

WE HAVE ONLY SEEN THE BEGINNING OF WHAT
FIBER-BASED MATERIALS AND SOLUTIONS
CAN BE USED FOR

Imagine fiber

INVESTOR PRESENTATION

December 2019



AHLSTROM
MUNKSJÖ

Ahlstrom-Munksjö – Global leader in fiber-based solutions

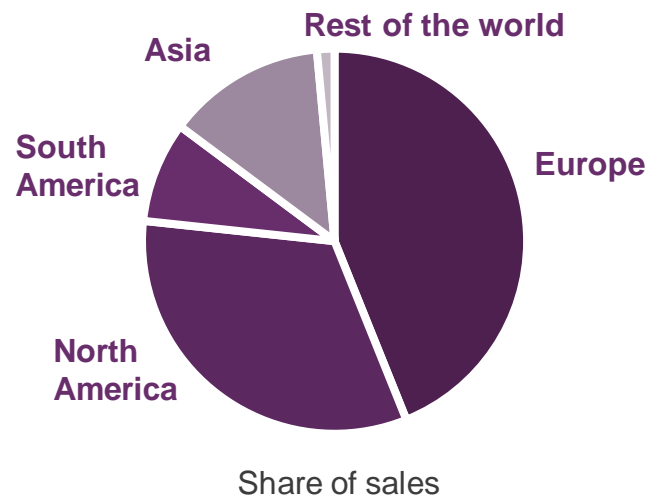
- Fibers are at the core of what we do and the common denominator for our products and solutions
- Natural fibers represent 94% of our total fiber use
- We offer custom made specialized fiber-based materials
- Our value proposition is based on innovation, quality and service
- Our offering contributes to a more sustainable everyday life by providing renewable materials that are alternatives to non-renewables, and solutions that make the end product more sustainable

Key facts

- Global network of sales offices and 45 plants and converting sites in 14 countries, approximately 8,000 employees
- More than 7,000 customers in over 100 countries
- Pro forma 2018 net sales of approximately EUR 3 billion
- Shares listed on Nasdaq Helsinki and Stockholm
- Head office in Helsinki



Balanced end-use and geographical exposure



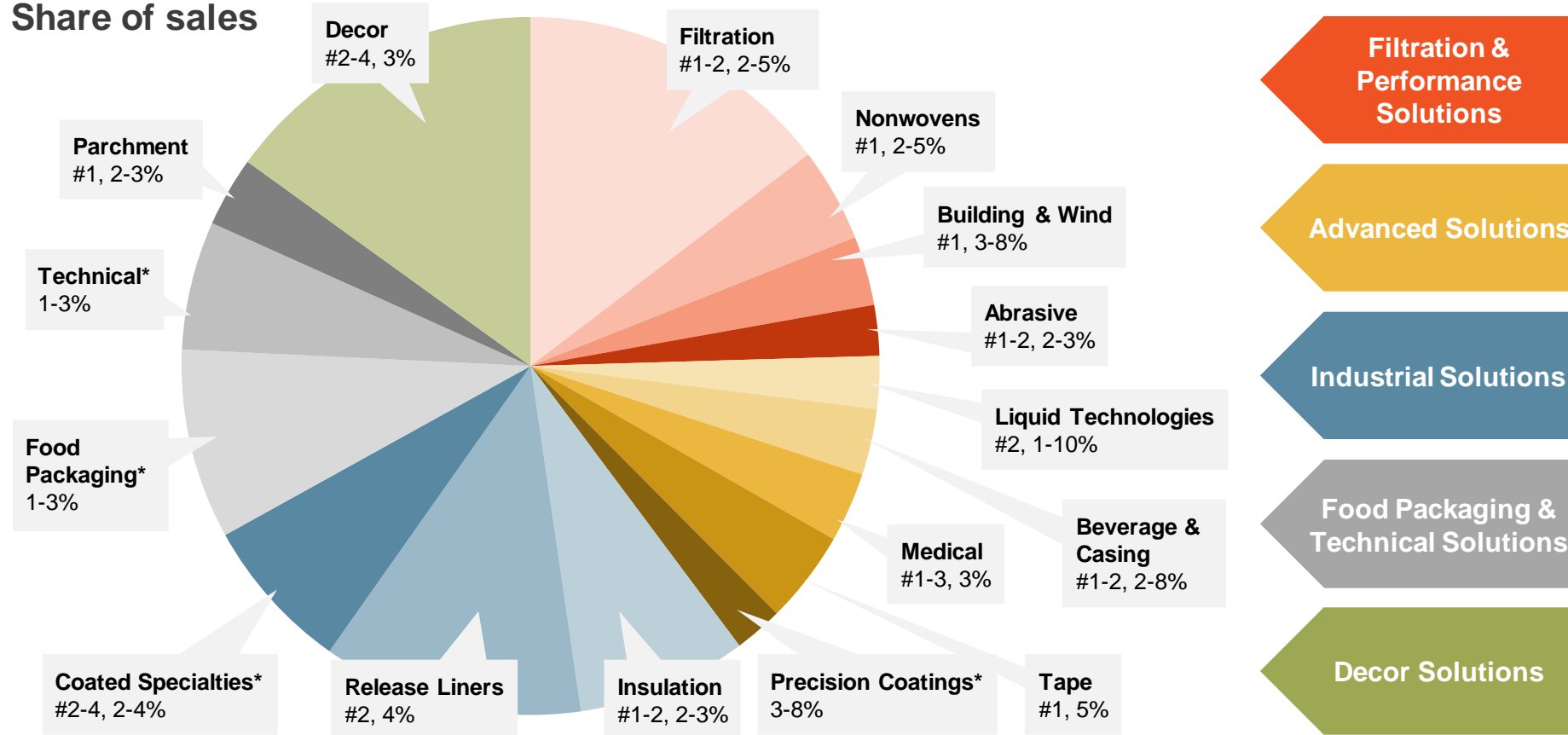
KEY STRENGTHS

- Leading position in chosen segments
- Operating in growing markets
- Balanced geographical exposure to a broad range of end-uses
- Designed sustainable and innovative solutions for customers



Leading positions in chosen growth segments

Share of sales



Market position in strategic segments

% Market growth in percentage

* One of the leading suppliers in the relevant segments

Figures are based on management estimates.



Smart solutions out of fibers



Trinitex® Advance W3200 for gas turbine filtration products



Extia® 1000 for industrial filtration applications



TrustShield™, single-use fabrics for ultimate protection



ReliaMAX™ microfilters for sample preparation and particle removal



HighFlow - a reinforcement fabric for wind and marine industry



TEX-STYLE™ - an extra resistant composite abrasive backing



Optilam™ - a release material to optimize RFID inlay lamination



CelluStraw™ - a fiber-based solution for paper drinking straws



GenReleaz™ specimen collection card for cost-effective biosamples



World of Colors gives heavyweight papers a great design look

Strategy



MISSION

Sustainable and innovative
fiber-based solutions

Strategy overview

VISION

Global leader in chosen
growth segments

CORNERSTONES

Local
accountability

Efficiency
and agility

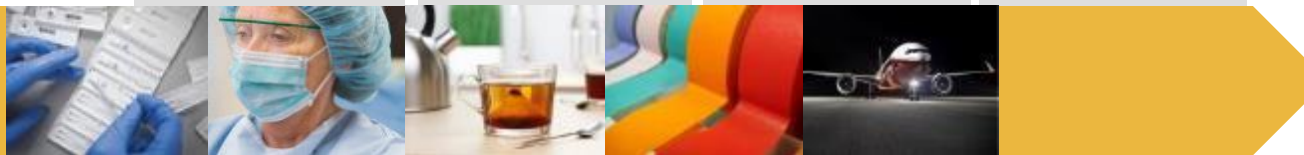
Customer
value

Profitable
growth

FILTRATION & PERFORMANCE



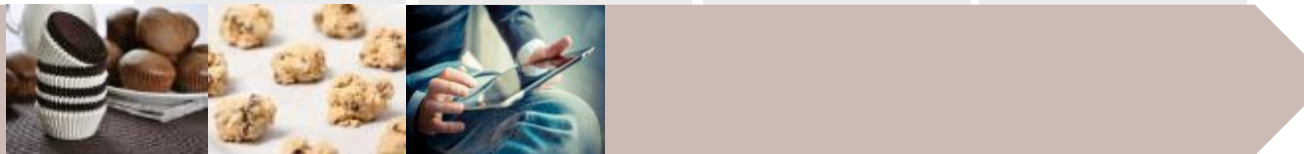
ADVANCED



INDUSTRIAL



FOOD PACKAGING & TECHNICAL



DECOR



FINANCIAL TARGETS

- EBITDA > 14% over a business cycle
- Net gearing < 100%
- Dividend: stable and annually increasing, paid bi-annually



VALUES

Long-term commitment | Teamwork | Passion to innovate and improve



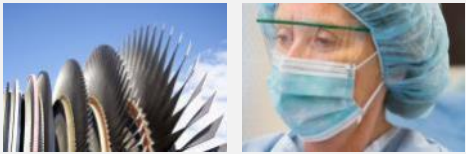
Sustainable everyday life

MISSION

Sustainable and innovative fiber-based solutions

BETTER PERFORMANCE

Filter materials to purify air and protect people from viruses and bacteria



SAFER MATERIALS

Formaldehyde free abrasive backings and fluorfree food packaging materials



FEWER RESOURCES

Diagnose diseases and purify polluted drinking water



LOWER IMPACT

Plastic free and compostable tea and coffee materials



PEOPLE



Human rights



Community engagement



Employee well-being



PLANET



Supply chain



Energy, water and waste



Carbon dioxide



PROSPERITY



Profitability



Innovation



Business ethics

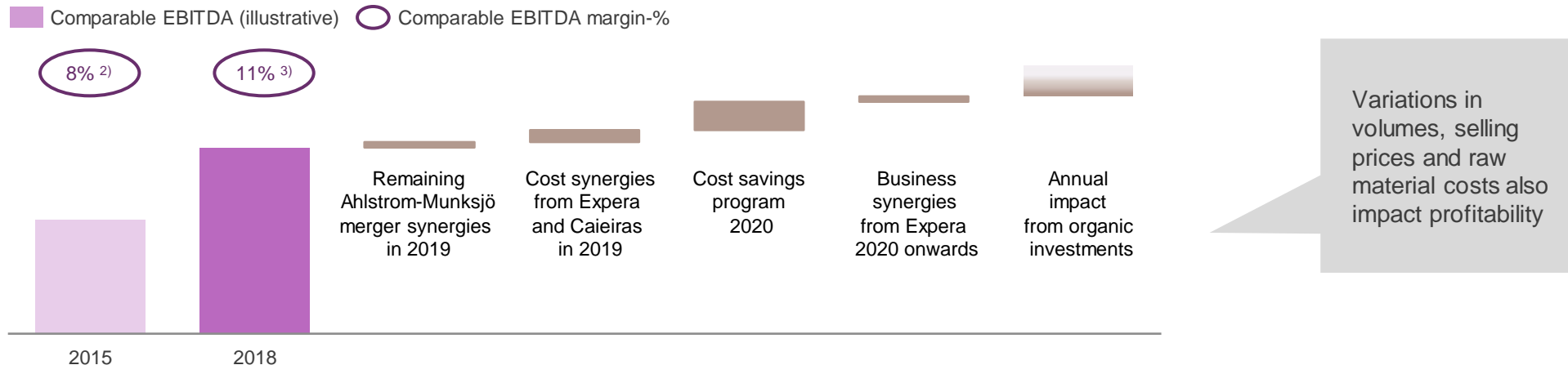
EcoDesign Tool



Strategic transformation supporting profitable growth



Measures underway to maintain and improve competitiveness, and drive growth¹⁾



1) Illustrative (not necessarily in scale), not to be considered as guidance
 2) Munksjö's reported adjusted EBITDA margin for 2015
 3) Pro forma comparable EBITDA margin in 2018

Promised cost synergy benefits exceeded

Synergy benefits:

Near-term cost synergies
EUR 11m NASS
EUR 10m Caieiras
by the end of 2019

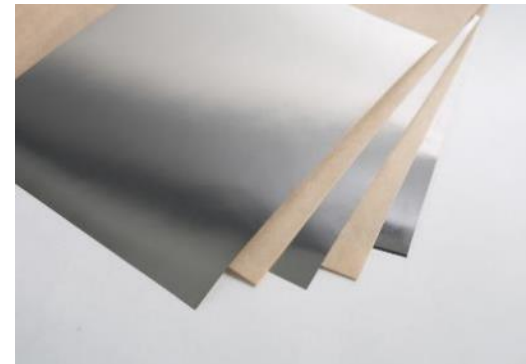
Business synergies
of at least **EUR 10m**
with a gradual impact
from 2020 onwards

SG&A

Sourcing

Cross-selling
Production optimization
Technology sharing

SG&A = Selling, General and Administrative expenses

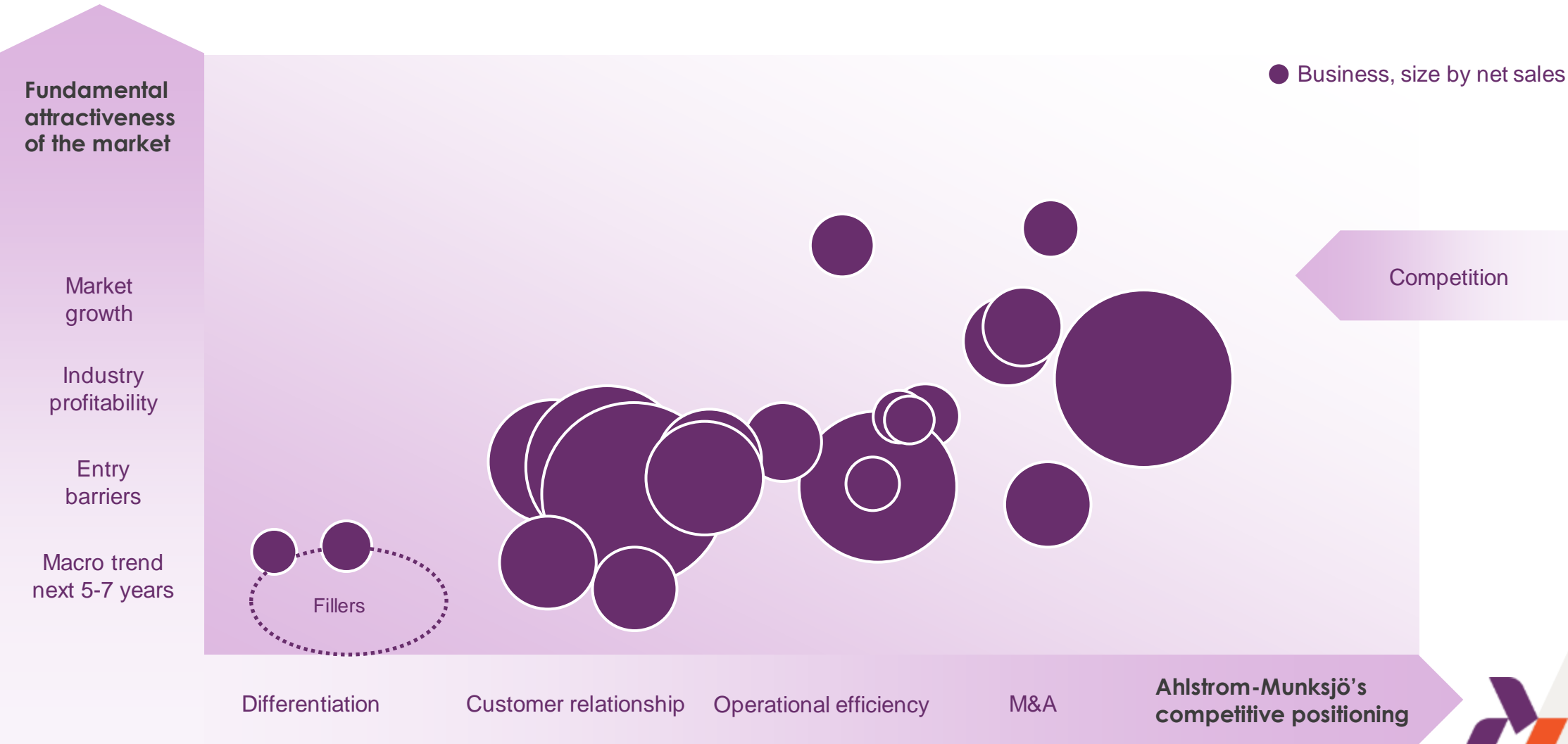


Cost savings program to maintain and improve competitiveness

- Market remains uncertain and does not promise much tailwind
- Measures to maintain and improve competitiveness
- Identified cost savings of at least EUR 50 million for the year 2020 compared to 2019 mainly relating to procurement and production
 - Change in recipes
 - Larger rebates
 - Centralizing indirect spend
 - Production optimization
 - Waste reduction
 - Streamlining

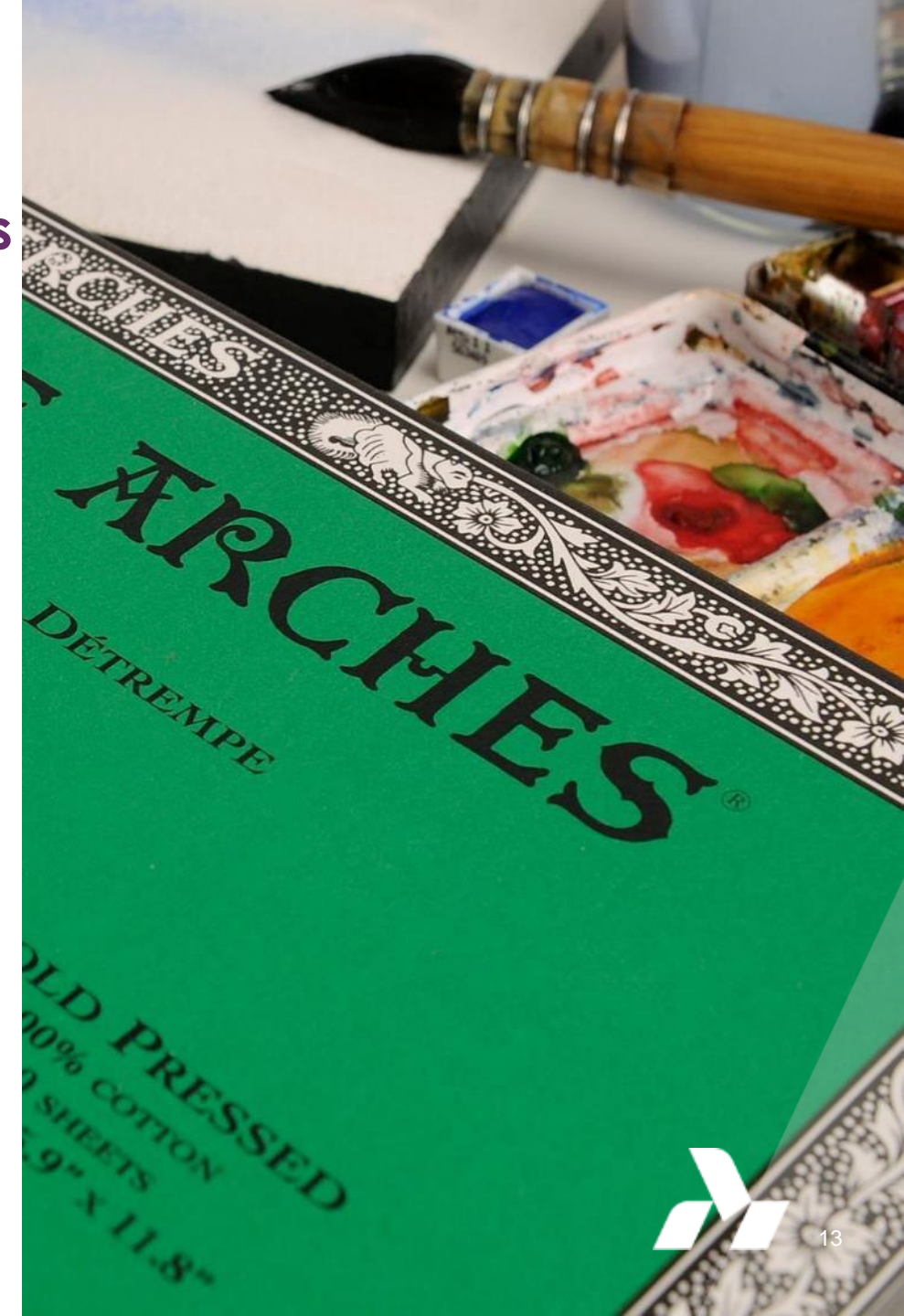


Our portfolio of businesses



Non-binding memorandum of understanding to divest fine art paper business

- Non-binding memorandum of understanding to divest fine art paper business, ARCHES®, to F.I.L.A. (Fabbrica Italiana Lapis ed Affini S.p.A. Group) of Italy
- Debt free purchase price about EUR 44 million
- Pro forma net sales are expected to be about EUR 13 million and comparable EBITDA in excess of EUR 4 million in 2019
- ARCHES paper is mainly used for watercolor painting, art publishing as well as printing and writing
- Two dedicated machines at the Arches plant in France
 - Ahlstrom-Munksjö will continue to operate five machines at the site for Abrasive and Decor businesses
- Transaction is subject to labor consultation and finalization of discussions between the parties to sign binding agreements
- Transaction is expected to be completed in Q1 2020



Divestment of glass fiber fabrics business

- Agreement to sell glass fiber reinforcement business in Mikkeli to Vitruan Group, part of the family-owned industrial holding ADCURAM of Germany
- Mikkeli plant produces glass and carbon based reinforcement fabrics, used to strengthen wind turbine blades, boat hulls, transportation equipment and industrial tanks and pipes
 - Limited synergies to Ahlstrom-Munksjö's portfolio
 - Different technology and customer base
 - Lower conversion margin
- Net sales of about EUR 30 million, no material impact on Group's comparable EBITDA
- Ahlstrom-Munksjö continues to produce glass fiber tissue at plants in Karhula, Finland and Tver, Russia
 - Defend and grow leading position in flooring applications and intends to expand its portfolio further
- Debt free purchase price about EUR 6.5m, expected closing in Q4 2019



