



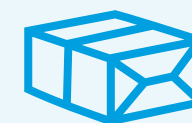
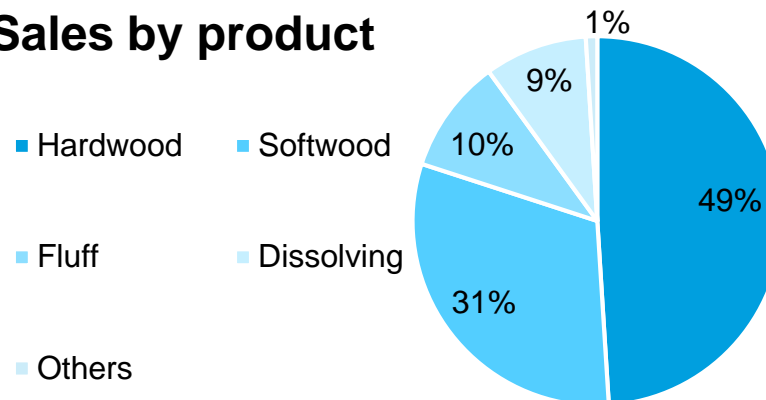
# Continuing our successful journey

**Markus Mannström**  
**EVP, Biomaterials division**

# Solid performance with increased focus on innovation...

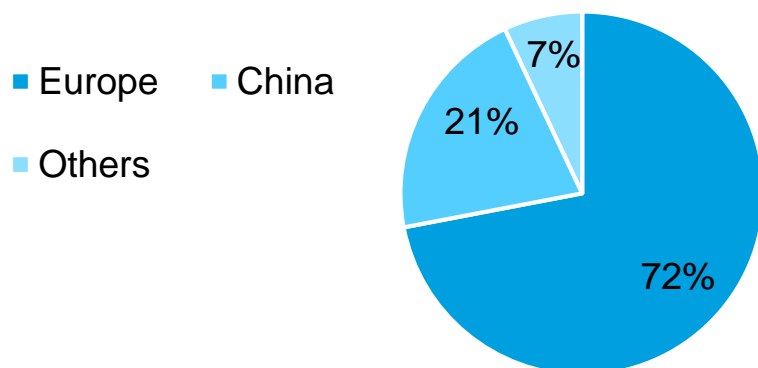


## Sales by product



**Nr 1 in fluff in Europe**

## Sales by