defend shadow investment-grade rating**
  - Total net debt/EBITDA < 2.5 x

MMC demand sensitivity – CAGR 2012-2020

		Cotton supply (mt)					
		25	26	27	28	29	30
Share of celluloses	40%	16%	15%	15%	14%	12%	11%
	38%	14%	13%	12%	11%	10%	9%
	36%	12%	11%	10%	9%	7%	5%
	34%	10%	8%	7%	5%	3%	1%
	32%	7%	5%	3%	1%	(1)%	(5)%

# Talking numbers (1/2)

## Market-environment adjusted strategy in financial terms

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- “We are NOT spending more than we earn going forward”  
**Net debt will be frozen at year-end 2013 levels**
  - **EUR 480 mn** estimated net financial debt
  
- “Given some lead time, we have flexibility in our future investments”  
**Minimum cash consumption rate is EUR 200 mn p.a., remainder is set by profitability**
  - **Approx. EUR 100 mn maintenance capex**  
(5% of sales, slightly below depreciation)
  - **Approx. EUR 100 mn “stakeholder payments”**  
(20 to 25 interests + 30 to 35 taxes + 45 to 50 dividends)

# Talking numbers (2/2)

## Market-environment adjusted strategy in financial terms

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- “Focus is on scaling TENCEL<sup>®</sup> - taking advantage of our first mover advantage”  
**Price/volume function also applies to TENCEL<sup>®</sup>.**  
**TENCEL<sup>®</sup> is, however, best positioned to contribute to profitable growth**
  - Almost 50% will be added to existing TENCEL<sup>®</sup> capacity by mid 2014
  - Key chemical cost only partially swapped into energy cost
- “Lack of visibility lets us take the foot off the accelerator”  
**We are growing our sales volume by 5% p.a. in 2014 and 2015**

'000 tons	2013e	2014e	2015e
Sales*	910	960	1,000
Capacity**	905	960	1,000
Production***	865	920	960
Utilization (%)	96%	96%	96%

\* includes trading goods from Kelheim and change in inventory

\*\* capacity beginning of the year + capacity end of the year divided by two

\*\*\* excluding Kelheim



# excelLENZ 2.0

Lack of visibility here to stay ...

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- **excelLENZ 1.0** – low hanging fruits
  - **Early reaction** to the poorer than expected pricing environment 2013
  - **Quick-win program** designed to help achieve Guidance
  - **Success in H1/2013** – EUR 16 mn saved compared to Q4/12 actuals
  - **85% of savings by 3 initiatives:** Purchasing, Capex, Maintenance
- **excelLENZ 2.0** – structural cost savings
  - Lead time
  - Upfront cost/investment
  - Offsetting effects (from excelLENZ 1.0)
  - Trade-offs
- **Focus on customers and markets** must not be diluted
  - No paralysis
  - No loss of spirit



# Leading Fiber Innovation



LENZING Capital Markets Day  
September 19, 2013  
Summary and outlook, Peter Untersperger, CEO

# Summary and outlook

Our imperatives on Lenzing's strategy

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- **Focus on customers**
  - **Focus on Asia**
  - **Focus on TENCEL<sup>®</sup>**
  - **Focus on innovation and applications**
  - **Focus on profitable growth**
- ➔ **75 years of innovation to be continued successfully!**

# Thank you for your attention!

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**See you on Lenzing's  
Capital Markets Day 2014**

**➔ Visit our new TENCEL® jumbo site!**