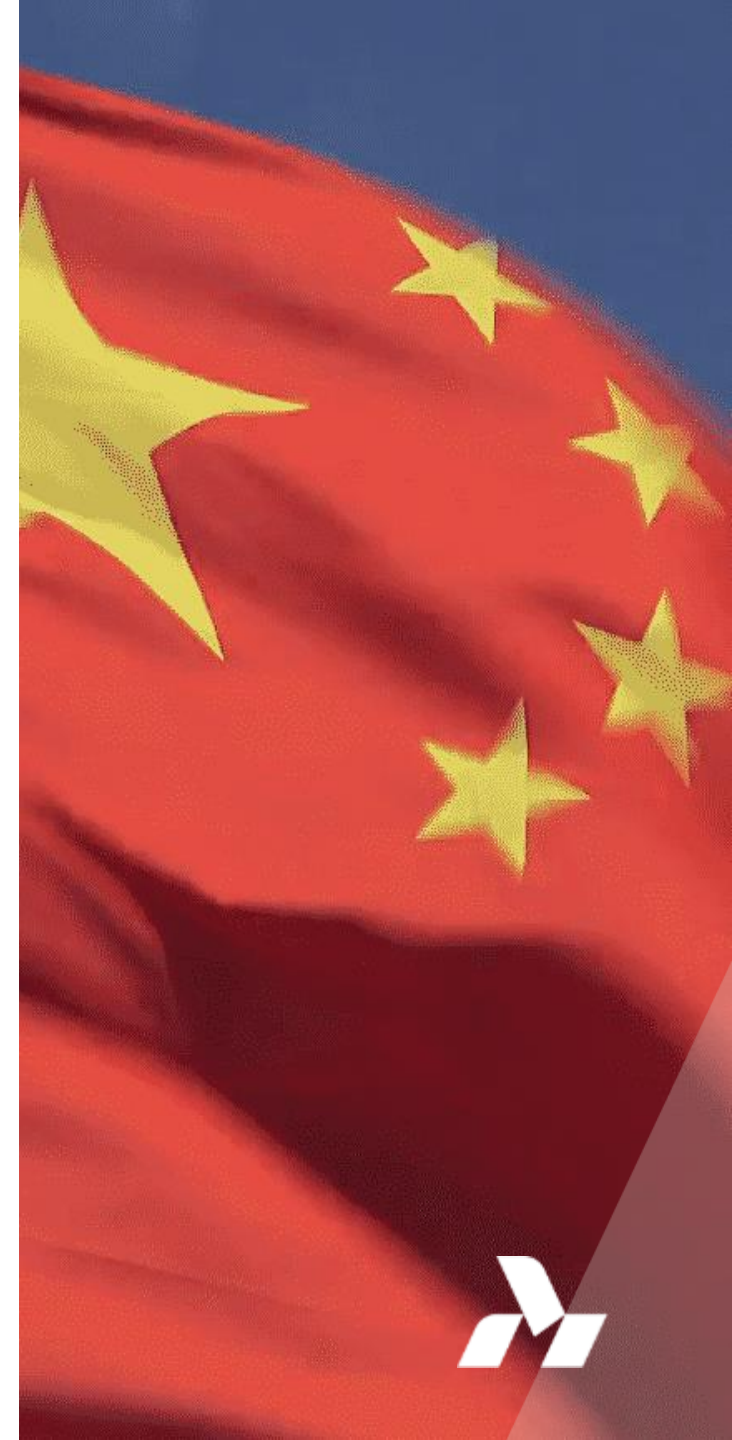
Non-binding letter of intent to acquire Chinese decor paper producer Minglian

Minglian New Materials – a state-of-the-art greenfield decor paper plant

- Debt free price approximately EUR 60 million
- Non-binding letter of intent, subject to further due diligence
- Transaction completion expected in Q1 2020

Combining Minglian with existing Decor business

- Strong presence in the world's two largest decor paper markets
- Improve cost competitiveness.
- Leverage Ahlstrom-Munksjö's leading brand and capabilities in the large and rapidly growing Chinese market
- Strengthen Ahlstrom-Munksjö's ability to serve international customers both in the short- and long term
- Provide technical and operational expertise to Minglian
- Strengthen Minglian's commercial opportunities in the domestic high quality segment and adjacent export markets



Minglian New Materials



- Established in September 2016
- State-of-the-art technology and plant lay-out
- Production capacity: ~50,000 ton
- Located in city of Xingtai, Hebei Province, China
- Production started at the end of 2018
 - Ramp-up progressed well



Key takeaways

- Leading position in chosen growth segments
- Balanced geographical exposure to a broad range of end-uses
- Designed sustainable and innovative solutions for customers
- Actions ongoing to improve competitiveness and drive growth

Smart solutions out of fibers

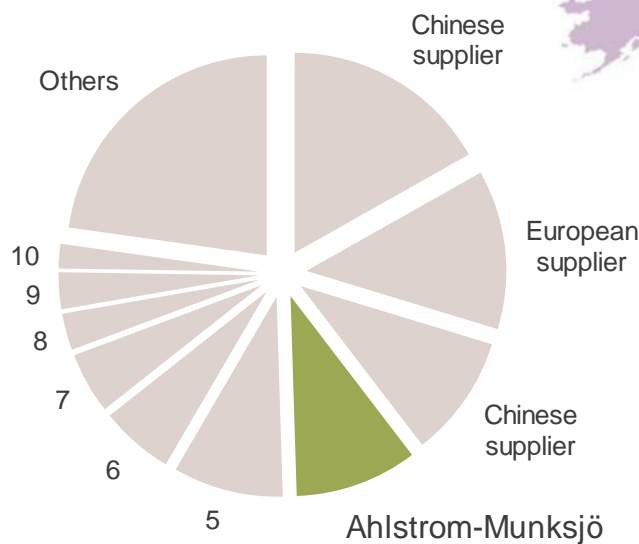


Exploring strategic alternatives for Decor business

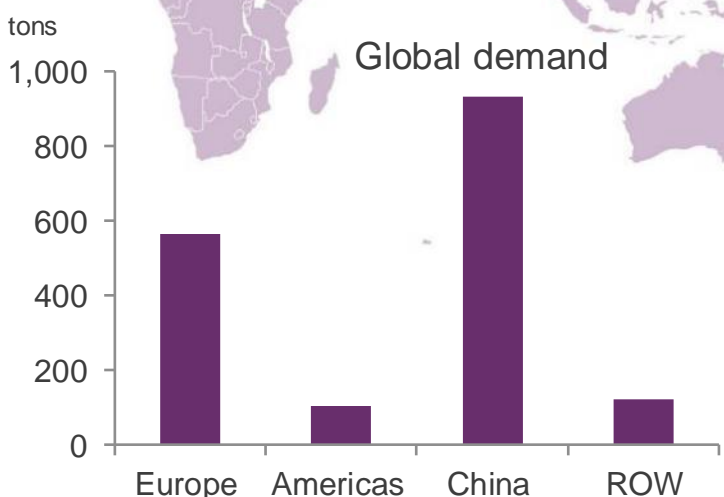
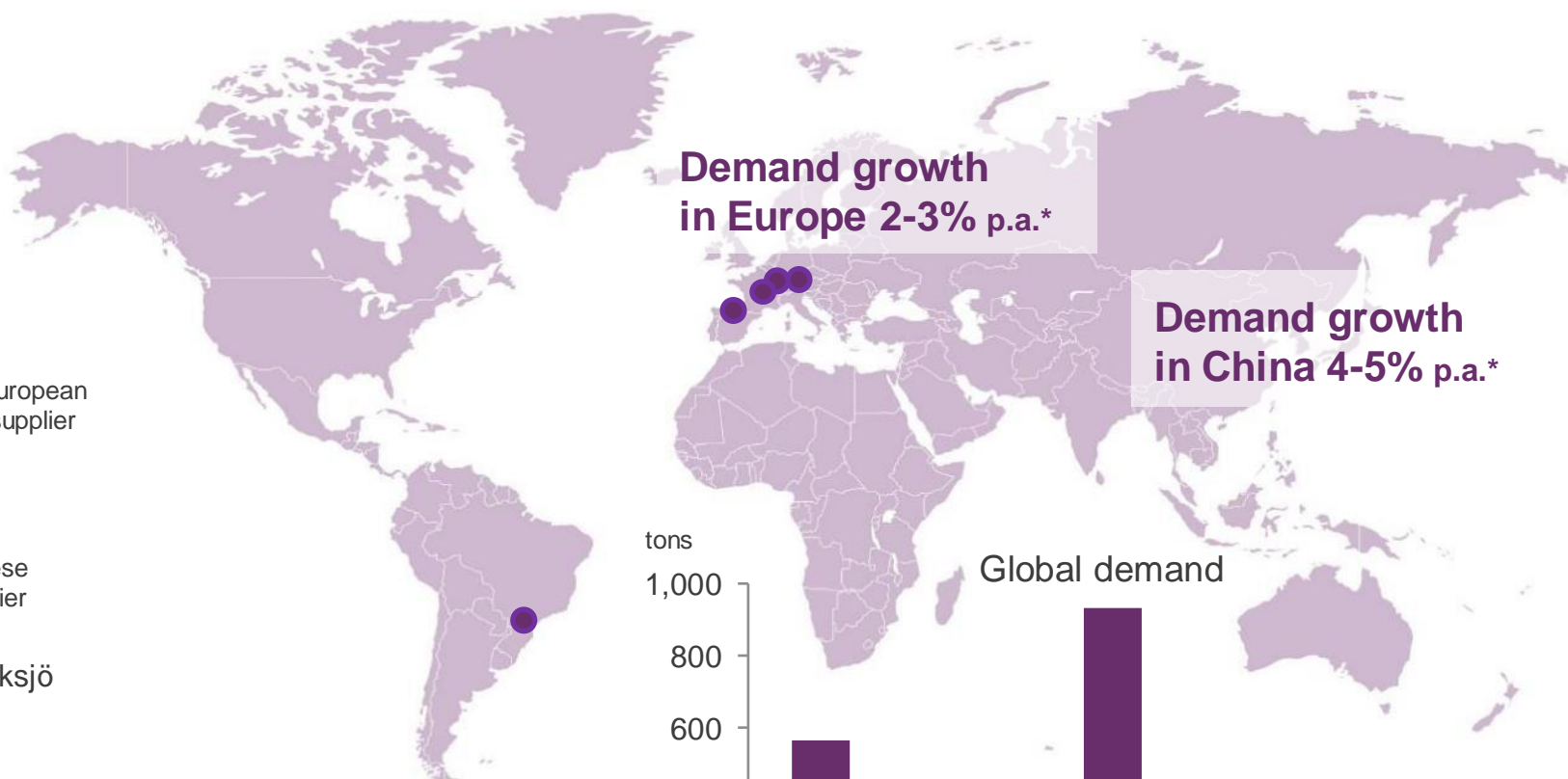


Strong in Europe and Americas, leading brand globally

Share of global capacity

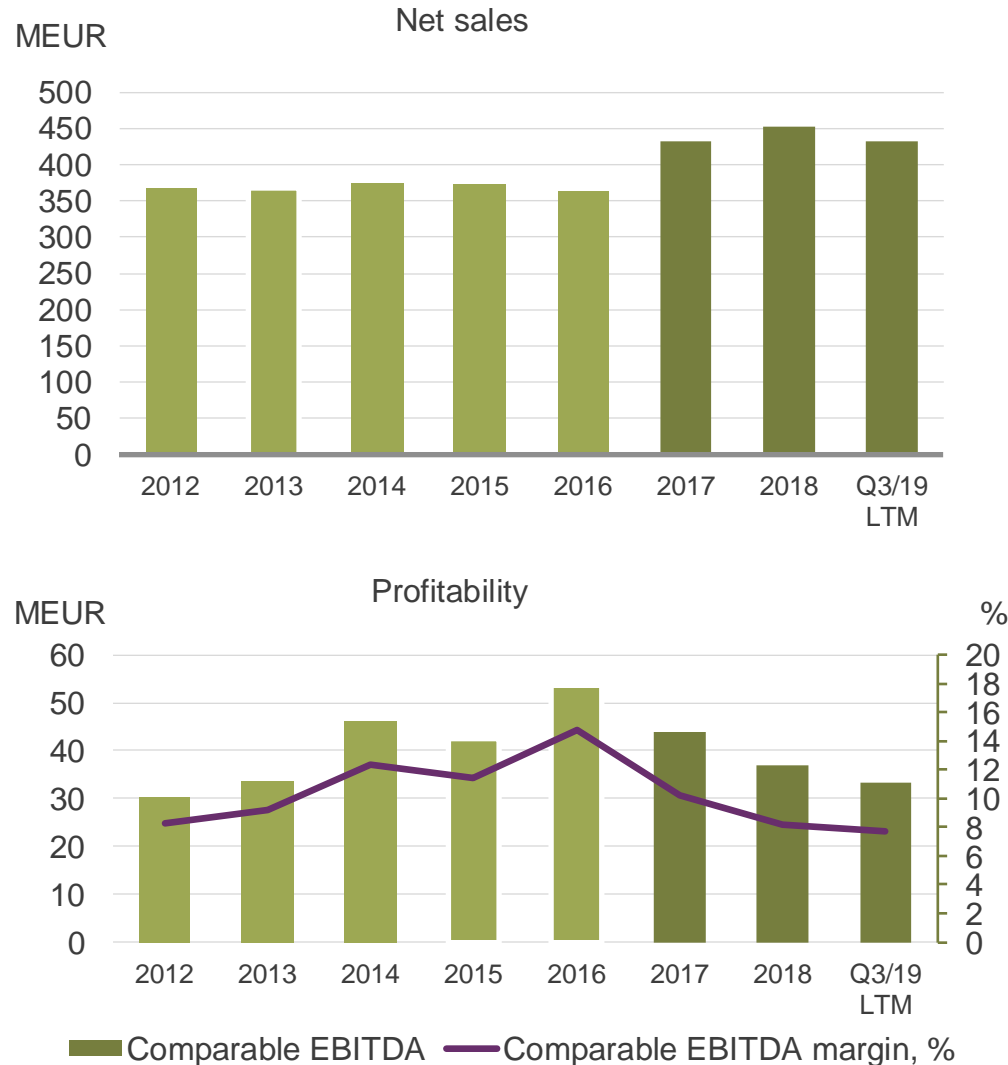


● Ahlstrom-Munksjö's manufacturing site
* Estimated market growth



Financial background

Volatility in profitability driven by fluctuating raw material costs and market demand



2012- 2016

- Strong underlying market growth
- Price and mix management driving margin improvement

2017

- Rapidly escalating raw material costs driving price increases, margin erosion and inventory build-up across the industry
- Sharp price increases giving overseas customers incentive to shift volumes to new Chinese competition

2018

- Gross margins per ton restored through successful price increases
- Oversea volume losses impacting sales and EBITDA
- Industry-wide de-stocking following the peak of TiO_2 prices in the summer adding further negative impact on sales in 2H
- Sharp decline in market demand

2019-

- Weakest market since the crisis back in 2009-10. Poor demand and rapidly falling pulp prices leading to strong price pressure
- Successfully maintained high margins
- Low volumes driving low EBITDA



Strategic Priorities – the way forward

**Defend and grow leading positions
in Europe and North America**

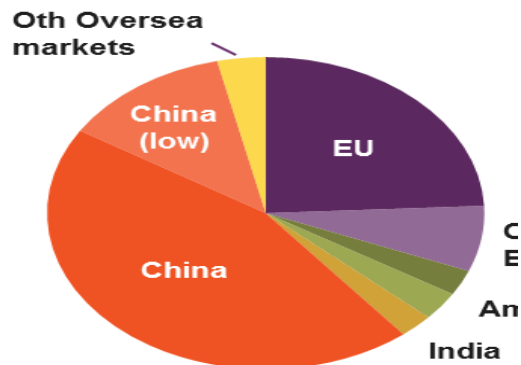
**Establish a strong growth platform
in South America**

Entry to China



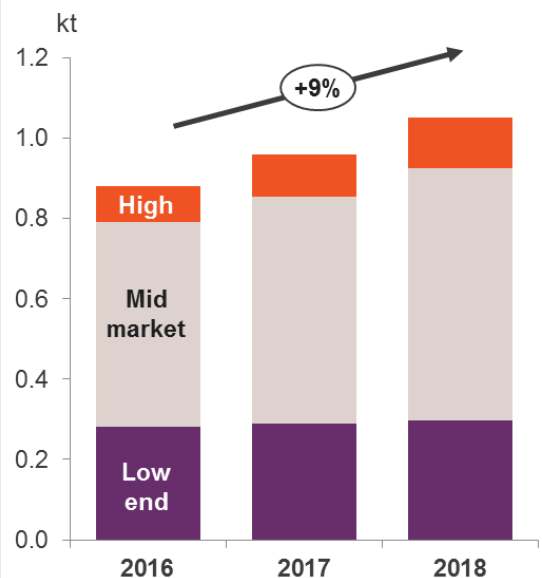
Chinese decor paper market – the growth engine of the global decor paper market

Global Decor paper market
- By Region -



Demand (2018): ~1,8 million

China Decor paper market
- Growth by quality segment -



- After two decades of remarkable growth, China is today the world's largest Decor paper market
- CAGR 2008-18: 21%!
- Demand surpassed 1 million ton 2018
- Around 2/3 of the projected future global growth (5 yrs) will come from China (+250 kt)
- **The high-quality segment is growing significantly faster than the overall market (>15%)**
- Limited growth in low-end (1-2%)

Exploring strategic opportunities for Decor business

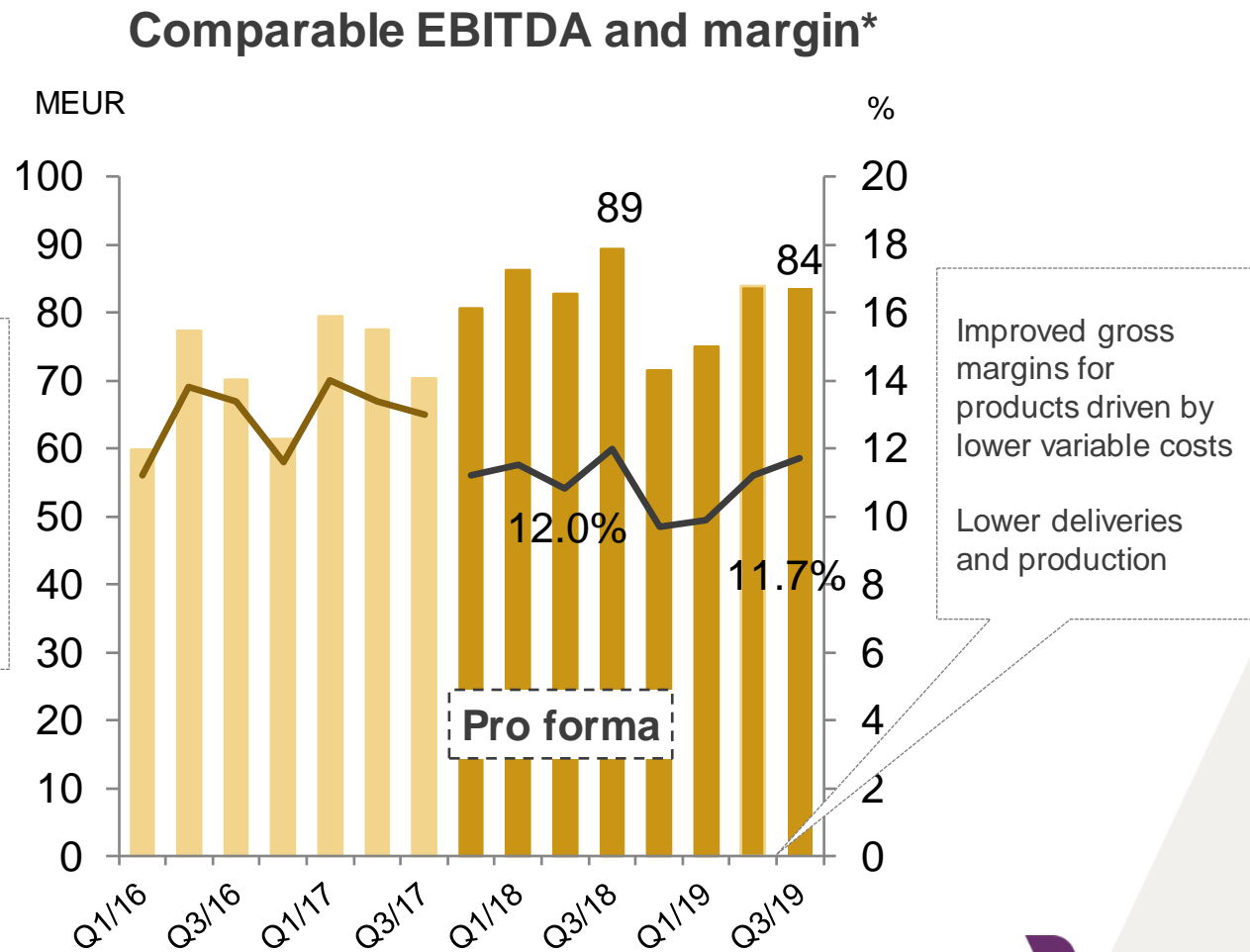
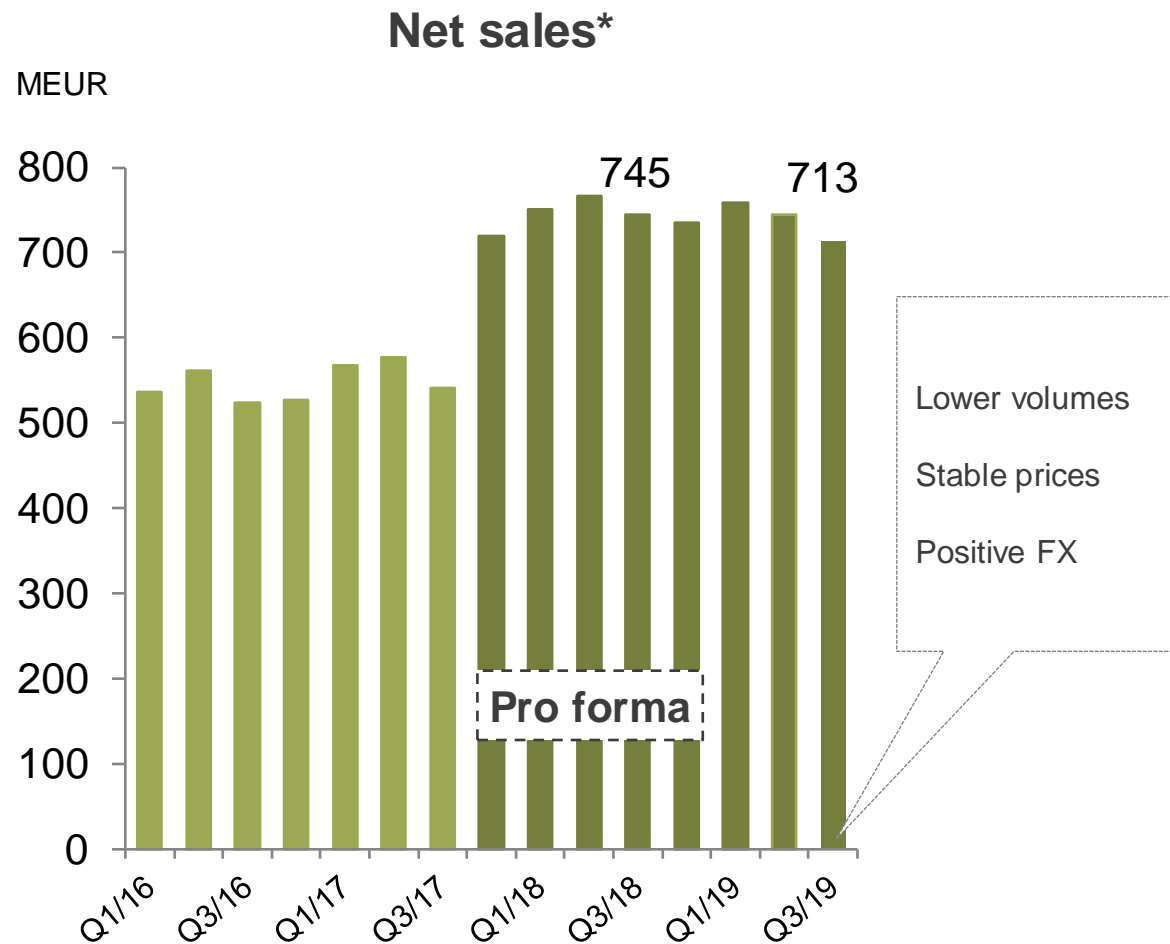
- Ahlstrom-Munksjö is committed to the Decor business and wants to develop and grow the business in a sustainable manner
- Partnering with a Chinese supplier would be based on strong strategic and financial rational
 - Create global leader with strong presence in the world's two largest markets
 - Leverage Ahlstrom-Munksjö's leading brand and capabilities to build a leading position in the fast-growing Chinese high-end market
 - Strengthen the business and abilities to serve our customers in the short- and long-term
- Investigating the possibility to attract outside capital into the Decor business
 - Speed up the execution of strategy
 - Outside capital will enable investments to grow and develop Decor business and strengthen our operations into a stand-alone global operation
- Enable us to remain an attractive employer