region



## Renewable material from certified forests and plantations



**4** R&D Innovation centres

**4** Growth platforms

**16** Projects

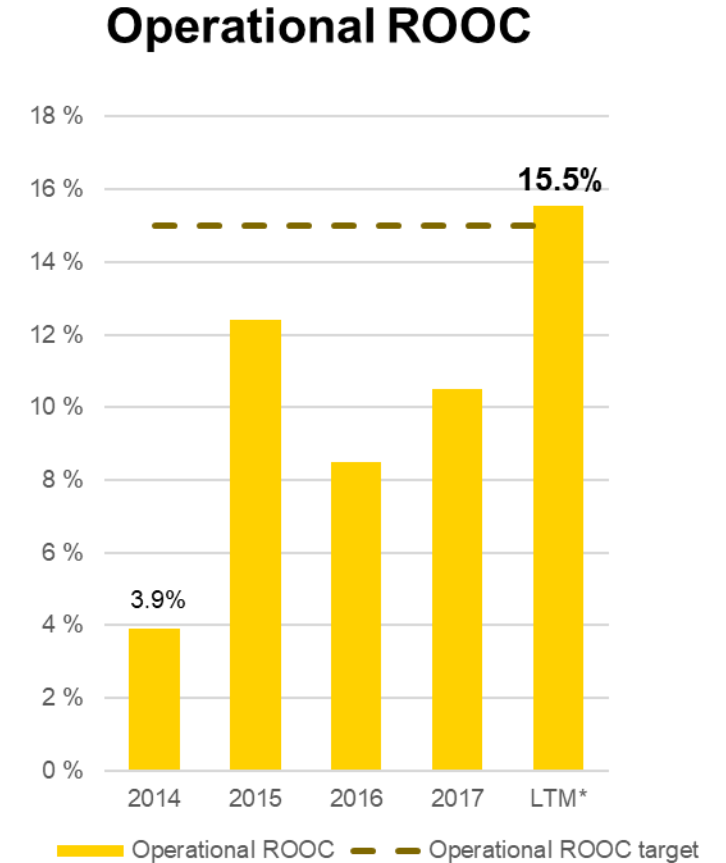
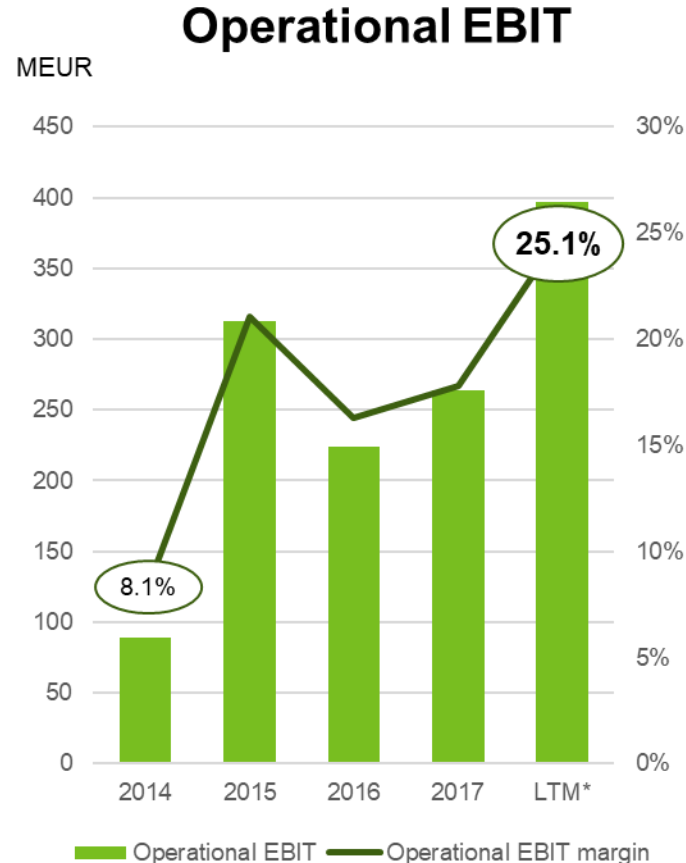
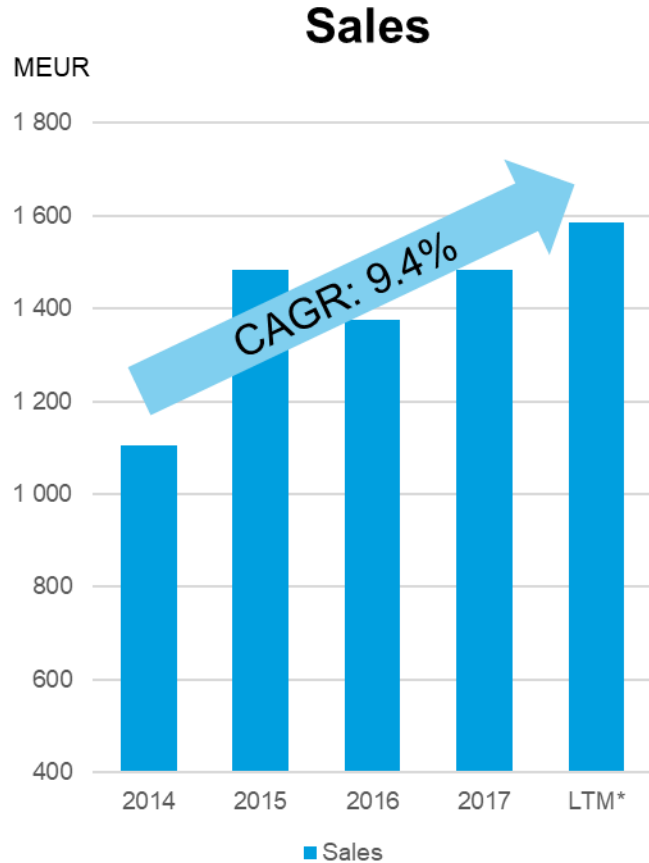
An ambition to become the leading R&D innovator within the industry sector