Financials and Q3/2019 highlights



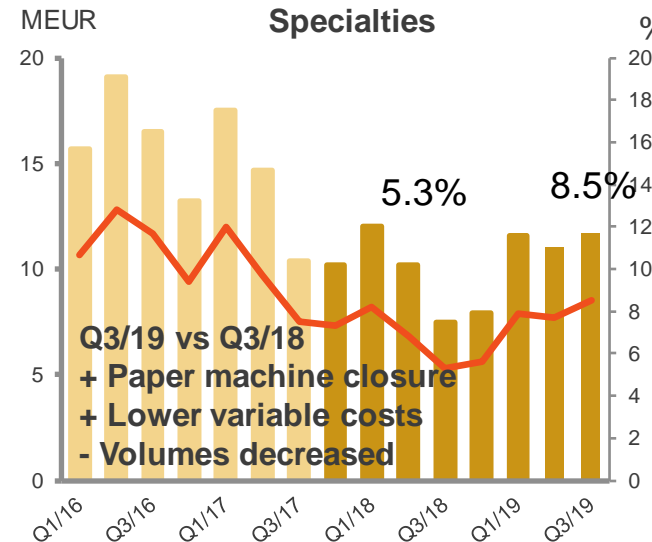
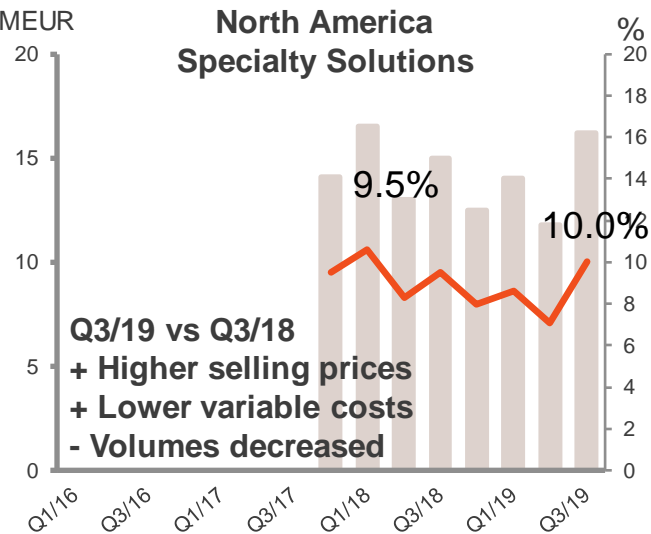
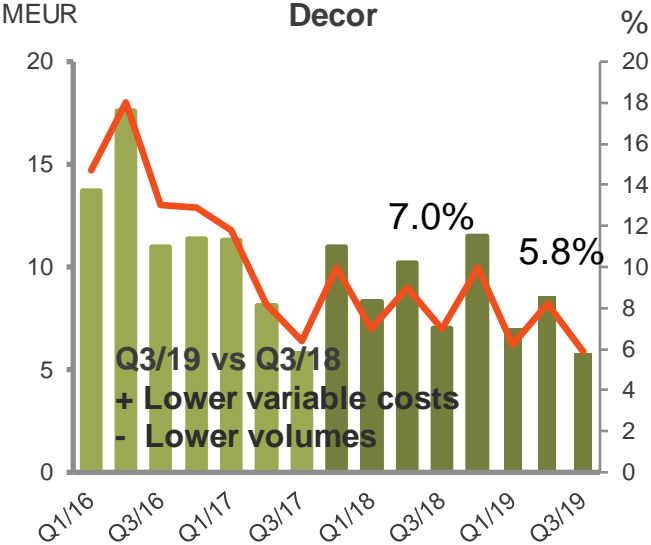
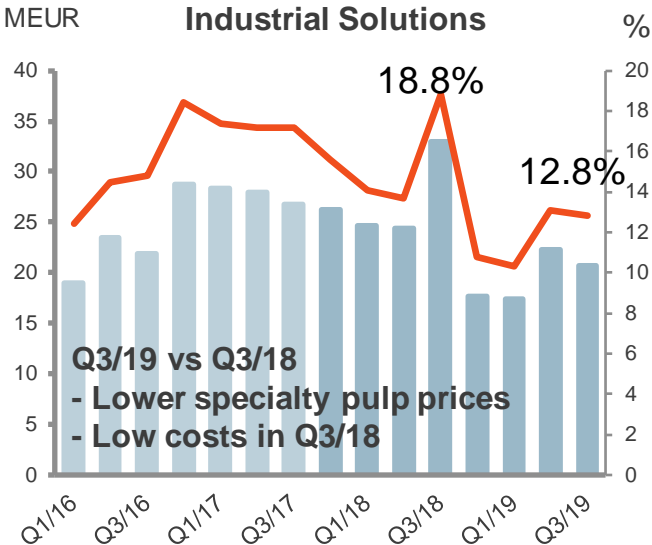
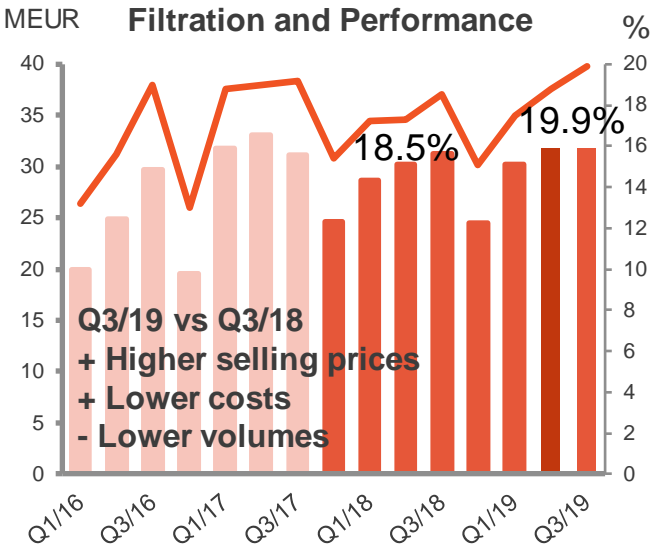
Net sales impacted by lower volumes, stable selling prices



*Years 2016-Q3/2017 Ahlstrom-Munksjö excluding NASS and Caieiras



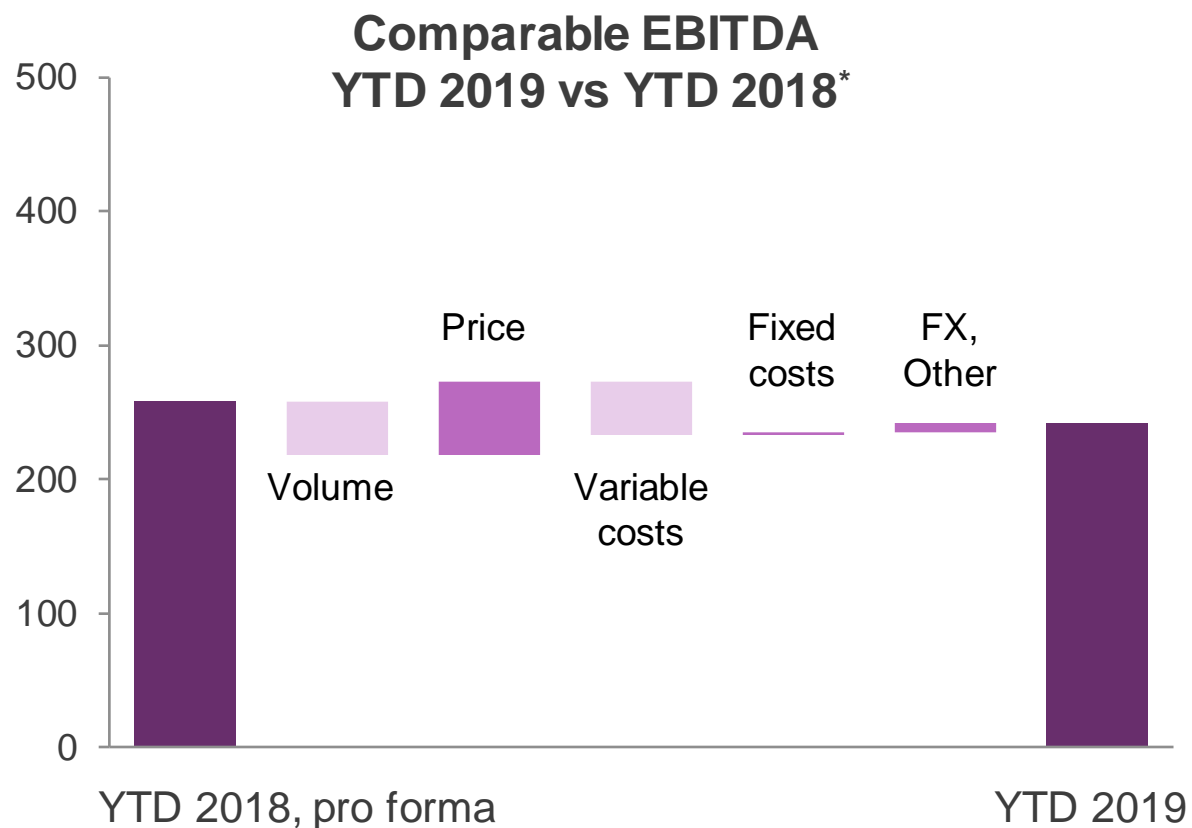
Comparable EBITDA and margin by business area*



*Years 2016-Q3/2017 Ahlstrom-Munksjö excluding NASS and Caieiras



Stronger than expected market headwind



* January-September, Illustrative

EBITDA impacted by:

Volume headwind in several businesses

- Supply chain destocking
- Weaker demand
- Stiffer competition

Successful management of selling prices, more than offsetting higher variable costs

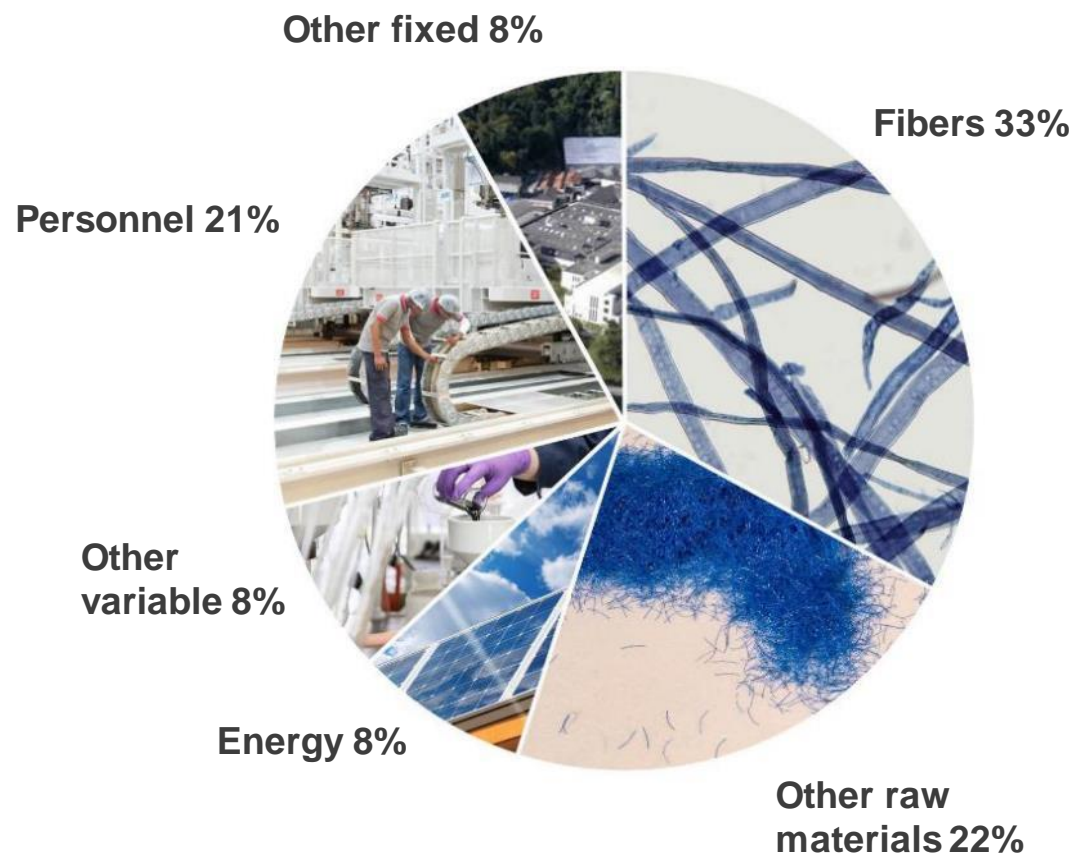
- Record gross margin for product

Stable fixed costs

- Inflation mitigated by fixed cost saving
- Higher fixed costs per ton



Breakdown of operating costs



Pro forma breakdown of operating costs

Approximate impact on EBITDA of a 10% increase in costs:

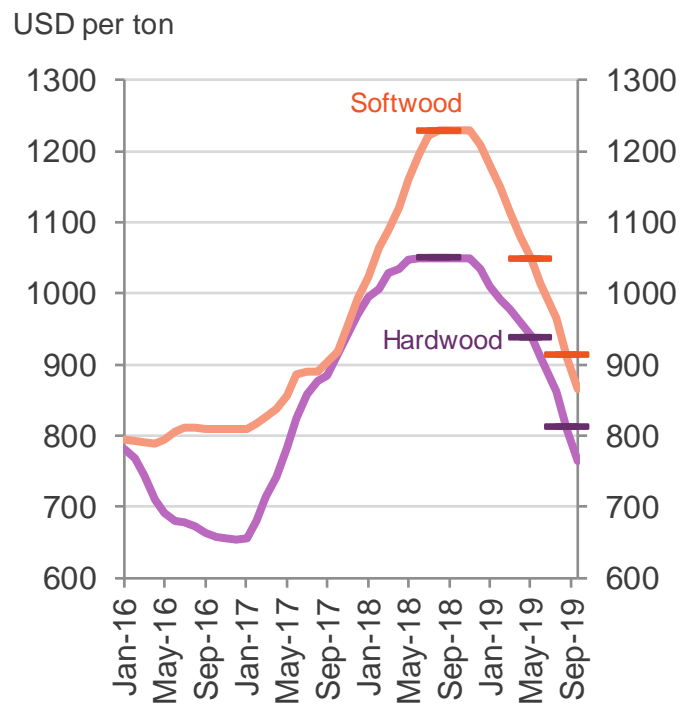
Hardwood pulp	-30
Softwood pulp	-11
Tio2	-12
Chemicals	-7
Energy	-20

Figures in EUR million



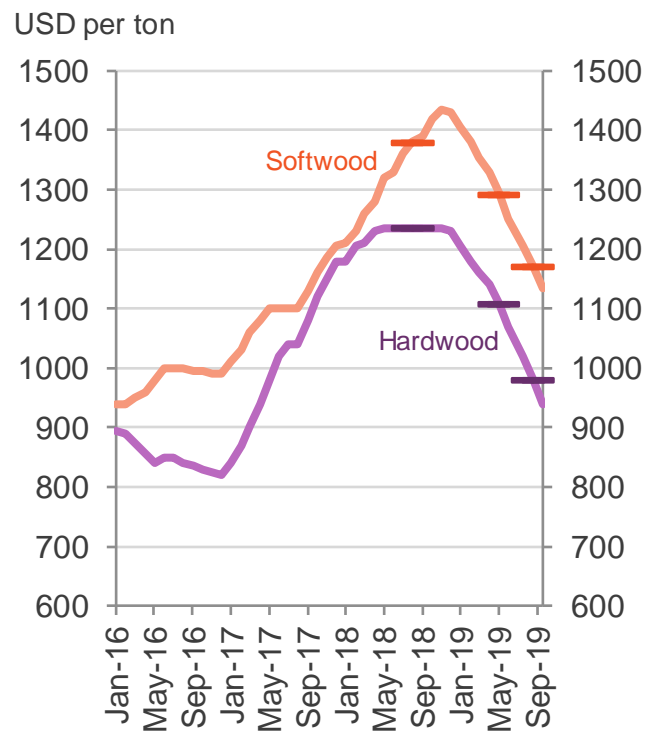
Pulp price development

Europe



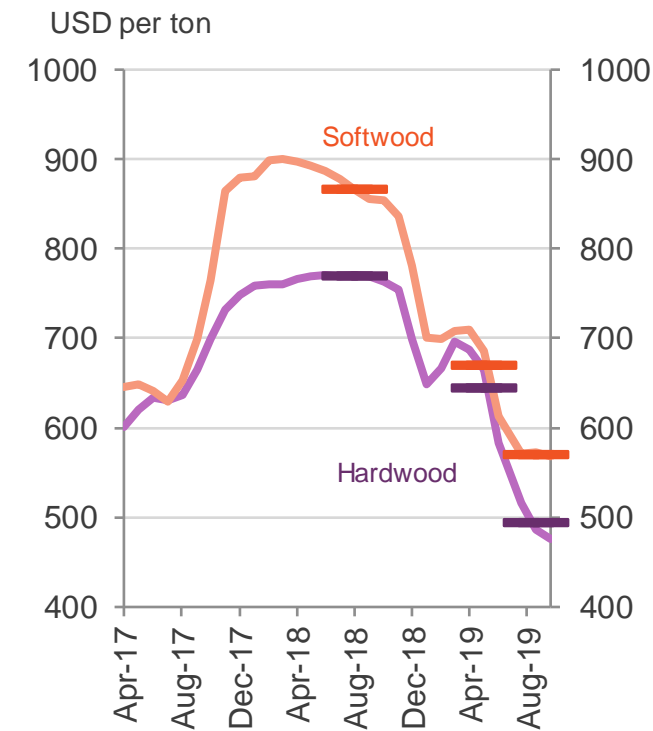
Europe		
Price change, %	Q3/Q3	Q3/Q2
Hardwood	-23	-13
Softwood	-16	-13

North America



North America		
Price change, %	Q3/Q3	Q3/Q2
Hardwood	-26	-11
Softwood	-15	-9

China



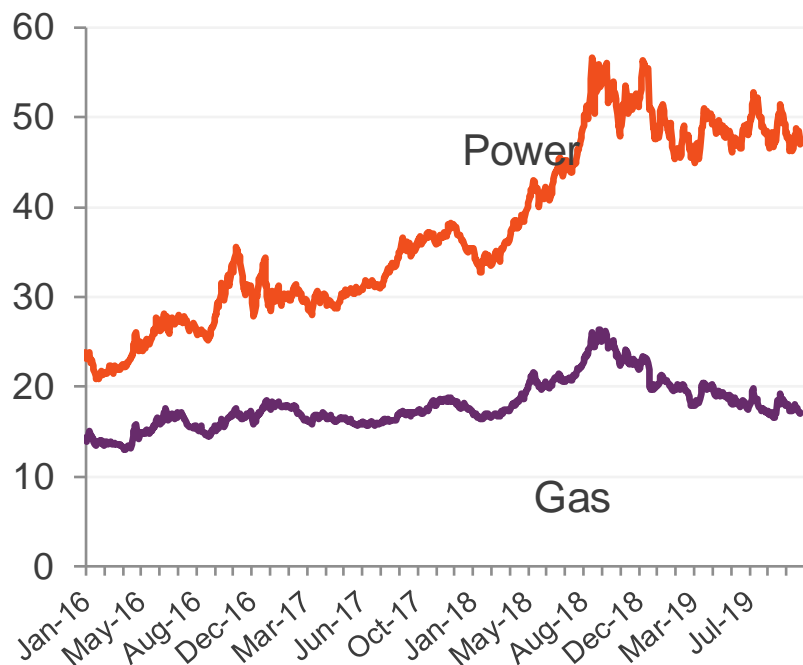
China		
Price change, %	Q3/Q3	Q3/Q2
Hardwood	-36	-24
Softwood	-34	-15