**+2.3%**  
**Global market pulp growth for all grades**

**30.3% EBIT margin Q3/18**  
**20.9% ROOC Q3/18**

# ...and we are performing well in line with long term targets



# We continue with our strategic focus areas



## Maximise value from eucalyptus pulp

Continue to improve production efficiency

Constantly improve the cost competitiveness of Montes del Plata

## Differentiate our Nordic pulp business

Reduce exposure in softwood

Grow in fluff and dissolving pulp

Continue to improve production efficiency

Innovate on pulp applications with current customers

## Generate profitable growth from innovation platforms

Build and develop strong business on:

- Improved pulp properties
- Regenerated cellulose and MFC
- Lignin
- Bio-based chemicals
- Extraction and separation technologies

# Demand for all pulp grades is growing by 2.3%...



**Textiles, nonwovens**  
107 Mt market, growing 3%/y  
6.6 Mt market pulp (dissolving)

**Hygiene**  
590 billions of converted unit, growing 3.5%/y  
6.2 Mt market pulp (fluff)

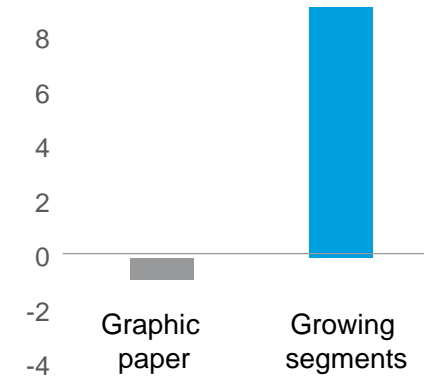
**Carton board**  
47 Mt market, growing 2.0%/y  
5.3 Mt market pulp

**Paper**  
Specialty: 29 Mt market, growing 2.0%/y  
9 Mt market pulp

**Tissue**  
36 Mt market, growing 3.2%/y  
22 Mt market pulp

**Graphic:** 101 Mt market, declining -1.0%/y  
17 Mt market pulp

Pulp consumption increase (Mt)



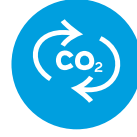
Digitalisation



Urbanisation



Growing middle class



Global warming



Eco awareness



Changing lifestyles

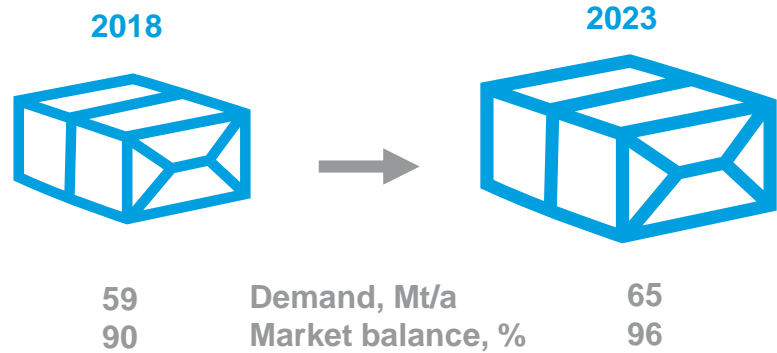


Growing population

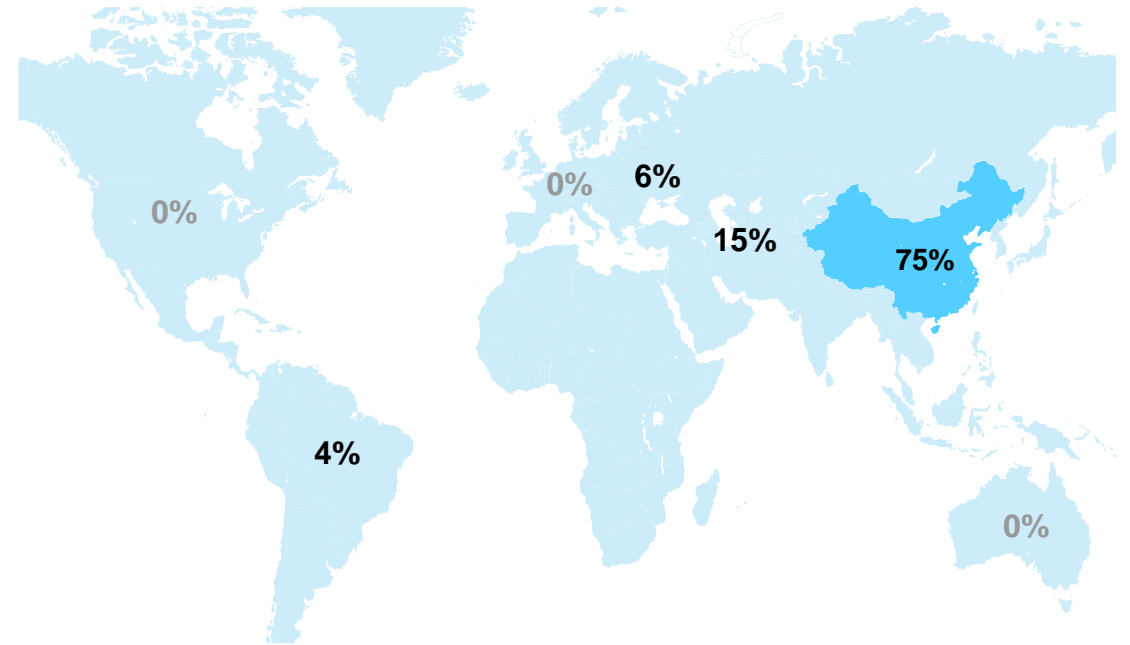
# ...and we expect a balanced market in pulp to continue



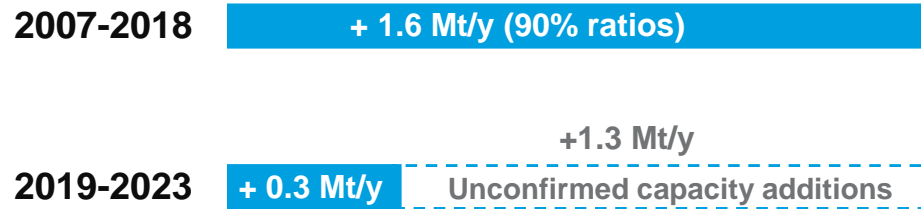
Pulp (hardwood and softwood) demand grows 2% CAGR by 2023



Share in pulp demand growth



Pulp average capacity growth

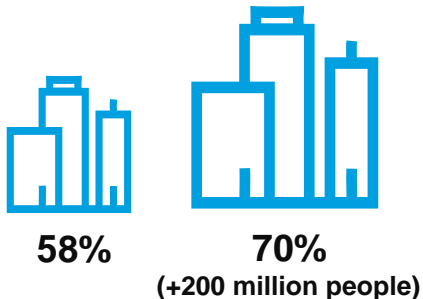


# Megatrends support the demand for virgin pulp in China

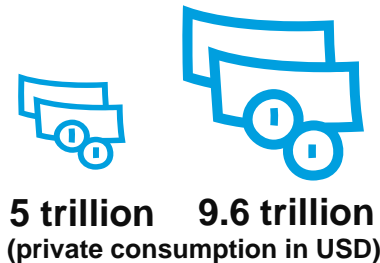


To 2030:

### Urbanisation



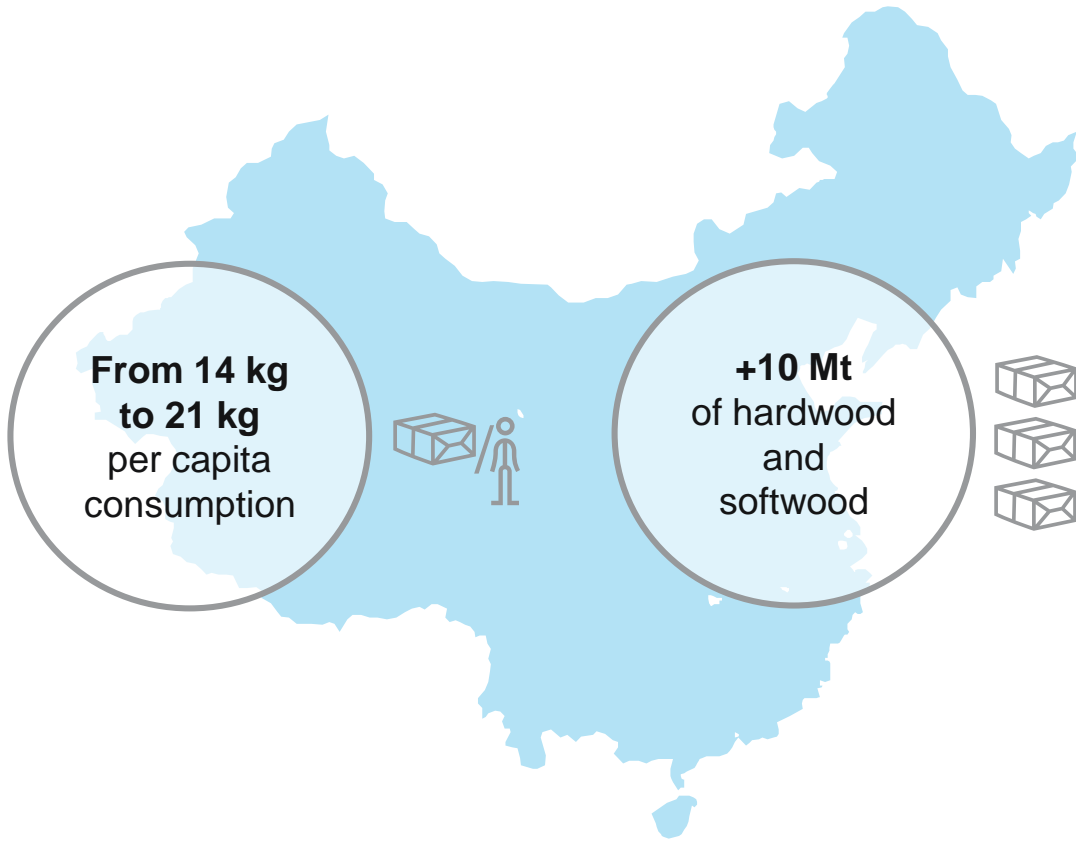
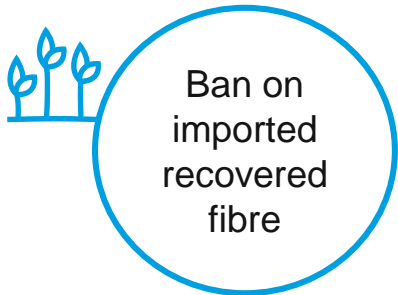
### Growing middle class