Energy and titanium dioxide

European forward power and gas prices

EUR MWh

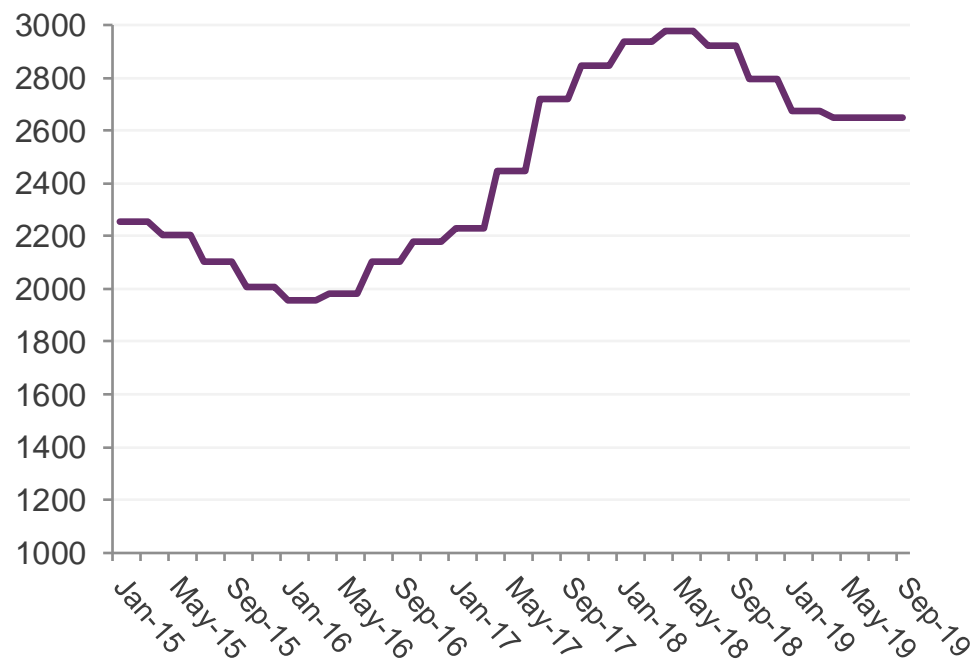


Change %	Q3/Q3	Q3/Q2
Power	2	2
Gas	-21	-6

Source: E&C consultants

Titanium dioxide

EUR per ton



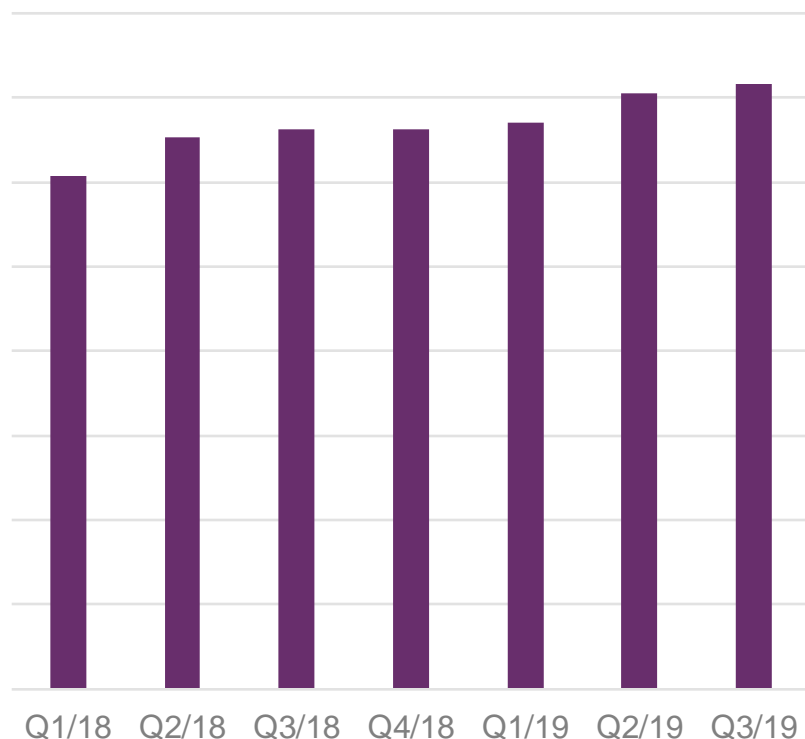
Change %	Q3/Q3	Q3/Q2
Tio2	-3	0

Source: ICIS Europe FD



Successful commercial strategy

Gross margin for product

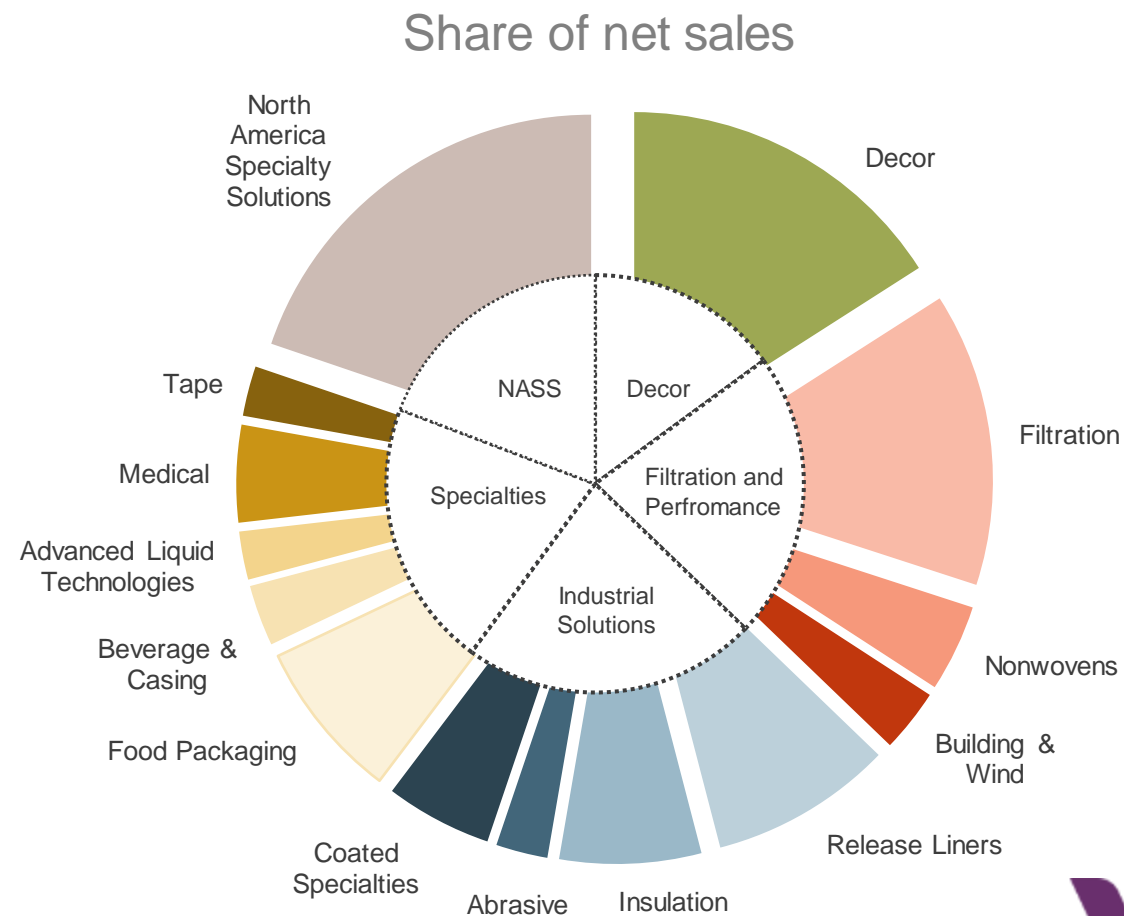
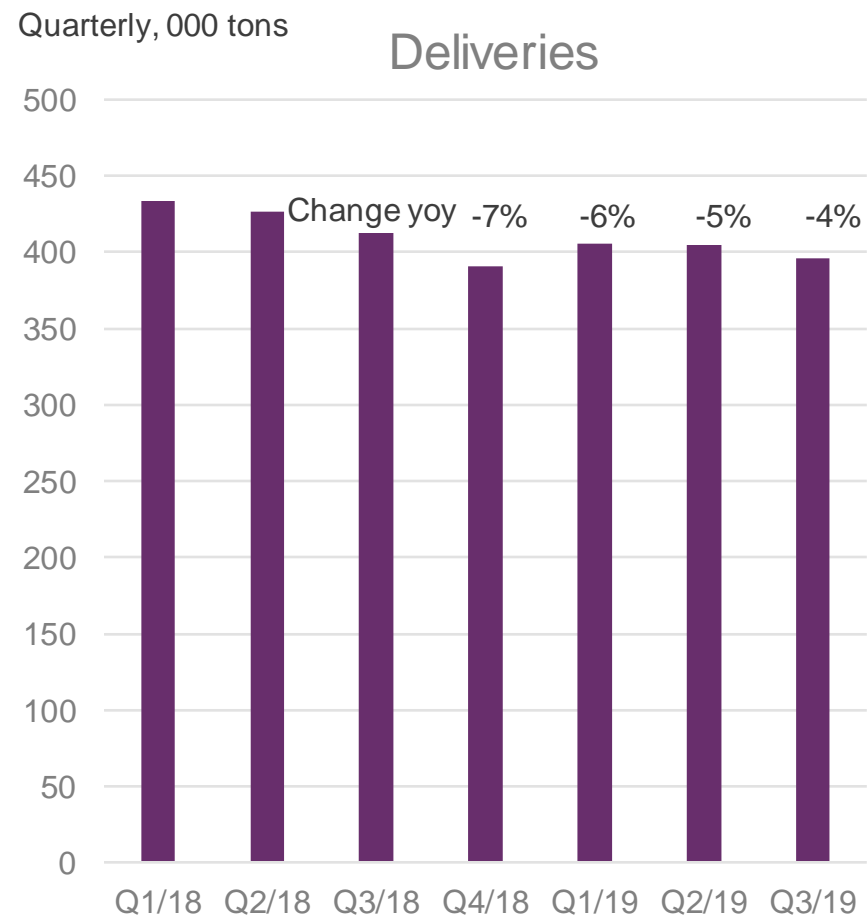


Successively increasing gross margin for product

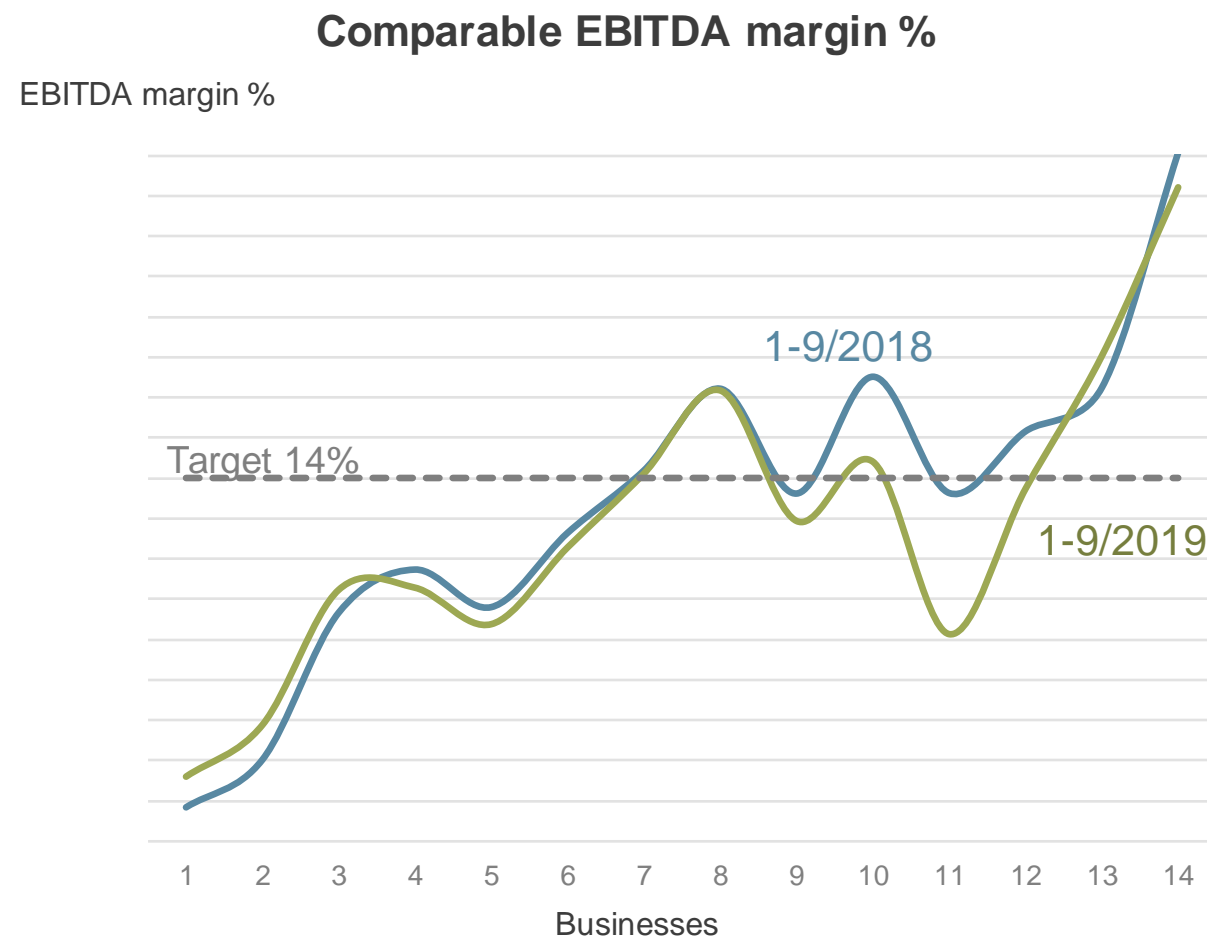
- Compensating for sharply increasing variable costs in 2018
- Supported by gradually lower variable costs in 2019



Deliveries impacted by destocking, slowing demand and stiffer competition



Some businesses are doing better, some worse, due to various reasons



Business performance

Deterioration

Weaker markets (4)

Stiffer competition (4)

Improvement

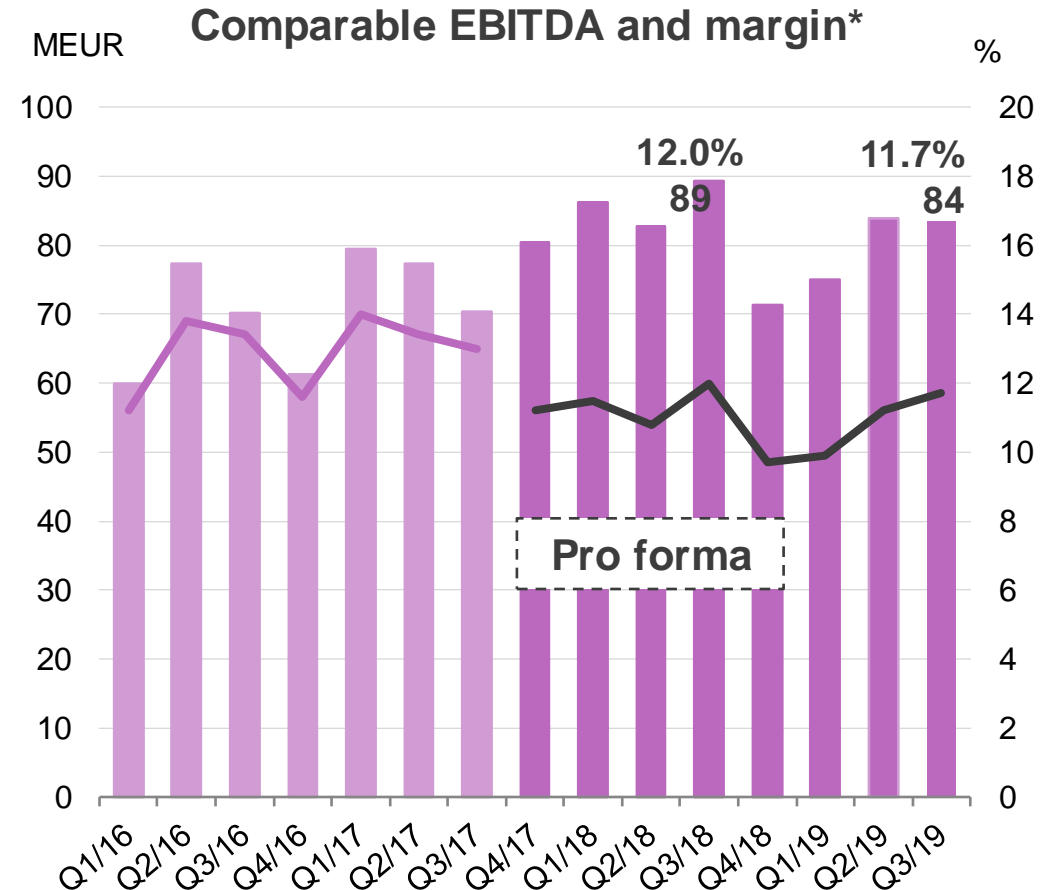
Stable performance (3)

Improved performance (3)

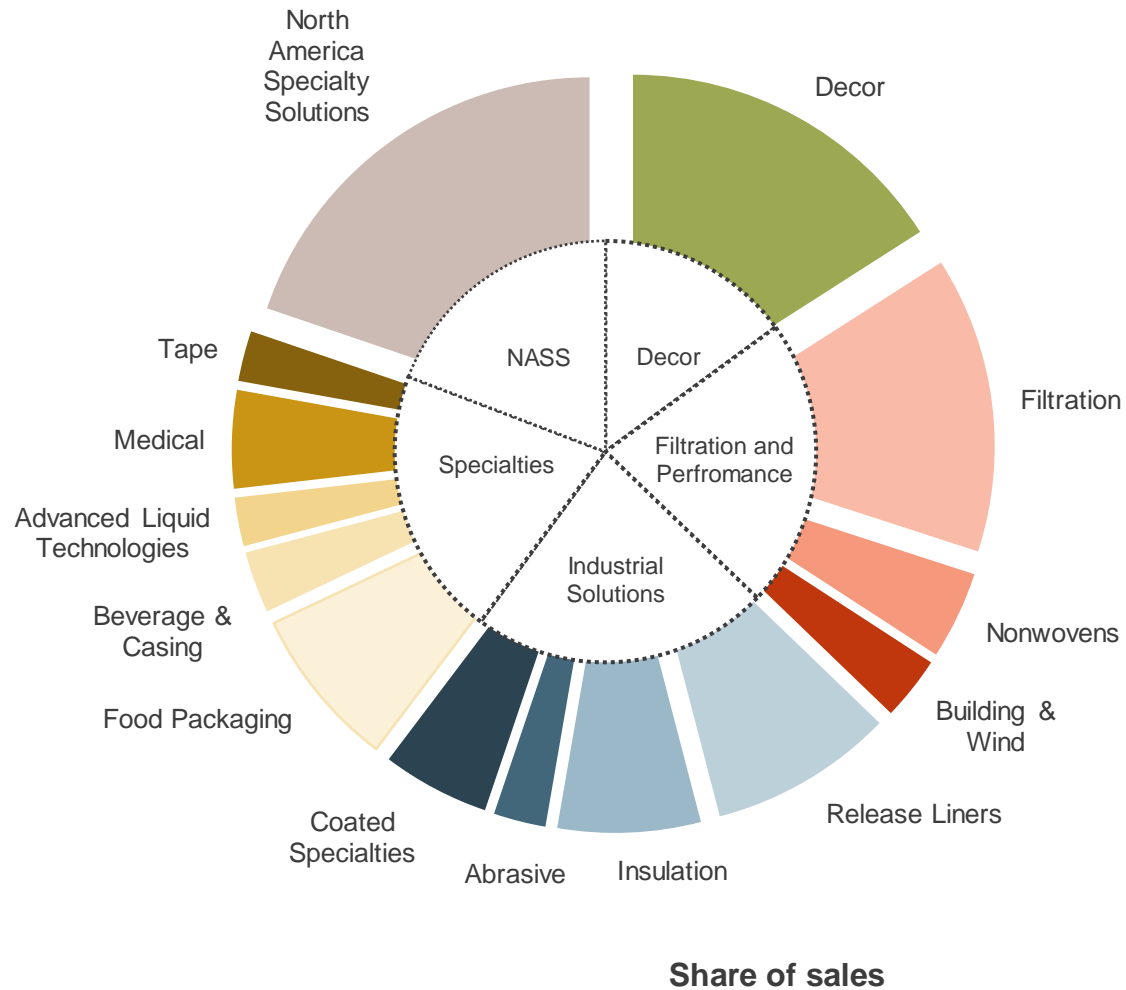


Highlights Q3/2019

- Stable profitability
 - Further increase in gross margin for products
 - Continued low volumes
 - Negative EBITDA impact of EUR 6 million from bringing down inventory levels
 - Promised synergies exceeded
- Strong operating cash flow of EUR 125 million
- The market environment remained uncertain
- Launched a cost savings program of at least EUR 50 million to improve competitiveness
- Strategic alternatives being explored for Decor business
- Non-binding memorandum of understanding to divest the fine art paper business
- Two strategic investments were completed, and innovative products were launched



Uncertain market environment in Q3/2019



- **Filtration and Performance**

- Demand for filtration products remained at a low level
- Solid demand for plasterboard and glass fiber tissue applications

- **Decor**

- Demand for decor paper remained weak

- **Industrial Solutions**

- Demand for abrasive backings and coated products was weak, specialty pulp stabilized
- Demand for some release liner grades improved, markets remained competitive
- Demand for electrotechnical insulation papers was stable

- **Specialties**

- Demand for food processing and beverage materials as well as packaging papers weakened, growth continued in fibrous casing materials
- Robust demand for life science, water purification and healthcare materials
- Demand weakened for tape backings in Europe and Americas, remained strong in Asia

North America Specialty Solutions

- Stable demand in food processing and packaging papers
- Soft demand for industrial and technical papers
- Weak demand for commodity release liners
- Strong demand for coated products



A detailed microscopic image of paper fibers, showing a dense, interwoven network of thin, elongated strands. The fibers are light blue/grey against a darker background, creating a complex, fibrous texture.

Outlook for 2019

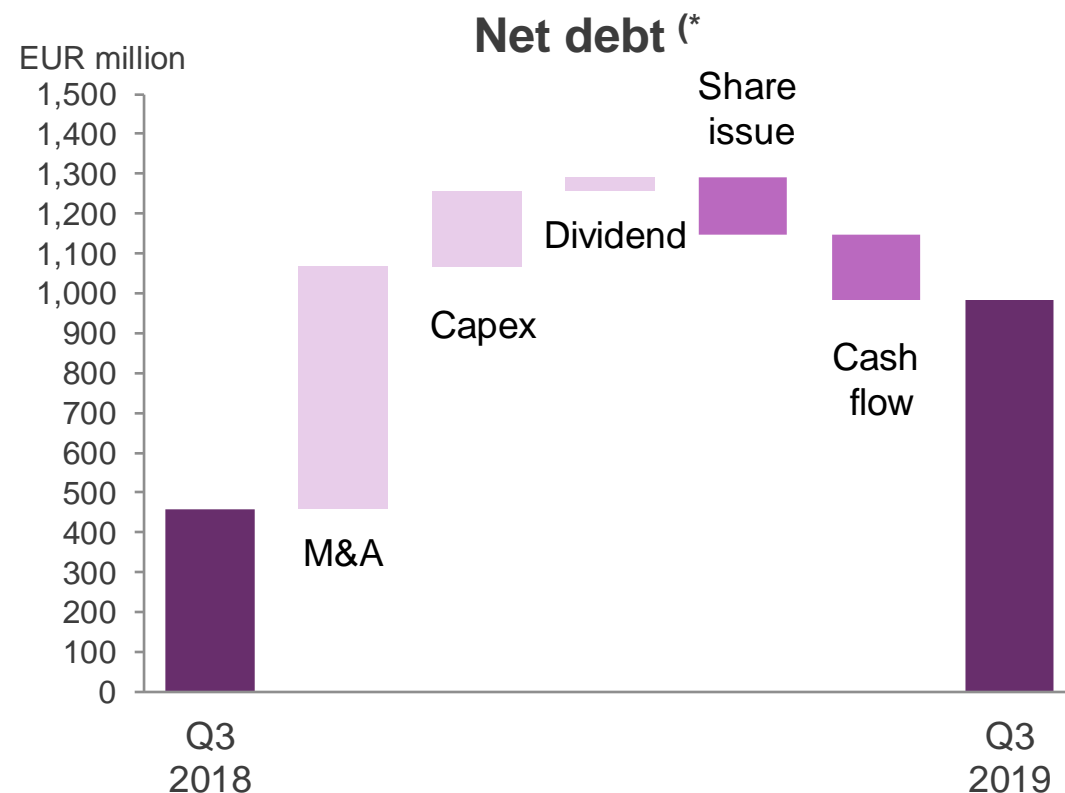
Ahlstrom-Munksjö's pro forma comparable EBITDA reached EUR 330 million in 2018. At the beginning of 2019, customers reacted to signs of slowing economic growth. Demand has slowed in several product segments, and customers have reduced inventories. The overall market environment remains uncertain and demand continuous to fluctuate.

Ahlstrom-Munksjö will continue its efforts to improve performance and competitiveness. The gross margin for products continued to increase in the first nine months of 2019, and the targeted synergy benefits and cost reduction measures are expected to contribute positively to earnings for the full year.

In the fourth quarter of 2019 scheduled maintenance shutdowns at the Aspa, Mosinee and Thilmany pulp mills are expected to be carried out to about the same extent as in the fourth quarter of 2018, with a negative profitability impact of approximately EUR 6 million.



Investment driven increase in debt



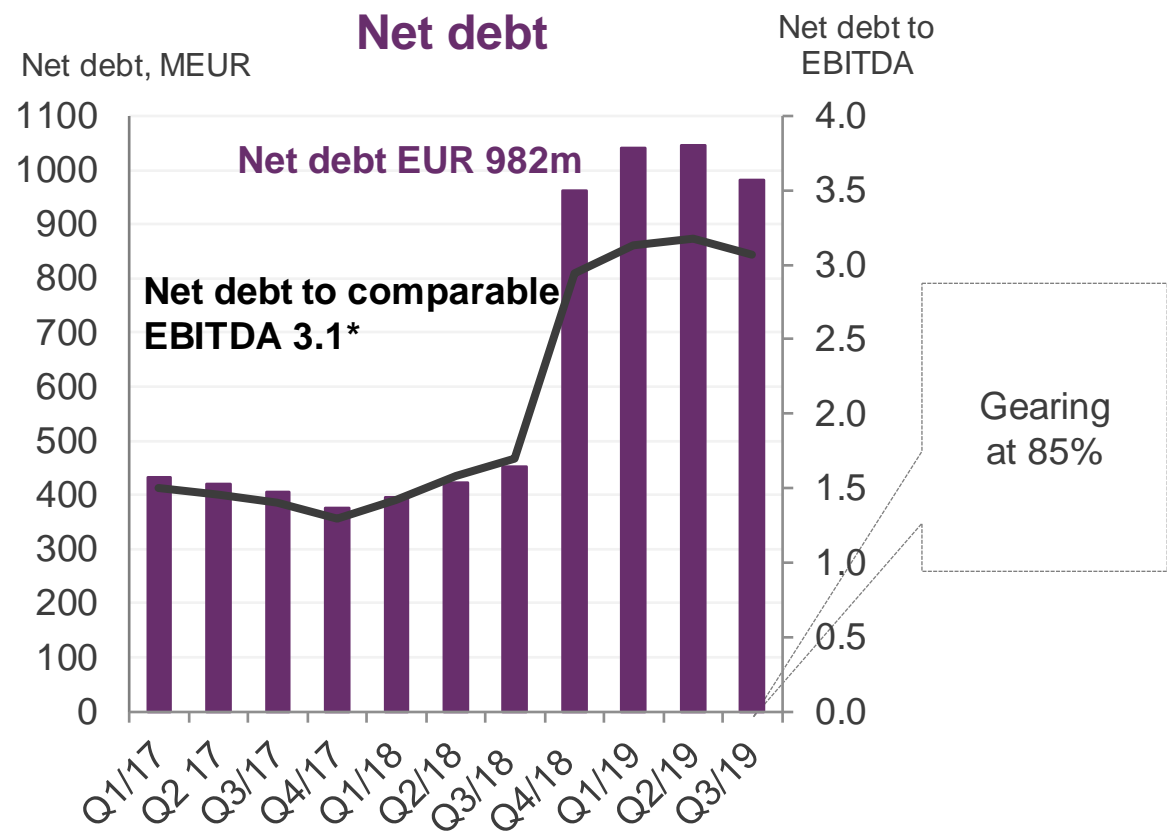
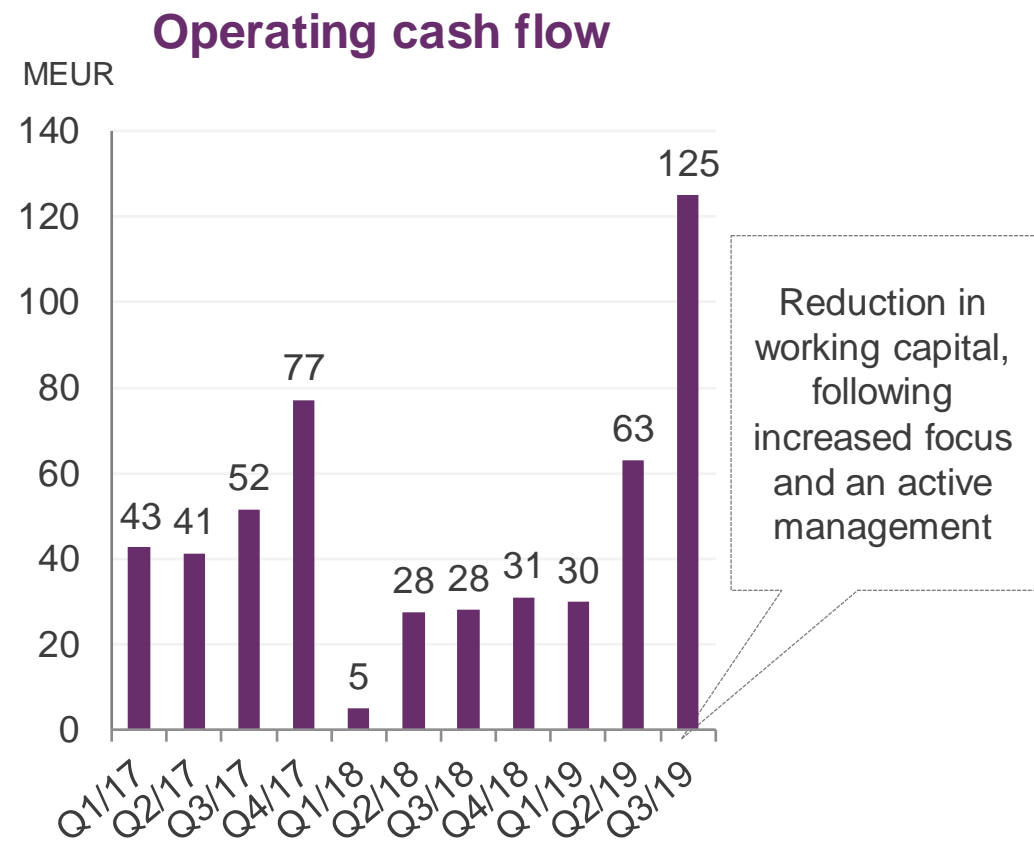
** Illustrative*

Net debt to EBITDA 3.1*
Gearing 85%

* The implementation of the new IFRS 16 standard, which is excluded from debt covenant calculations, increased net debt by EUR 57 million and EBITDA by EUR 12 million in 1-9/19



Strong cash flow boosted by an improvement in working capital



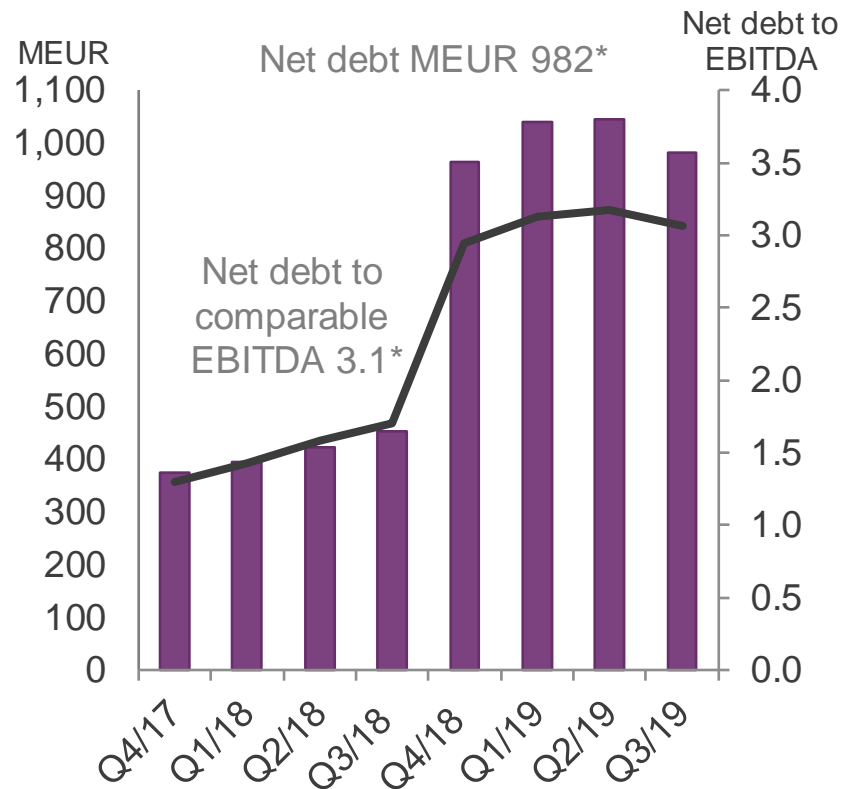
Classification of certain balance sheet items between interest-bearing and non-interest-bearing assets and liabilities were redefined. Comparison figures from Q3/2018 have been have been restated accordingly

* The implementation of the new IFRS 16 standard, which is excluded from debt covenant calculations, increased net debt by EUR 57 million and EBITDA by EUR 12 million in 1-9/19



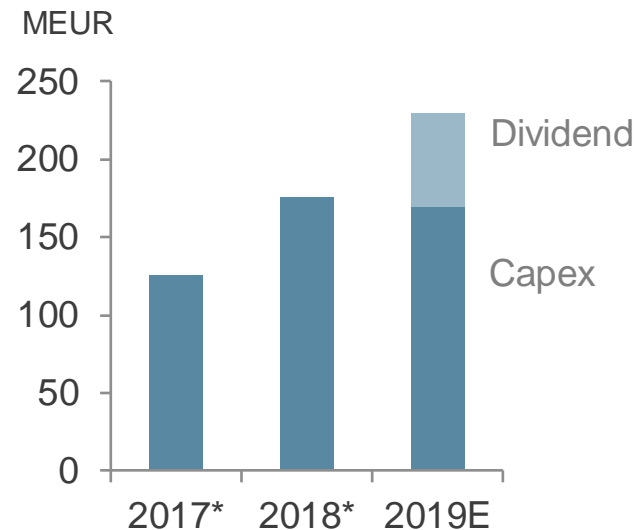
Capital generation and allocation

Net debt



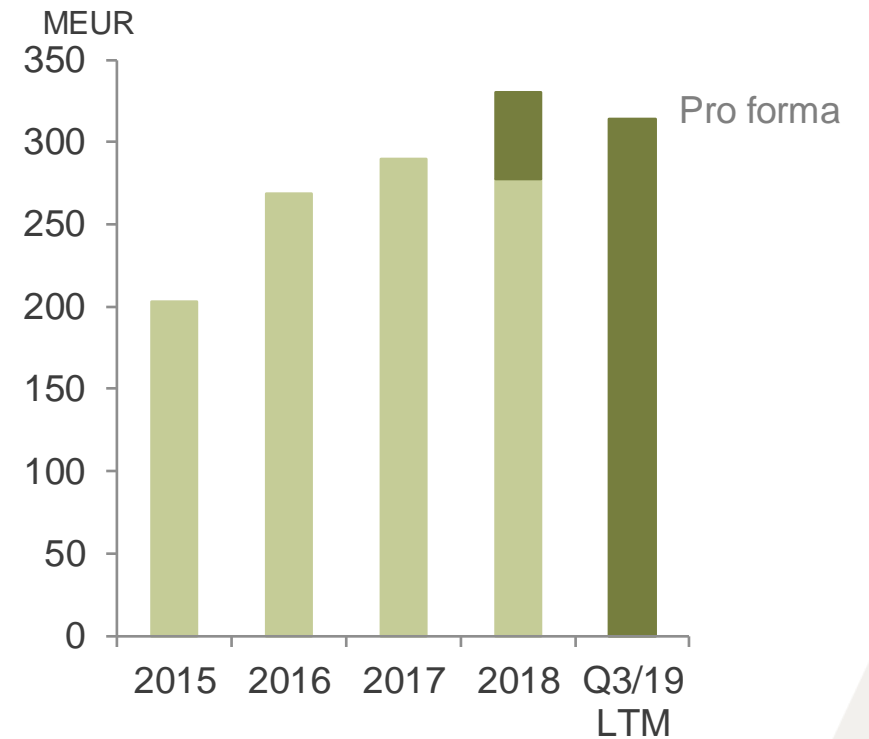
* The implementation of the new IFRS 16 standard, which is excluded from debt covenant calculations, increased net debt by EUR 57 million and EBITDA by EUR 12 million in 1-9/19

Capital allocation



* Pro forma

Comparable EBITDA**










**Years 2015-2017 Ahlstrom-Munksjö excluding NASS and Caieiras



Completed investments driving strategic progress

Production ramp-up ongoing

		Efficiency and agility	Customer value	Profitable growth		
Abrasive backings, Arches Paper machine rebuild, Q1/18-	EUR 14m	✓	✓	✓		Back of sandpaper
Filtration, Turin Capacity debottlenecking, H1/18-	EUR 3m			✓		Filtration material
Filtration, Madisonville Product offering , H2/18-	EUR 23m	✓	✓	✓		Filtration material
Foodpack, Saint Severin New line installation, Q3/18-	EUR 7m		✓	✓		Baking paper
NASS Coater expansion, Q3/17-	EUR 13m		✓	✓		Fiber composite release liners
Decor, Dettingen Production line upgrade, Q1/19	EUR 5m		✓	✓		Pre-impregnated decor paper
Insulation, Aspa Bailing line modernization, Q2/19-	EUR 4m	✓	✓			Specialty pulp



Completed and announced investments driving strategic progress

Production ramp-up ongoing

Coated Specialties, Jacarei
Coating line upgrade, Q3/19- **EUR 21m**

Efficiency
and agility



Customer
value



Profitable
growth



Coated
specialty
paper

Insulation, Billingsfors
Boiler and pulp line rebuild, Q3/19- **EUR 23m**



Electrotechnical
paper

Announced investment decisions

Medical, Pont Audemer
Converting line rebuild, Q4/19- **EUR 4m**



Sterilization
wrap

Filtration, Release Liner
New co-generation in Turin plant, H1/20- **EUR 15m**



Turin plant

Filtration, Turin
Capacity expansion, H2/20- **EUR 28m**



Industrial filter
material

Beverage & Casing, Chirnside
New production line, H2/20 **EUR 28m**



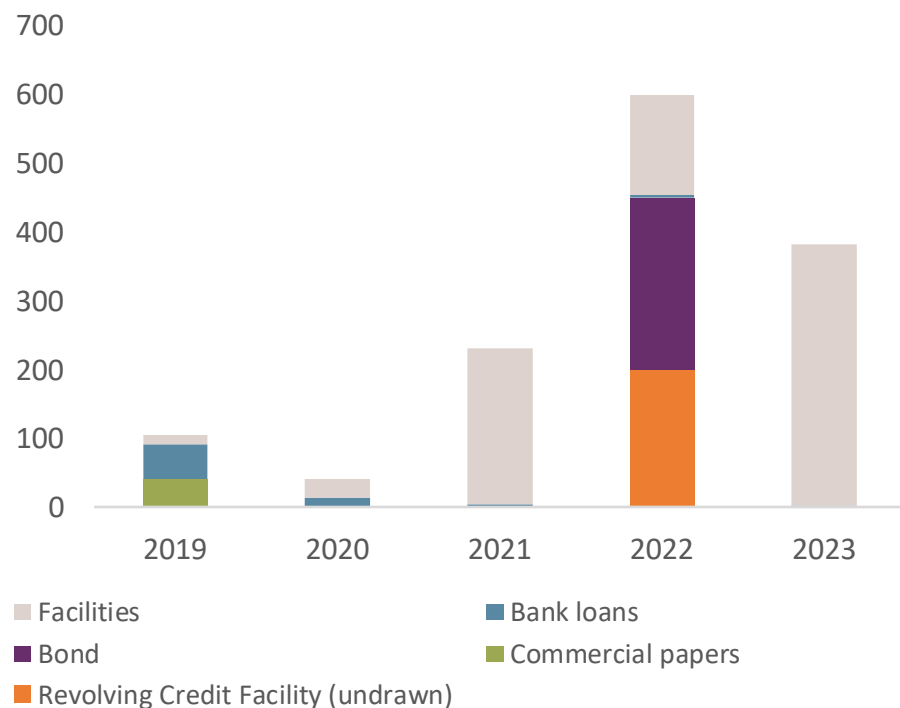
Coffee, tea, and
casing material



Maturity profile and debt structure

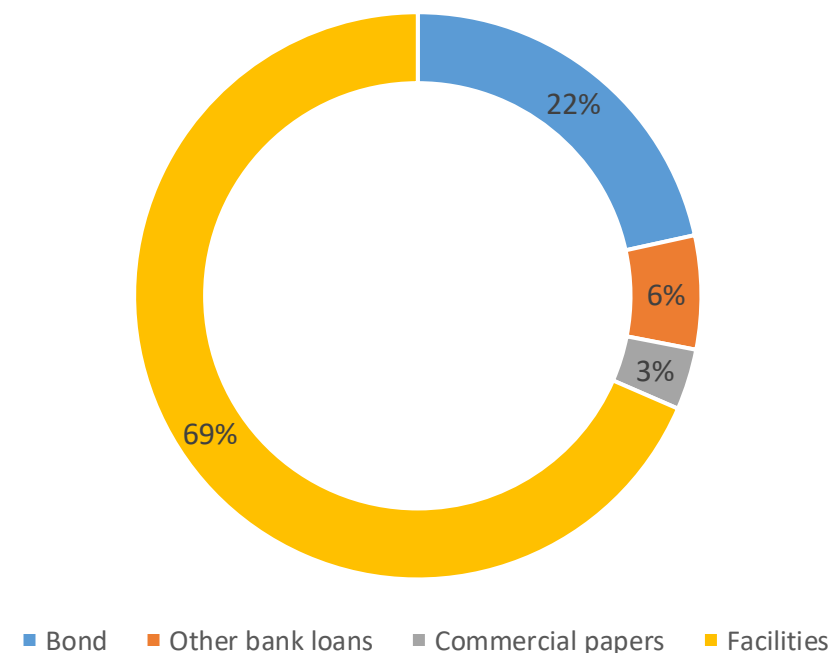
EUR
million

Maturity profile as of Sept. 30, 2019



- Cash position EUR 228 million
- Available undrawn committed facilities EUR 214 million
- Available undrawn uncommitted facilities EUR 372 million