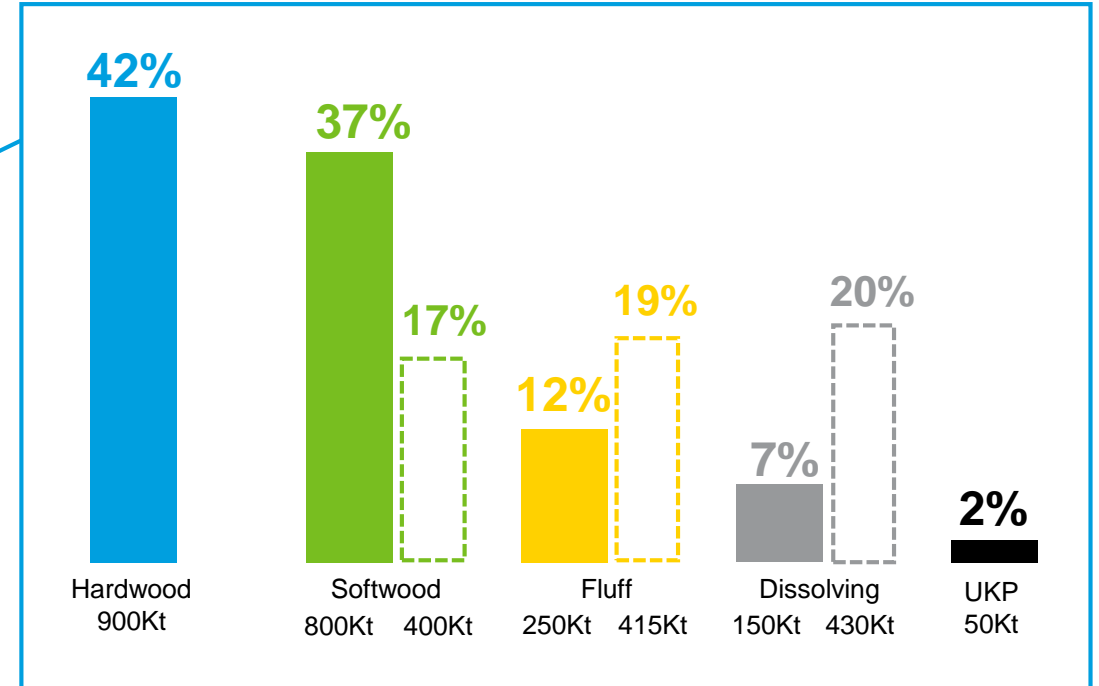
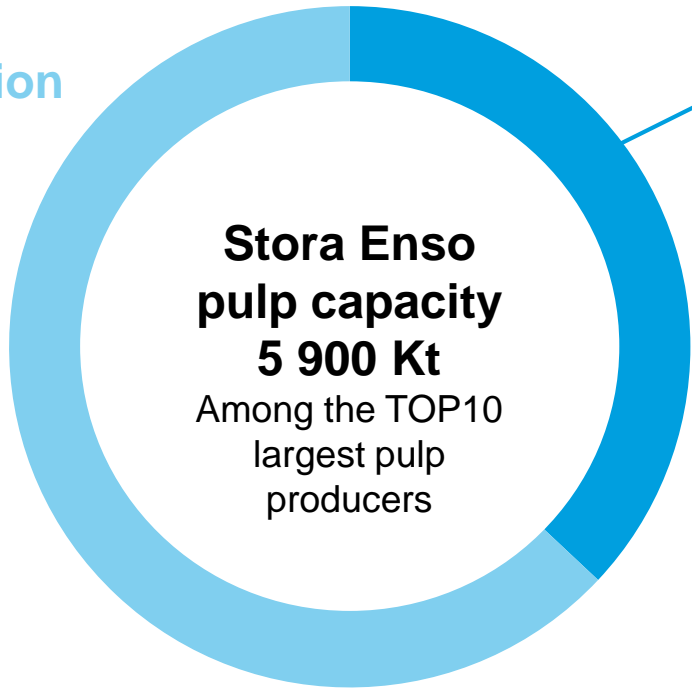
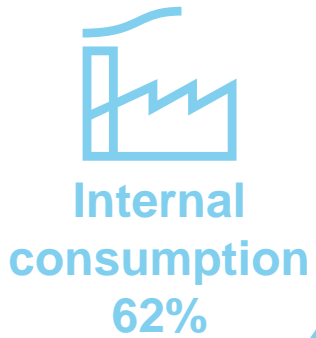
### Changing lifestyles