Interest-bearing liabilities EUR 1.209 billion
as of Sept. 30, 2019



- Weighted average interest rate 3.1%
- Net interest expense EUR 36 million in 1-9/2019



Appendix



Executive Management Team



Hans Sohlström
President and CEO



Sakari Ahdekivi
Deputy CEO and CFO



Tarja Takko
Acting Executive Vice
President of People and
Safety



Andreas Elving
Executive Vice President
Legal and General Counsel

Changes in EMT as of January 1, 2020

- Anna Bergquist, Executive Vice President Strategy, Sustainability and Innovation
- Tarja Takko, Executive Vice President of People and Safety
- Markus Westerkamp, Executive Vice President of Advanced Solutions
- Robyn Buss, Executive Vice President of Food Packaging & Technical Solutions
- Omar Hoek has decided to leave Ahlstrom-Munksjö at the end of 2019



Daniele Borlatto
Executive Vice President of
Filtration and Performance



Omar Hoek
Executive Vice President of
Specialties



Dan Adrianzon
Executive Vice President of
Industrial Solutions



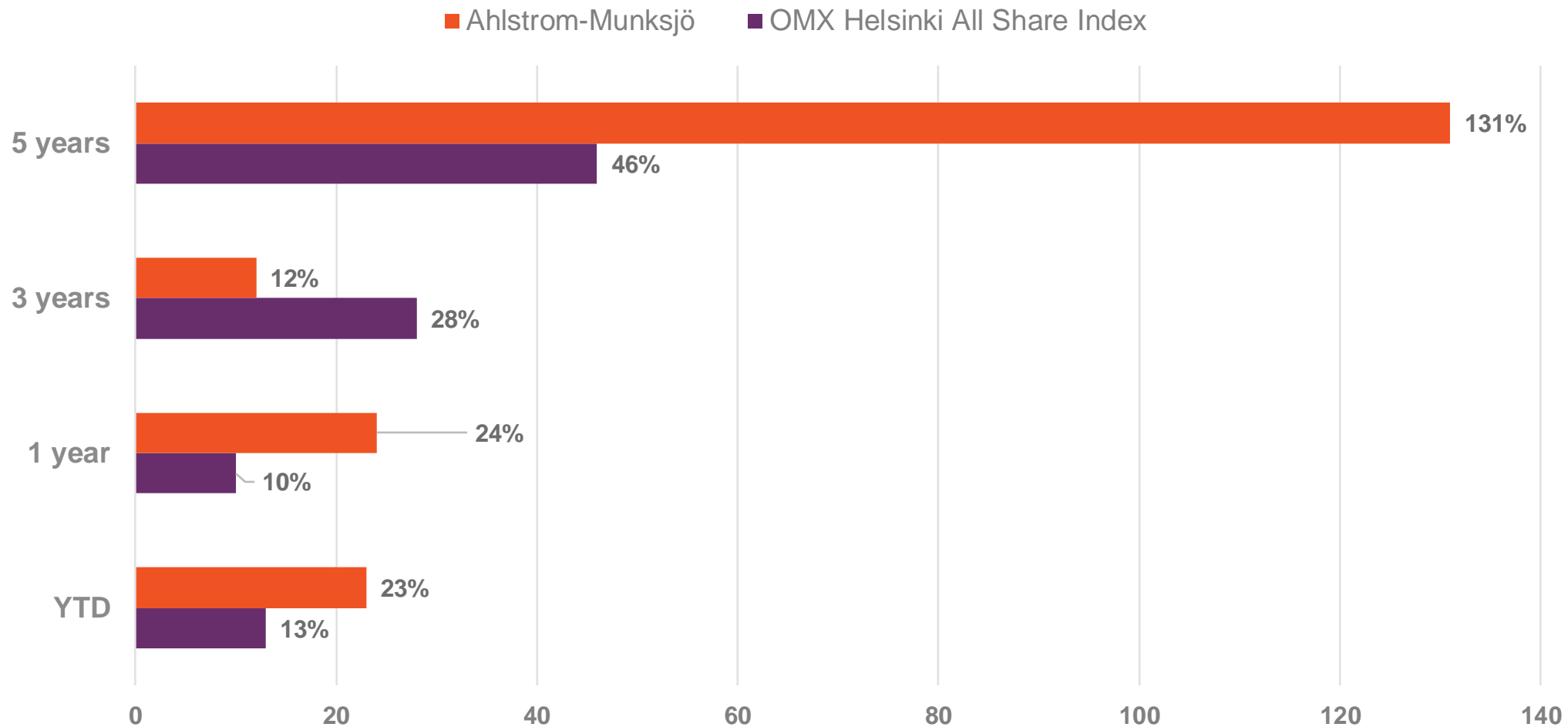
Robyn Buss
Executive Vice President of
North America Specialty
Solutions



Tomas Wulkan
Executive Vice President
of Decor



We have created value*

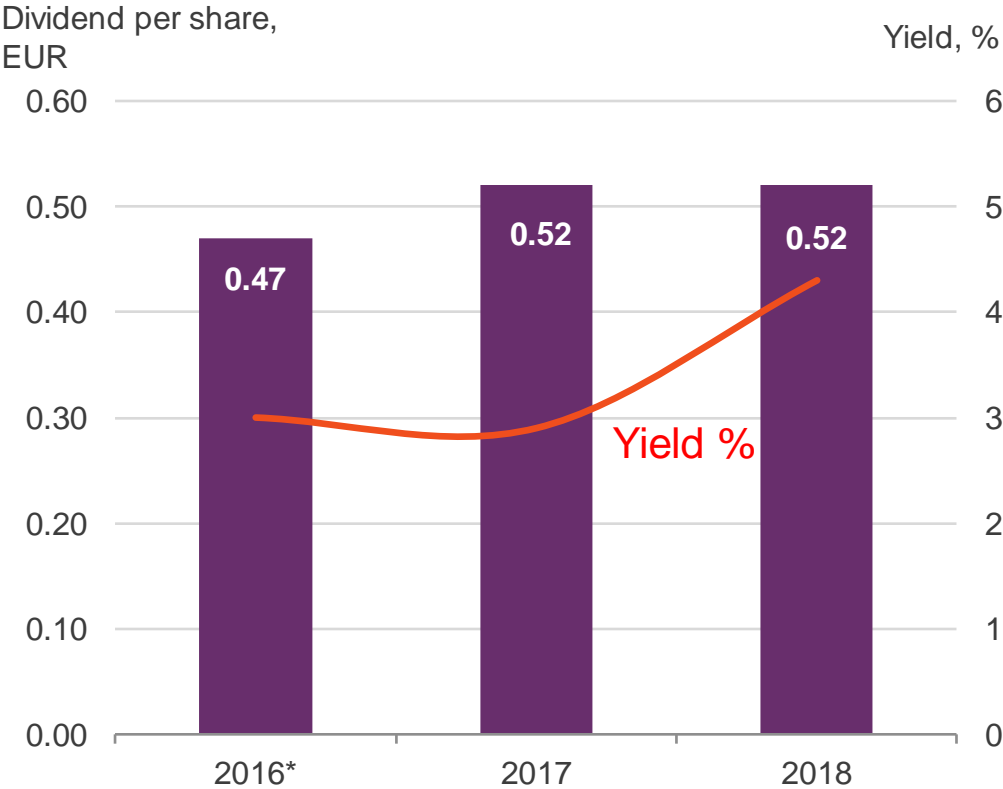


*Total shareholder return at November 30, 2019



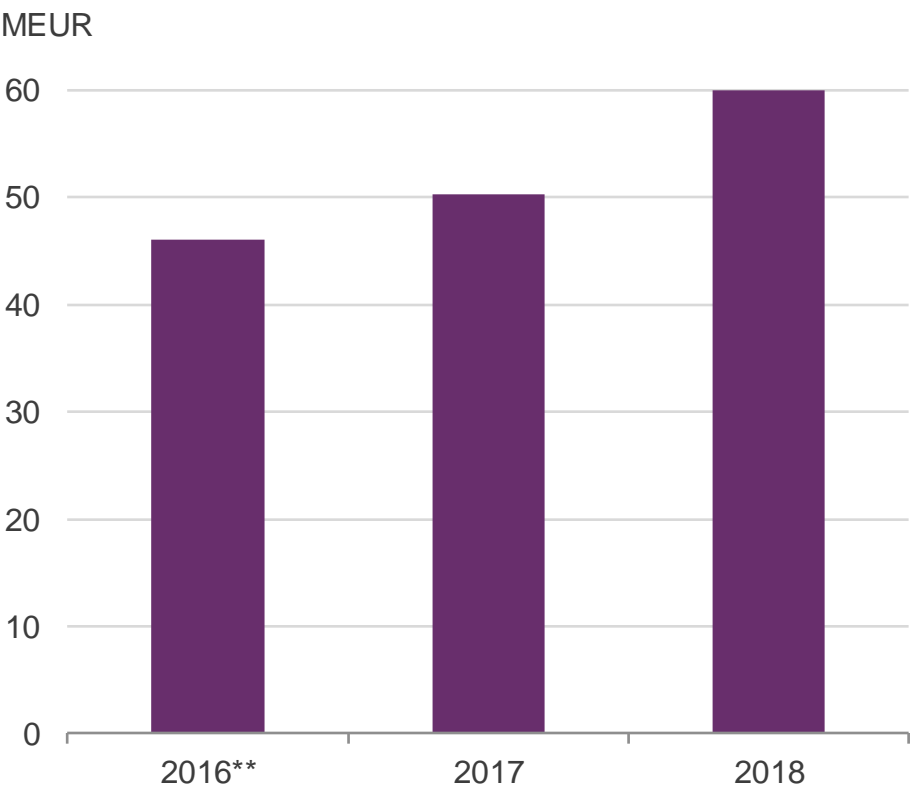
Dividend: EUR 0.52 per share for 2018

Dividend per share and yield %



* Converted by using the same number of shares as in 2017

Dividend



** Total dividend of Ahlstrom and Munksjö

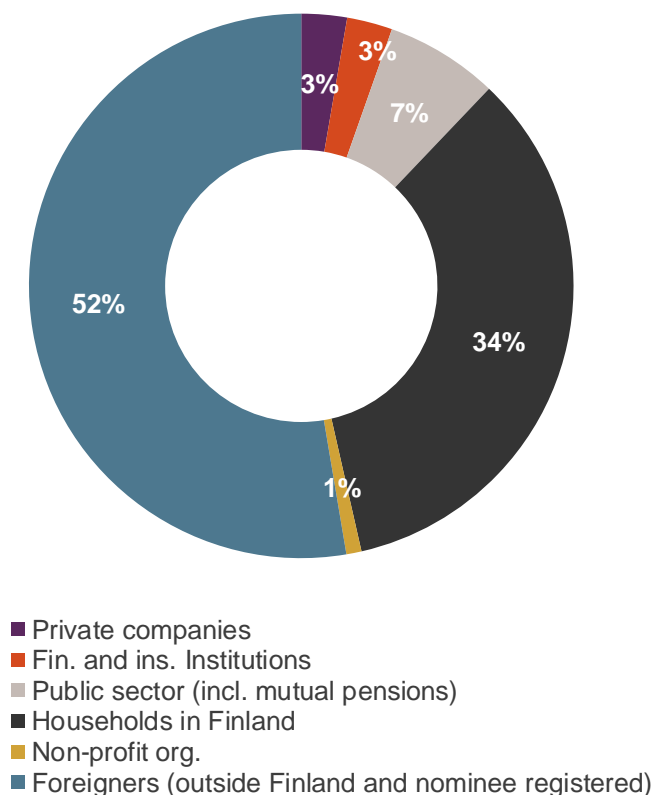


We have over 13,000 shareholders

	Shareholders	Shares	% of shares
1	Ahlström Capital Oy	21,618,957	18.69
2	Viknum AB	14,048,006	12.15
3	Ilmarinen Mutual Pension Insurance Company	4,070,593	3.52
4	Odin Funds	2,581,264	2.23
5	Huber Mona Lilly	2,294,006	1.98
6	Varma Mutual Pension Insurance Company	2,089,532	1.81
7	Tracewski Jacqueline	1,512,926	1.31
8	Nahi Kai Anders Bertel	1,283,030	1.11
9	Studer Anneli	1,235,653	1.07
10	Gullichsen Johan Erik	1,171,068	1.01
11	Huber Karin	1,170,553	1.01
12	Sumelius John Michael	1,154,388	1.00
13	Emmett Linda-Maria	1,137,627	0.98
14	Kylmälä Kim	1,128,888	0.98
15	Elo Mutual Pension Insurance Company	1,090,434	0.94
16	Seligson Peter	1,074,576	0.93
17	Huber Samuel	1,041,307	0.90
18	Lund Niklas Roland	1,034,920	0.89
19	Nordea Funds	993,936	0.86
20	Koivulehto Monica	981,690	0.85
	20 largest shareholders total	62,713,354	54.22
	Nominee registered	16,190,608	14.00
	Other shares	36,749,353	31.78
	Total	115,653,315	100

The table is compiled by Ahlstrom-Munksjö by using the Information based on Euroclear Finland and Euroclear Sweden. Ownership as of October 30, 2019.

Shareholders by sector*



*According to Euroclear Finland



Peer group valuation

Company	P/E	P/E 2019	P/E 2020	EV/EBITDA	EV/EBITDA 2019	EV/EBITDA 2020	P/B	ROE
Median	21,4	18,7	14,7	10,3	8,8	8,7	1,5	11.6%
AHLSTROM-MUNKSJÖ	235,7	18,7	11,2	10,4	8,8	6,8	1,4	0.9%
UPM-KYMMENE	11,7	14,9	16,1	7,4	9,1	9,6	1,7	14.7%
STORA ENSO	14,3	15,5	14,7	10,3	8,8	8,8	1,4	10.0%
METSA BOARD	12,2	14,8	14,6	10,4	8,6	8,6	1,7	13.9%
GLATFELTER	34,3	24,9	18,2	10,6	9,7	8,4	1,5	-9.9%
NEENAH PAPER	22,9	21,0	19,0	12,2	11,5	10,5	3,0	13.1%
OWENS CORNING	12,6	14,3	12,6	7,7	8,3	7,7	1,6	11.6%
LYDALL	33,1	17,5	11,8	6,0	6,8	6,0	0,8	1.9%
SUOMINEN	--	57,5	14,4	6,8	6,0	5,2	1,0	-0.4%
BILLERUDKORSNÄS	21,6	25,8	16,7	9,0	9,4	7,3	1,2	40.3%
ESSITY	21,1	20,2	17,8	13,1	12,2	11,0	4,1	20.3%

Source: Bloomberg December 4, 2019



Cash flows by currency before financing (pro forma)

EUR million in 2018	EUR	SEK	USD	BRL	CNY	KRW	Other
Net sales	1,210	55	1,440	145	65	20	62
Operating costs	-1,315	-195	-1,240	-145	-50	-45	-57
Net cash flow	-105	-140	200	0	15	-25	5



Recent key product launches

Sales from new products* was 11% in 2018 – Long-term target is 15%**



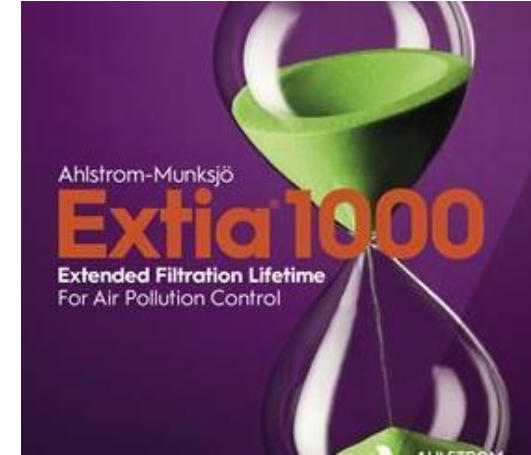
CelluStraw™ U is a new fiber-based solution for U-shaped paper drinking straws, enabling the food industry to provide consumers an alternative to single-use plastic straws.



Optilam™ is a new generation of release materials to optimize RFID inlay lamination. It makes the lamination process easier, more efficient, and improves quality of the inlay.



ViroSêl™ Breathable Viral Barrier fabric is constructed for the most critical areas of a surgical gown designed to keep medical professionals protected and comfortable.



Extia® 1000 is a range of highly durable filtration media, specifically designed for industrial filtration applications.

*Products launched in the past three years

** By 2025

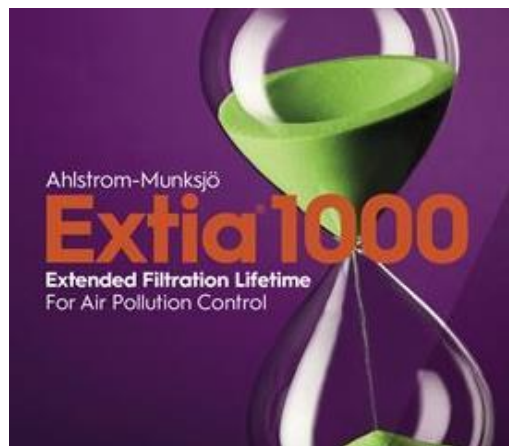


Better performance

Functioning better than alternative solutions



Trinitex® Advance W3200 is a unique gas turbine filtration product specifically designed for pulse jet gas turbine applications.



Extia® 1000 is the first product on the Extia® platform, a range of highly durable filtration media, specifically designed for industrial filtration applications. Extends filtration lifetime by over 40%.



ViroSēl™ Breathable Viral Barrier fabric is constructed for the most critical areas of a surgical gown designed to keep medical professionals protected and comfortable.



Optilam™ is an antistatic release material used during the lamination process of RFID pre-laminated inlays, improving the final quality of the inlay. It is a sustainable alternative to plastic release films.



Safer materials

Comprising safer materials than alternative solutions



Grease-Gard® FluoroFree® papers are designed to deliver outstanding grease resistance without the use of fluorochemicals (PFAS).



TEX-STYLE – the first product in the RE-VOLUTION range, a new category abrasive backings of paper substituting cloth backings.



Pre-impregnated, formaldehyde-free foil base papers are suitable for furniture, doors, separation walls, ceilings and wall paneling.



ParaFree™ Wax Alternative Papers are paraffin wax free, reducing the dependency on petroleum-based ingredients.

Fewer resources

Consuming fewer resources than alternative solutions



Specimen collection cards provide an alternative solution to liquid sampling. By removing the need for cold chain and special transport, they can be used for DNA screening, the diagnosis of genetic diseases, and others.



Acti-V® supercalendered release papers for silicone coating play an active role in the silicone curing and anchorage process. Curing is faster and requires less catalyst. Anchorage is stronger and more stable.



HighFlow Wind Energy is a platform of reinforcement fabrics for lightweight composite materials, allowing a reduction of about 15% in total cost ownership in wind mill blade manufacturing.



Disruptor® – product line of electrosorptive filter media that improves water quality through a natural positive charge.

Lower impact

Lower impact than alternative solutions



Fiber+ a plastic free, compostable tea bag materials product range, a solution for every application and covers all manufacturing platforms.



GreenPod™ - compostable plastic free coffee pod material for espresso.



CelluStraw™ U is a new fiber-based solution for U-shaped paper drinking straws, enabling the food industry to provide consumers an alternative to single-use plastic straws.



Coralpack compostable, grease resistant wrapping papers reduce the environmental impact of packaging waste.

Businesses

Filtration & Performance Solutions

Filtration

Demand drivers

- Mileage driven, growing truck and passenger car fleets
- Transportation: more stringent emission regulation, new filter applications in electrical mobility
- Industrial: higher air quality standards

Strengths

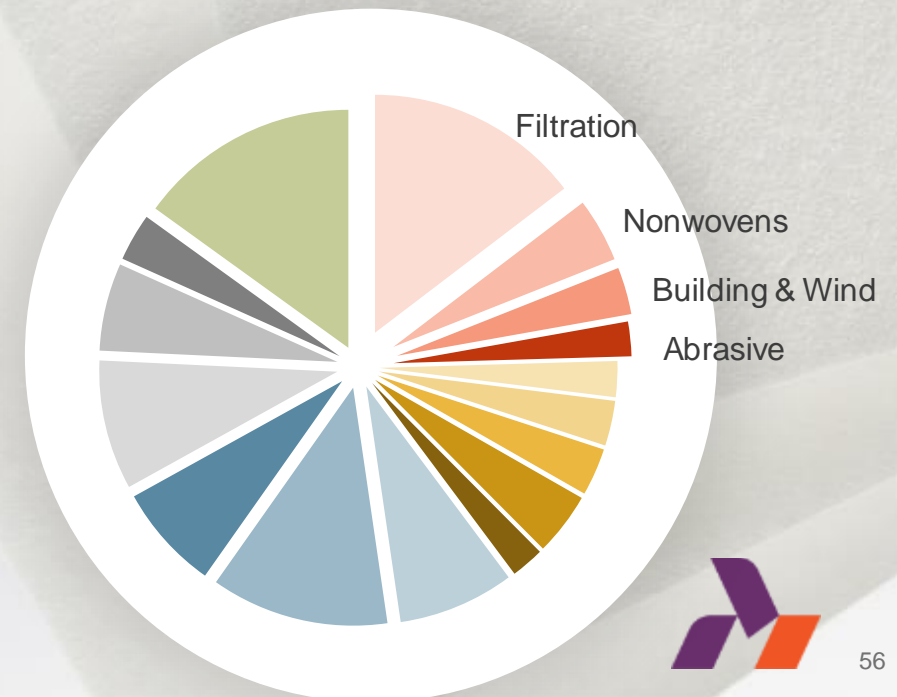
- Global leadership engine filtration
- Growing position in industrial air filtration
- Unique know-how enabling tailor-made developments for engine filtration customers
- Wide and unique technology platform and strong R&D capabilities in industrial filtration

Going forward

- Filtration seeks to further reinforce its global leadership in engine filtration and grow in China and elsewhere
- The industrial filtration will be expanded, and new filtration applications developed to capitalize from the electrification of mobility

The **Filtration business** develops and produces high-performance filtration materials for engine oils, fuels and air, as well as industrial air, used in vehicles or for industrial purposes. The Filtration business also has applications and is further developing filtration solutions for hybrid and fully electric vehicles. In transportation applications, sales come primarily from the aftermarket. The business operates globally.

- **Market position #1-2**
- **Average market growth 2-5% p.a.**



Filtration & Performance Solutions

Nonwovens

Demand drivers

- Construction and need for energy efficient materials
- Shift from paper to nonwoven wallcoverings, increased use of personalized design in high-end wallcoverings
- Consumer spending

Strengths

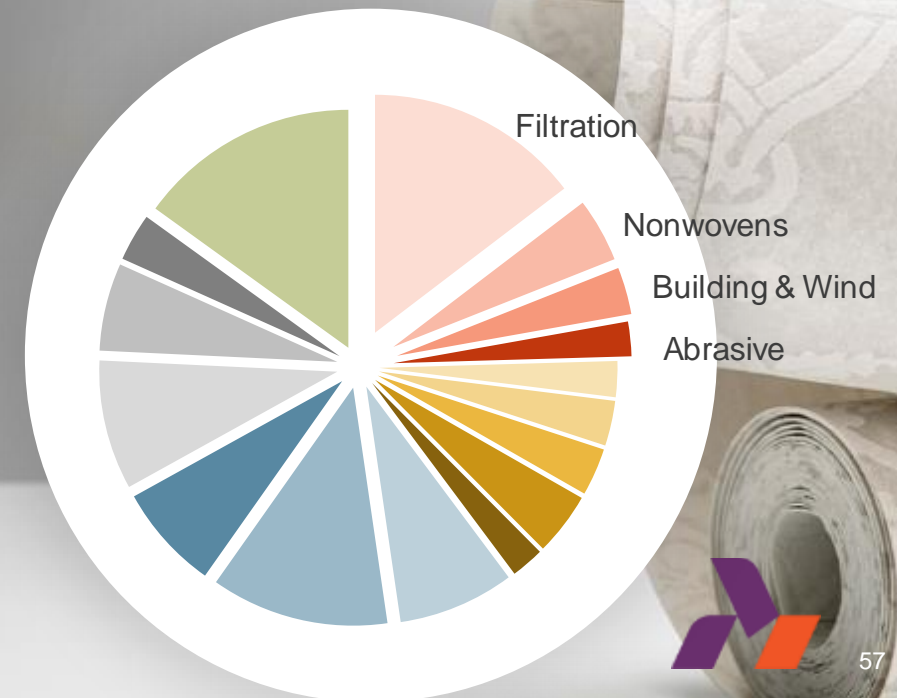
- Leading position in in the high-end wallcoverings market in Europe and Asia
- Differentiated offering for growing plasterboard applications
- Ability to tailor-make products to meet specific customer needs

Going forward

- Grow significantly in the plasterboard segment and explore new niches in for example furniture laminates
- To further strengthen the position in high-end and digital wallcoverings materials

The **Nonwoven** business produces a wide range of materials for various applications including high-end wallcoverings, automotive interiors, plasterboard and flushable wipes. Key markets are Europe and Asia.

- **Market position** #1 in high-end wallcoverings
- **Average market growth** 2-3% p.a.



Filtration & Performance Solutions

Building & Wind

Demand drivers

- Construction and renovation activity
- Growing popularity of luxury vinyl tile (LVT) flooring solutions, especially in North America
- Substitution from other flooring reinforcements such as mineral felt, especially in North America
- New and upgrade investments in wind turbines

Strengths

- Unique glass fiber tissue production technology
- Agile customer service and close customer relationships

Weak position in Fabrics

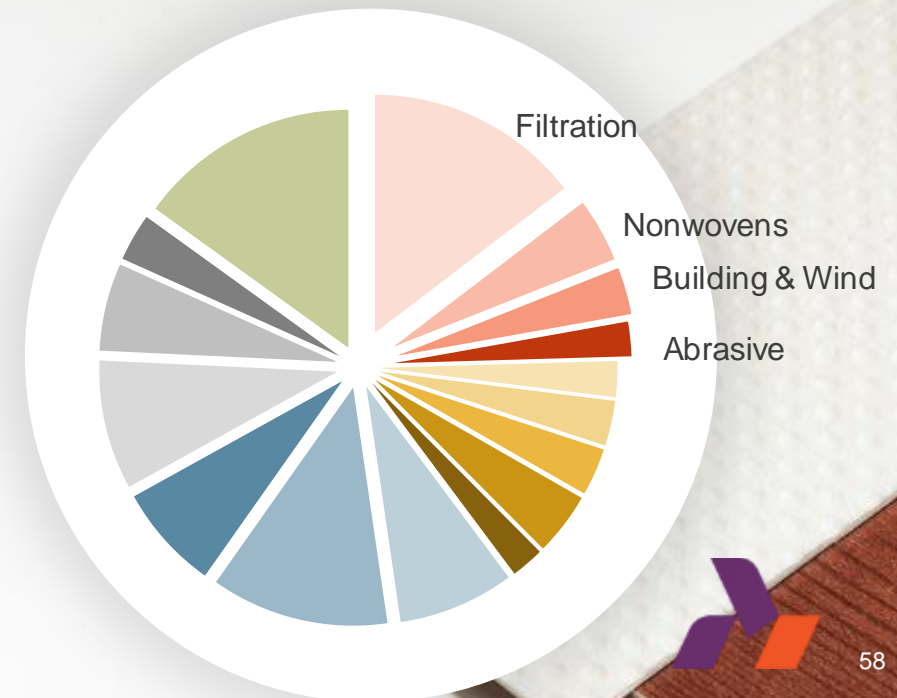
- Focus on quality and delivery flexibility

Going forward

- Defend global leadership in glass fiber tissue for flooring applications and expand portfolio of applications for glass fiber tissue. In fabrics, seek product differentiation, e.g. through new product launches and increased customization.

The **Building & Wind** business produces glass fiber tissue, mainly for flooring applications, and a range of building and transportation related end-uses. It also manufactures reinforcement fabrics to the wind turbine, boat hull and vehicle industries. In flooring applications Ahlstrom-Munksjö targets global markets.

- **Market position #1** in flooring
- **Average market growth 3-8% p.a.**



Abrasive

The **Abrasive** business produces specialty papers used as backings for abrasive products used in industrial and do-it-yourself sanding applications. In the Abrasive business Ahlstrom-Munksjö targets global markets. The Abrasive business also includes fine art papers under the brand name Arches™ and printed decor papers.

Demand drivers

- Demand is driven by automotive, wood, furniture and construction industries

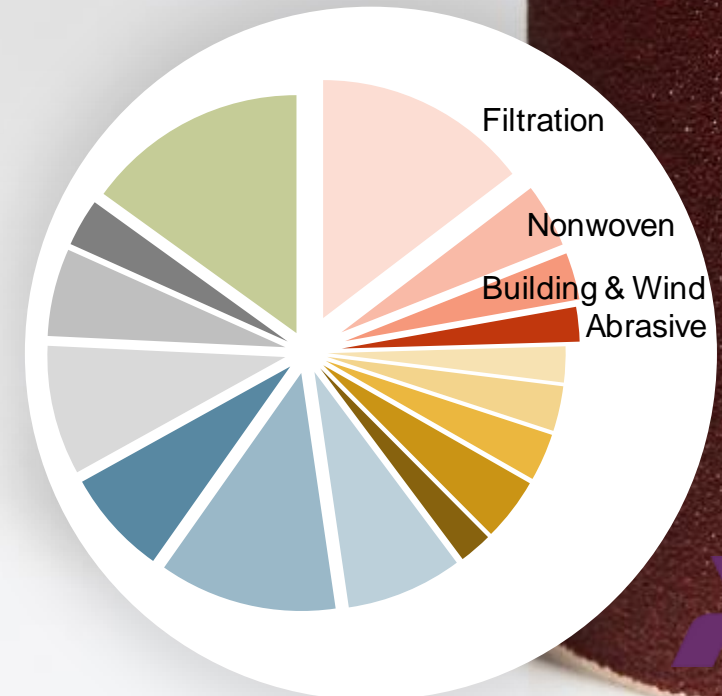
Strengths

- Only supplier offering full range of paper and composite backings for the production of abrasive shapes in do-it-yourself or industrial channels
- 100% formaldehyde free offering
- Innovative paper backings in Light Weight latex paper segment and in Heavy Weight paper segment

Going forward

- Profitable growth through innovative product differentiation and mix improvement as well as continuous improvement in production and value based pricing

- **Market position #1-2**
- **Average market growth 2-3% p.a.**



Liquid Technologies

Demand drivers

- Increase in testing for environmental and health monitoring.
- Patient-friendly procedures, performed at home
- Quick, cost-effective solutions for healthcare
- Safer drinking water, rising quality standards for food and liquids

Strenghts

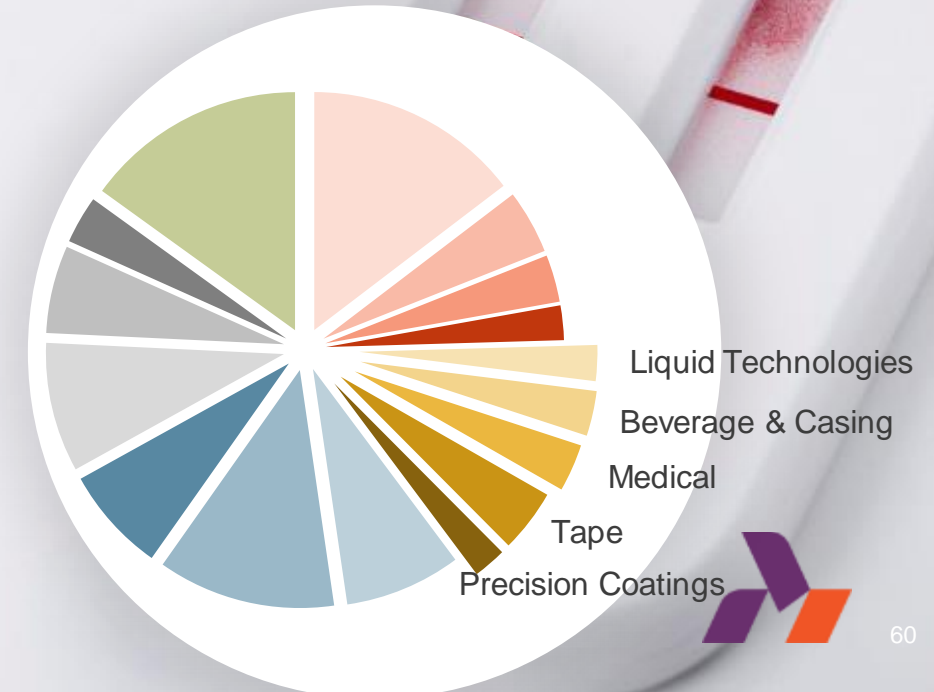
- Disruptor proprietary technology in water purification
- Alternative solution to liquid sampling by avoiding cold chain and special transport of specimen to be used for i.e. diagnosis of genetic diseases and DNA screening. New components for rapid test kits that extend this technology into pregnancy tests, infectious diseases and drug monitoring.
- Full range service for laboratory filters; cost-effective solution to increase hot cooking oil quality

Going forward

- Market position in life science and laboratory segment will be strengthened through further product development and partnerships with e.g. kit assemblers. In liquid purification, the business will continue to penetrate the water purification market through more end-use applications.

The **Liquid Technologies** business produces high-quality filters for laboratory sample preparation and life science diagnostics materials, used by laboratories and manufacturers of rapid test kits, in addition to high-performance media for water purification devices.

- **Market position #2**
- **Average market growth 1-10% p.a.**



Beverage & Casing

Demand drivers

- Consumers increasingly seek sustainable alternatives
- Stricter food safety and chemical regulations
- More demanding packaging functionality and barrier properties

Strengths

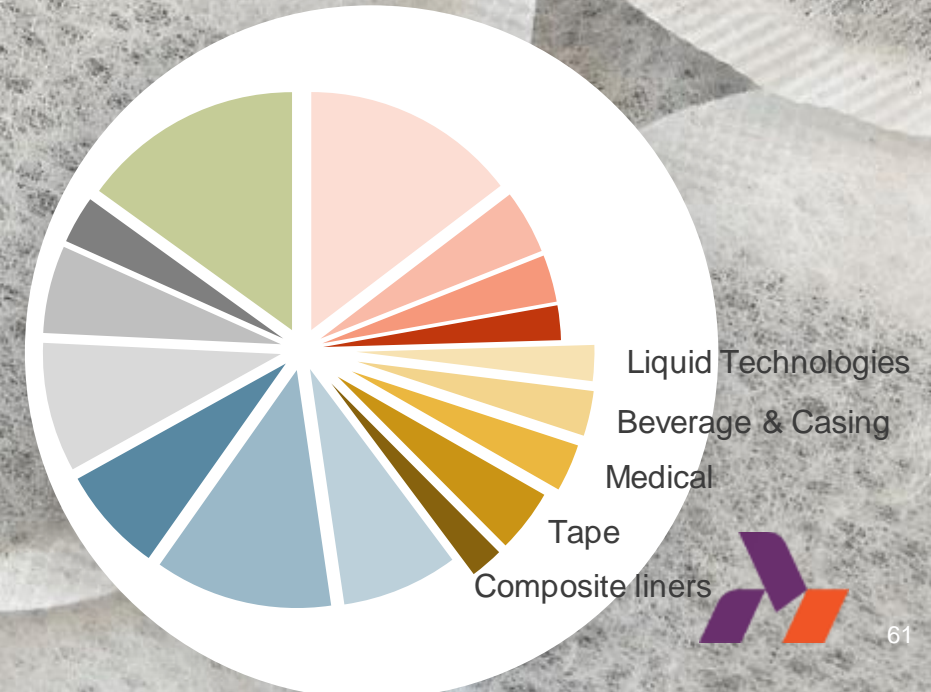
- Unique plastic-free biodegradable and compostable offering
- Forerunner in plastic-free coffee materials
- Unique viscose technology in casing materials

Going forward

- To continue to differentiate with an unique plastic-free, biodegradable and compostable tea bag materials and single-serve coffee solutions offering
- To further develop and grow in the fibrous casing material segment
- Invest to improve manufacturing capability and efficiency in tea and coffee filter materials as well as in increased capacity

The **Beverage & Casing** business makes material for tea bags and coffee pods and casings with a focus on sustainability. Key markets are in Europe and North America, while the business is global.

- **Market position #1-2**
- **Average market growth 2-8% p.a.**



Advanced Solutions

Medical

Demand drivers

- High-risk surgeries increasing
- Liabilities around infections and contamination
- Rigorous regulatory requirements
- Increasing use of single-use protection

Strengths

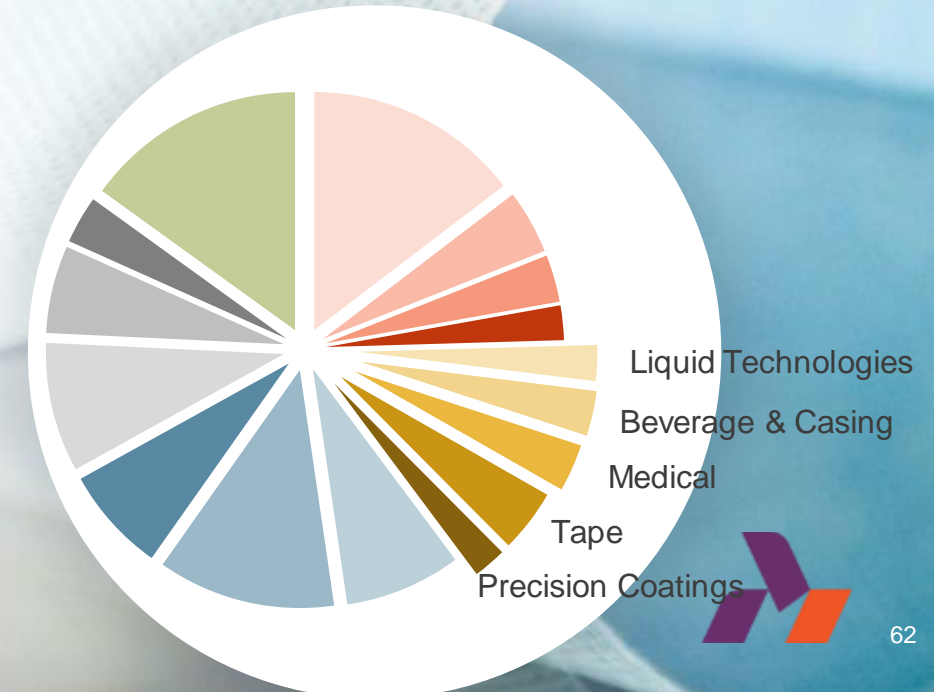
- Leading in high protective fabrics for high risk surgeries
- Leading position in sterilization wrap market in Europe
- Experienced team and strong product development capabilities
- Multi-technology platform approach

Going forward

- Continue to expand with personal protective apparel fabrics as well as increasing market share in surgical drapes and gowns.
- Strengthen leading position in Europe in sterile wraps and grow as a solutions provider through an enhanced service offering
- Grow in Asia through improved customer service and local converting footprint

The **Medical** business makes medical fabrics used in sterile barrier systems, drapes, gowns, facemasks and sterilization wraps, all used primarily in surgery but also in cleanrooms and laboratories. Ahlstrom-Munksjö targets global markets.

- **Market position #1-3**
- **Average market growth 3% p.a.**



Advanced Solutions

Tape

Demand drivers

- Home construction and renovation activity
- Growth in automotive and electronics industries
- Growth in e-commerce

Strengths

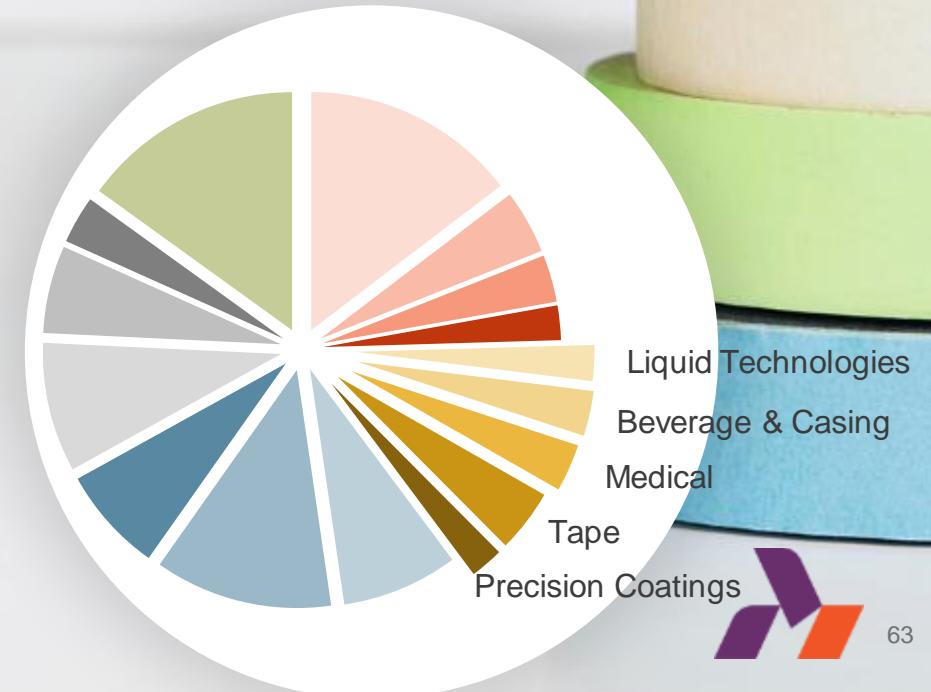
- Close customer relationships
- High and consistent quality in products and services
- Strong brand and comprehensive product range
- Cost competitive

Going forward

- Consolidate product portfolio and optimize expanded global manufacturing footprint after Expera and Caieiras integration
- Growth in packaging tape segment by developing sustainable alternatives to replace plastics
- Leverage the competitive manufacturing in China in general purpose masking tape segment in Asia
- Continue product mix improvement with existing customers through a comprehensive offering in both general purpose and specialty masking tape

The **Tape** business offers tape backings to masking and packaging tape manufacturers used in the construction and automotive industries, packaging applications for e-commerce and for specialty purposes. Ahlstrom-Munksjö targets global markets.

- **Market position #1**
- **Average market growth 5% p.a.**



Advanced Solutions

Precision Coatings

Demand drivers

- Increasing use of composite materials in the aerospace industry
- Increased use of self-adhesive fasteners in industrial and home applications
- E-commerce drives demand for packaging tapes and labels

Strengths

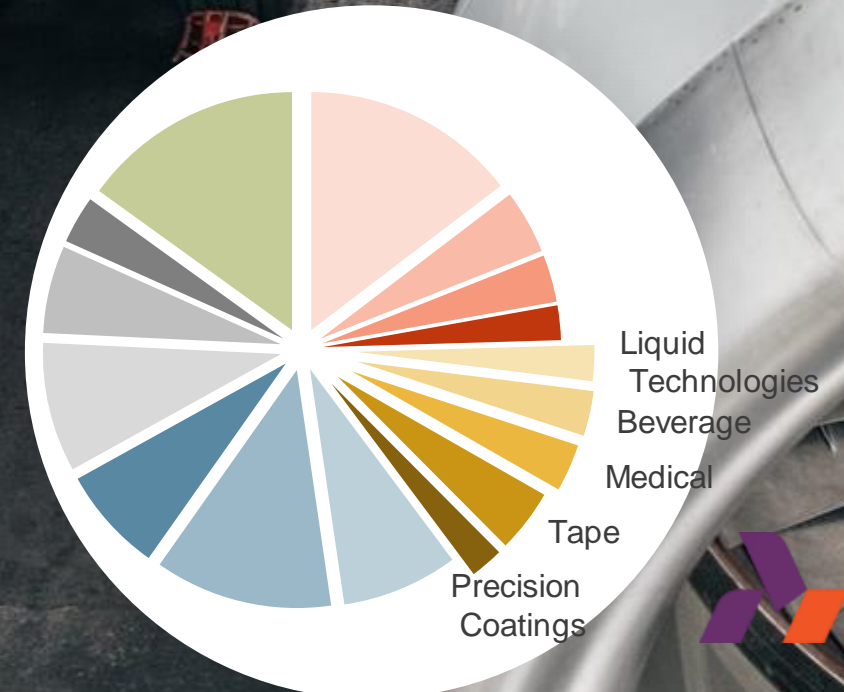
- Leading North American market position
- High degree of technical complexity and customization
- Strong innovation and product development capabilities

Going forward

- Work proactively with customers, focus on brand owner and end-user collaborative innovation

The **Precision Coatings** business offers a variety of pressure-sensitive liners for fiber composites. The business especially targets highly technical products that require specialized coating machines and experts to meet qualification and certification needs. Key markets are in North America.