### Eco awareness



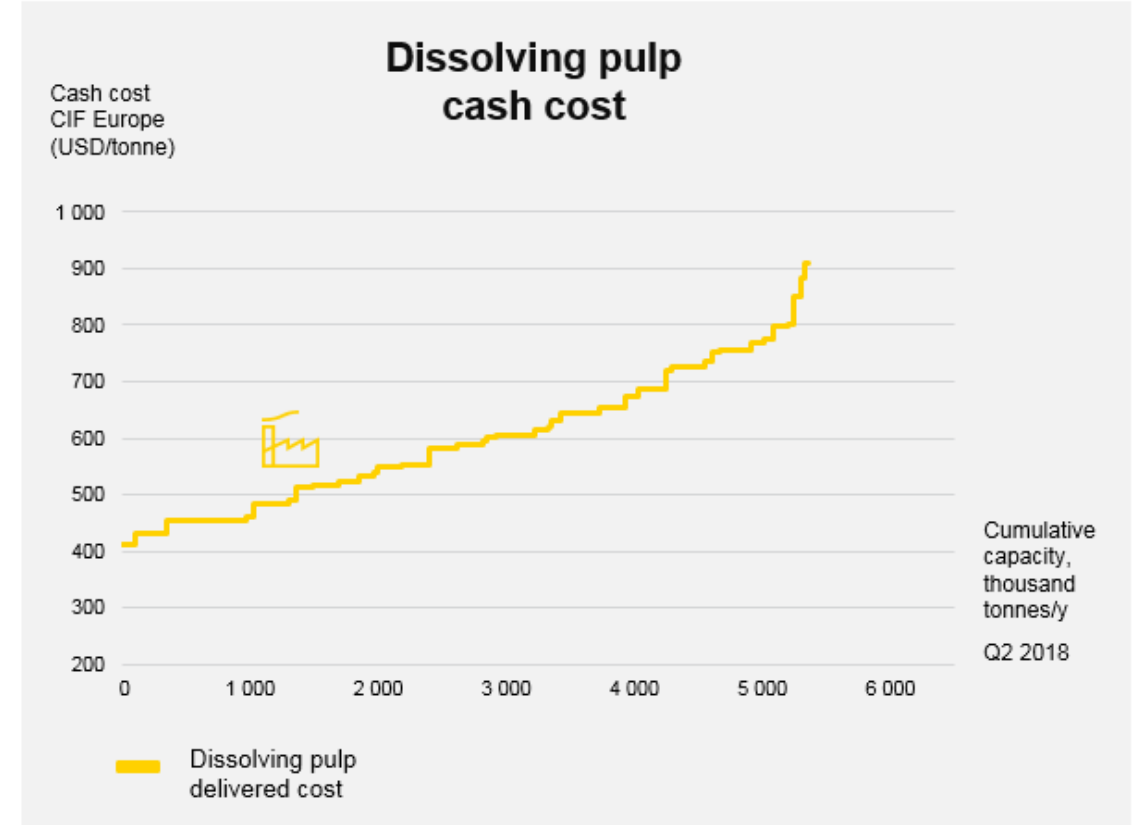
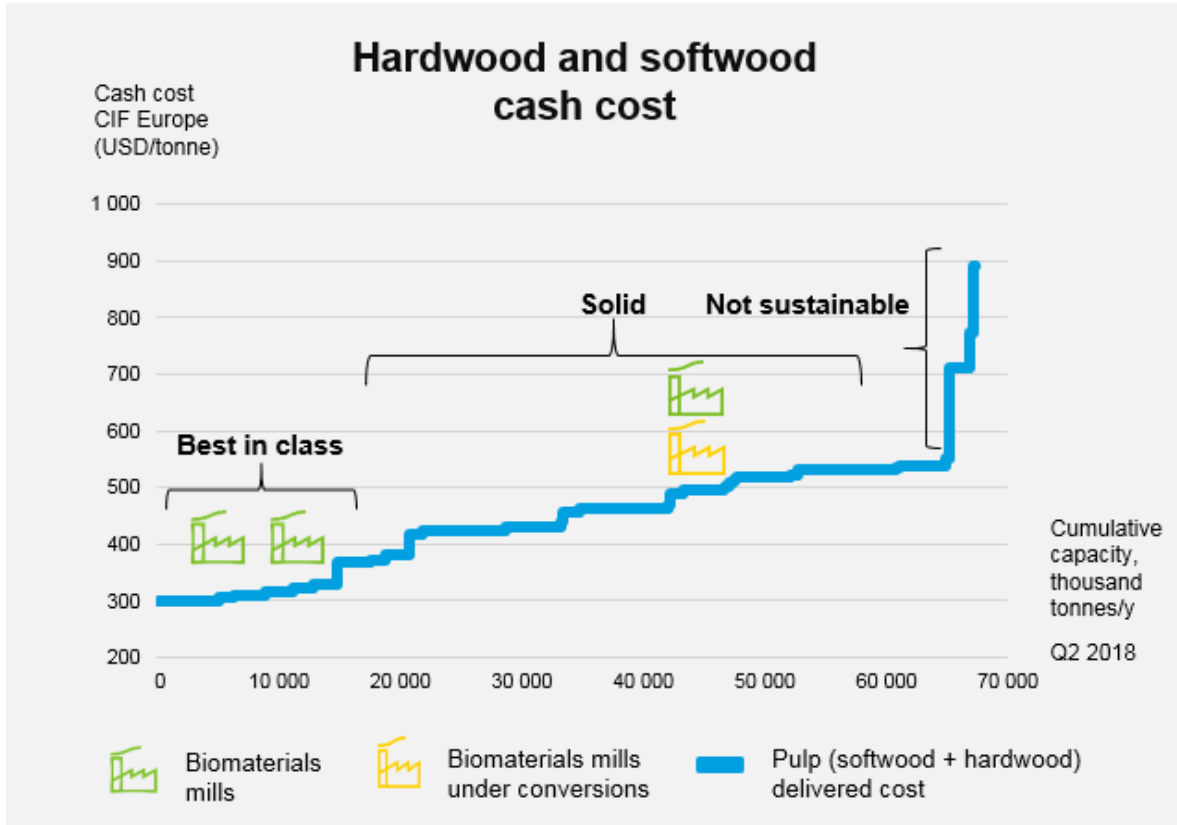
# We are moving towards a more specialized pulp mix...



By 2020 after conversions



# ... with cost competitive assets







# Innovation is key for sustainable profitable growth



# Creating value from renewable, reusable and fossil free materials



Innovation Platforms	Value proposition 	End markets 	Time to market 	Market Potential: Size / value 
<b>Improved pulp properties</b>	Increased material efficiency and performance	Specialty papers, hygiene fibre-based packaging	Continuous	2.6 Mt / 1.4 BEUR
<b>Regenerated cellulose</b>	Novel sustainable material from cellulose	Textile, and as film material in packaging	2020–2022	20 Mt / 35 BEUR
<b>MFC</b>	Increased material efficiency and performance	Specialty papers, coatings, cosmetics, and as film material in packaging	2019–2021	0.7 Mt / 1.6 BEUR
<b>Lignin</b>	Replace fossil-based materials	Resins and adhesives Carbon fibre Carbons for energy storage	2017–2023	1 Mt / 1.7 BEUR
<b>Bio-based chemicals</b>	Replace fossil-based materials for plastics	Packaging	2026–2027	2 Mt / 2.5 BEUR

# Continuing our successful journey



**Maximise value from eucalyptus pulp**



**Differentiate our Nordic pulp business**



**Profitable growth from innovation platforms**



**Delivering sustainable profitable growth**

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