- **One of the leading suppliers** in the relevant product segments
- **Average market growth 3-8% p.a.**



Insulation

- Electrotechnical

Demand drivers

- Extension and upgrade of power distribution networks
- Decentralization of power generation and power grids
- Urbanization and construction activity drives power equipment investments

Strengths

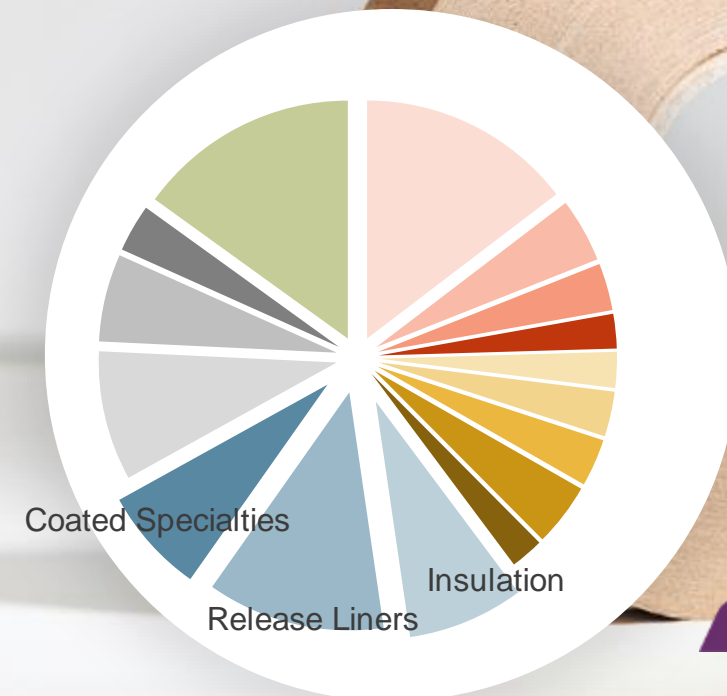
- Broad portfolio of electrotechnical papers
- Internally sourced high quality, pure and clean pulp
- Technical knowledge of power equipment end-uses

Going forward

- In electrotechnical insulation papers, converting capability and overall capacity will be expanded to drive profitable growth. In addition, continuous improvement for operational efficiency and value-based price management is pursued.

The **Insulation** business supplies electrotechnical insulation papers to manufacturers of transformers and high voltage cables globally. It also produces thin papers used as interleaves and specialty long fiber cellulose pulp.

- **Market position** #1-2 in electrotechnical papers
- **Average market growth** 2-3% p.a.



Release Liners

Demand drivers

- Economic growth, growing middle class
- E-commerce drives logistics and need for labels in tracking and identification
- In industrial segments growth is driven by tapes, medical and composites

Strengths

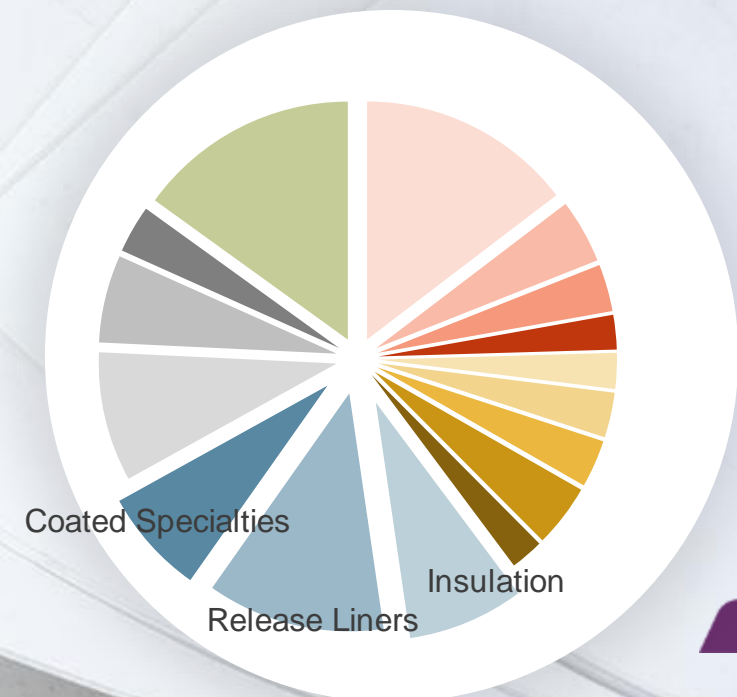
- Superior customer relationships
- Quality and service
- Sustainable products

Going forward

- Focus is on operational excellence and continuous improvement in performance
- Build on Ahlstrom-Munksjö's strong global platform, particularly in technical release liners for specialty industrial applications, to seize attractive opportunities
- Expand geographically outside of Europe

The **Release Liners** business produces papers that after coating can be used to carry self-adhesive labels or for manufacturing and assembling adhesive components in industrial processes. Key markets are Europe and selected export regions.

- **Market position #2**
- **Average market growth 4% p.a.**



Coated Specialties

Demand drivers

- Increasing need of packaging, tracking and identification in supply chains
- Packaging functionality
- Private consumption, sustainable alternatives replacing plastics
- Demographic and purchasing power development in Brazil and South America

Strengths

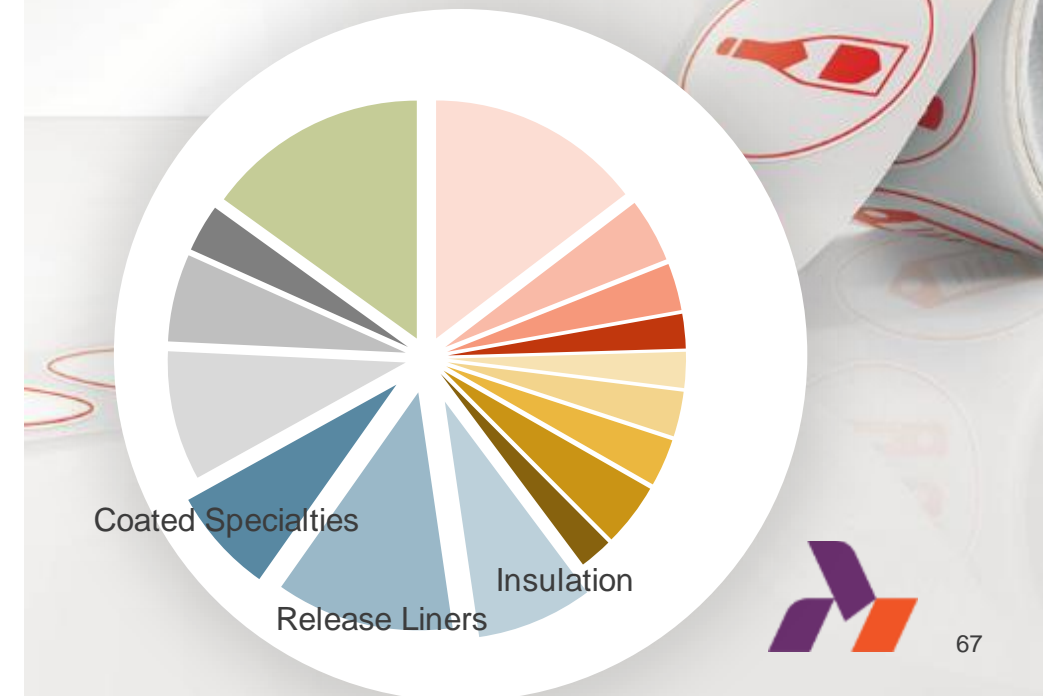
- Customer relations with both regional and global players
- Strong local platform in the South American market
- Product range and development

Going forward

- Further increase efficiency by continuous improvement and key investments supporting product mix strategy, capturing a larger part of the high-value coated specialties segment
- To secure benefits from Caieiras integration in terms of market, operations, and competence sharing

The **Coated Specialties** business manufactures coated label papers, flexible packaging papers for fast-moving consumables and processed foods, as well as office, printing and writing papers. Key markets are Europe, South America and Asia.

- **Market position** #2-4 in coated specialty papers
- **Average market growth** 2-4% p.a.



Food & Technical Solutions

Food Packaging

Demand drivers

- Sustainability, recyclability, alternatives to plastics
- Stricter food safety and chemical regulations
- Packaging functionality
- Move toward unbleached papers

Strengths

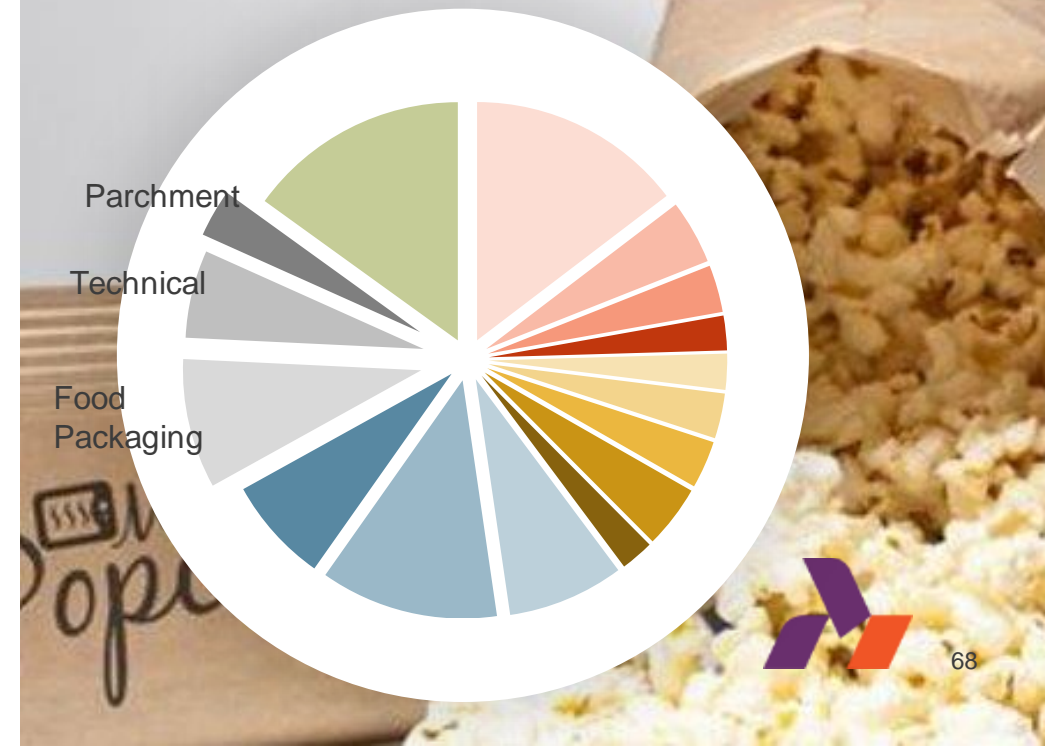
- Strong innovation and product development capabilities
- Broad range of products and capabilities
- Leading North American market position with integrated pulp production

Going forward

- Work proactively with customers, focus on brand owner and end-user collaborative innovation
- Utilize asset base optimization

The **Food Packaging** business offers a broad range of specialty papers and unique capabilities for quick service restaurant, food processing, cooking and baking, and flexible packaging markets. Key markets are in North America and Europe.

- **One of the leading suppliers** in the relevant product segments
- **Average market growth** 1-3% p.a.



Technical

Demand drivers

- U.S. construction and infrastructure activity, particularly homebuilding
- Trends in residential and commercial building segments, and changing building codes
- Increased use of LCD/other displays and continuing need for higher quality materials
- Sustainability in packaging
- Trends and changes in textile production and printing

Strengths

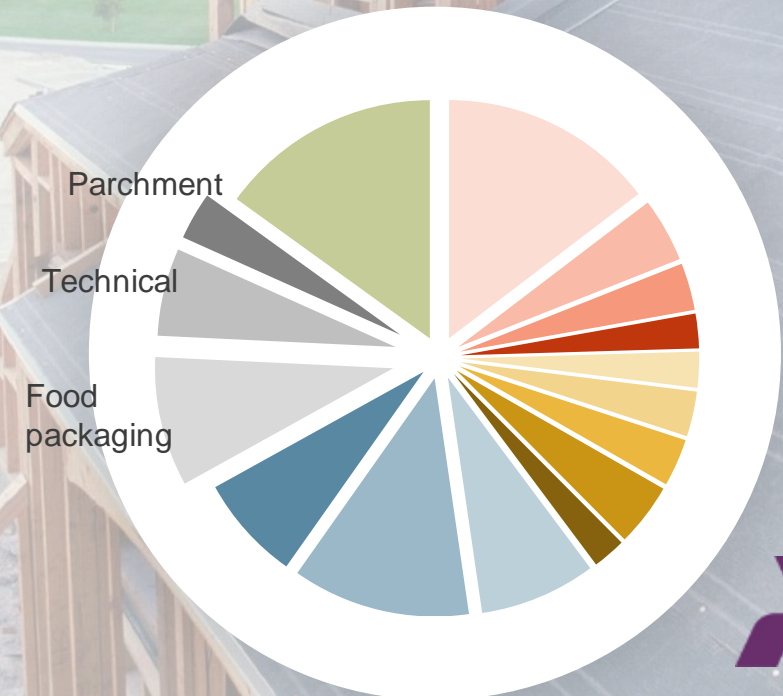
- Leading North American market position
- High degree of technical complexity and customization
- Strong innovation and product development capabilities

Going forward

- Leverage R&D, Product Development, and capability strengths to address changing needs
- Utilize asset base optimization

The **Technical** business produces specialty products used for a wide variety of industrial and construction applications. The product portfolio includes glass interleave papers, saturating bases, laminating bases, dye sublimation papers, and other industrial packaging fiber-based solutions. Key markets are in North America, in addition to selected export regions.

- **Leading supplier position** in the several product segments and niche applications
- **Average market growth** 1-3% p.a.



Food & Technical Solutions

Parchment

Demand drivers

- Private consumption, push towards sustainable alternatives
- Brand-owners seeking cellulosic solutions with intrinsic barrier properties to replace plastics
- Stricter food safety and chemical regulations

Strengths

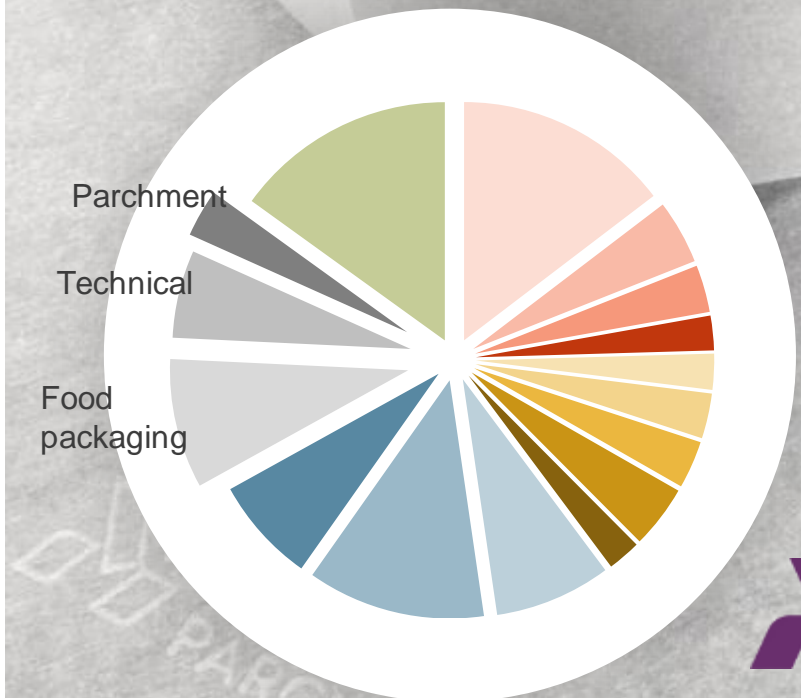
- Capabilities helping customers to differentiate
- Leading brand
- Unique technical characteristics of parchment paper

Going forward

- To leverage on the technical characteristics of parchment paper and consolidate and expand leadership in baking and cooking
- Expand the use of parchment paper to non-food adjacencies

The **Parchment** business produces a broad portfolio of sustainable vegetable parchment solutions for food and industrial applications. The product portfolio includes cooking and baking papers, pan liners, trays and molds. Key markets are in Europe and North America.

- **Market position #1** in baking and cooking
- **Average market growth 2-3% p.a.**



Decor

Demand drivers

- GDP growth, impacting residential home starts, commercial building projects and renovation
- Rapidly growing middle class in developing markets driving construction and furniture demand
- Interior design trends
- Substitution from solid wood, veneer and plastic foils

Strengths

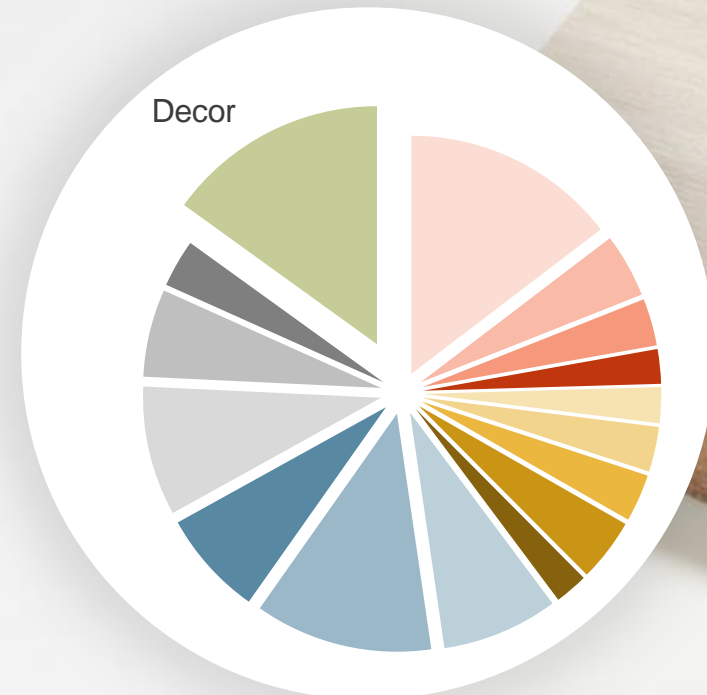
- Industry leading brand, based on capabilities, service and quality
- Strong positions in Europe, North and South America
- Diverse, high-quality product and service offering
- Global leader in solid colors and pre-impregnated papers

The way forward

- Grow and strengthen leading positions in Europe and North America
- Establish a strong growth platform in South America
- Enter China market

The **Decor** business produces paper in a wide range of colors, grades and grammages for decorative applications mainly used in laminated furniture, flooring and interior applications both for technical and esthetical purposes. Key market is Europe and selected export markets.

- **Market position #2-4**
- **Average market growth 3% p.a.**



History

History of Ahlstrom-Munksjö

Over 160 years of industrial leadership

1851

Antti Ahlström starts his business



1862

The first Munksjö paper mill is established in Jönköping by Johan Edvard Lundström och Lars Johan Hierta

1896

After Antti's death, his wife Eva Ahlström becomes one of the first female industrialists in Finland



1908

A. Ahlström Osakeyhtiö is established



1919

The first listing of Munksjö AB shares on the Stockholm Stock Exchange

1960's

Ahlström's internationalization starts through acquisition in Turin, Italy



1987-2000

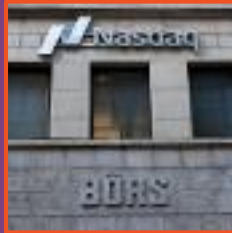
Ahlström focuses on specialty papers and fiber solutions by divesting fine paper and paper machinery businesses and acquiring e.g. Sibille-Dalle and Dexter businesses

History of Ahlstrom-Munksjö

Constantly re-imagining fiber

2006

Ahlstrom Corporation listed on Nasdaq Helsinki



2011

Munksjö purchases ArjoWiggins' decor, thin print and fine art paper, and abrasive backings businesses in France and Germany

2013

Ahlstrom's label and processing business merges with Munksjö

2017

Ahlstrom and Munksjö merge into Ahlstrom-Munksjö

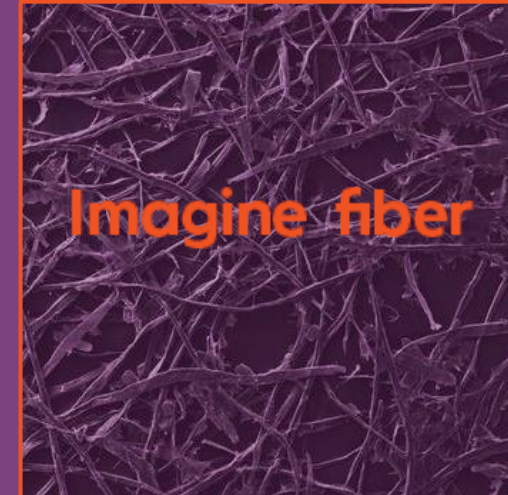


2019

Expera and Caieiras acquired to strengthen regional growth in North and South America

2019-

We continue to imagine fiber in a sustainable manner



UPCOMING EVENTS IN 2019

- Financial statements release for 2019 on February 13, 2020



Further information, please contact

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