



Valmet – unique offering with  
process technology, automation  
and services

Roadshow presentation  
September 2019

# Agenda

## Valmet roadshow presentation

1 Valmet in brief

2 Investment highlights

3 Financials

4 Conclusion



# Valmet in brief

# Unique offering with process technology, automation and services



## Services

Mill and plant improvements, roll and workshop services, parts and fabrics, and life-cycle services



## Automation

Supplies and develops automation and information management systems, applications and services



## Pulp and Energy

Technologies and solutions for pulp production, power generation, and biomass conversion



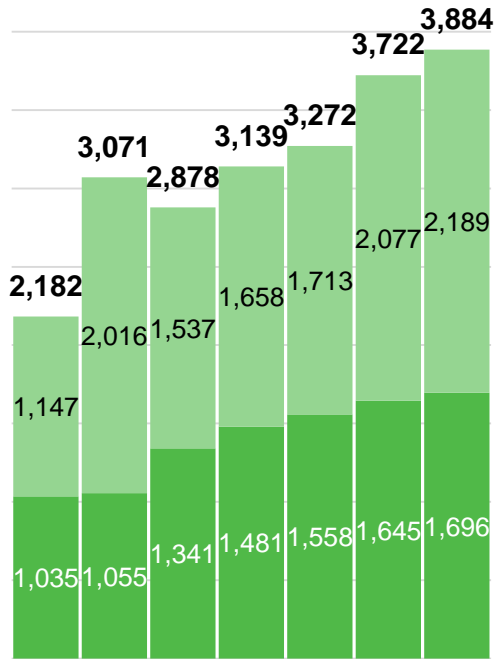
## Paper

Technologies and solutions for board, tissue, and paper

# Valmet's development

Comparable EBITA target 8–10%

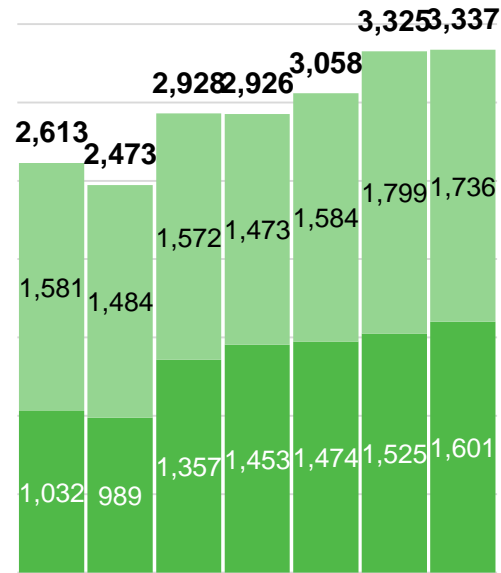
Orders received  
(EUR million)



2013 2014 2015 2016 2017 2018 LTM

■ Pulp and Energy, and Paper business lines  
■ Services and Automation business lines

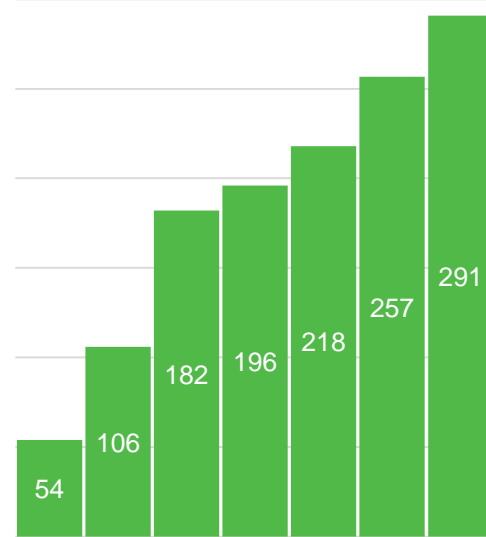
Net sales  
(EUR million)



2013 2014 2015 2016 2017 2018 LTM

■ Pulp and Energy, and Paper business lines  
■ Services and Automation business lines

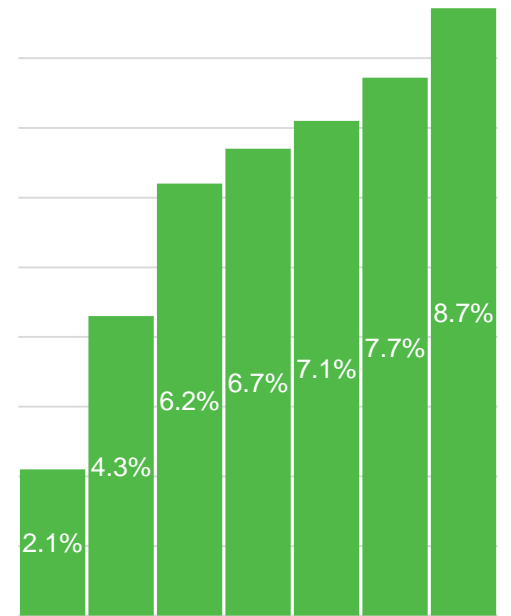
Comparable EBITA  
(EUR million)



2013 2014 2015 2016 2017 2018 LTM

■ Comparable EBITA

Comparable EBITA margin  
(%)



2013 2014 2015 2016 2017 2018 LTM

■ Comparable EBITA margin

2013 figures on carve-out basis

# Key figures

Last twelve months

**Orders received**  
EUR 3,884 million

**Net sales**  
EUR 3,337 million

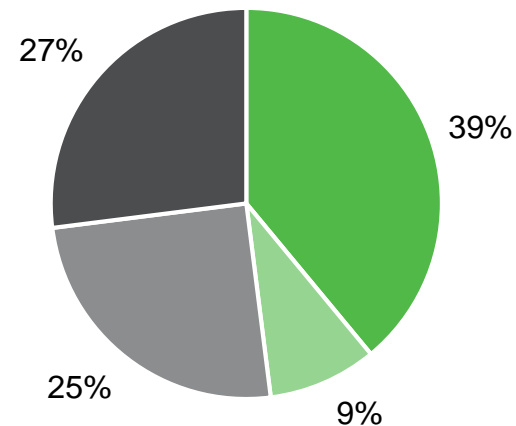
**Comparable EBITA**  
EUR 291 million

**Comparable EBITA margin**  
8.7%

**Order backlog (Jun 30, 2019)**  
EUR 3,216 million

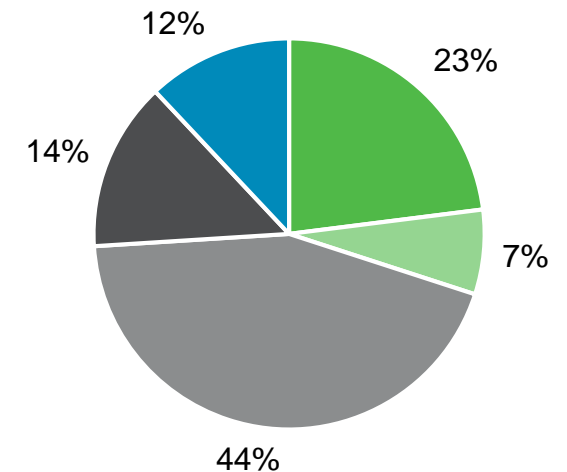
**Employees (Jun 30, 2019)**  
13,622

Net sales by business line



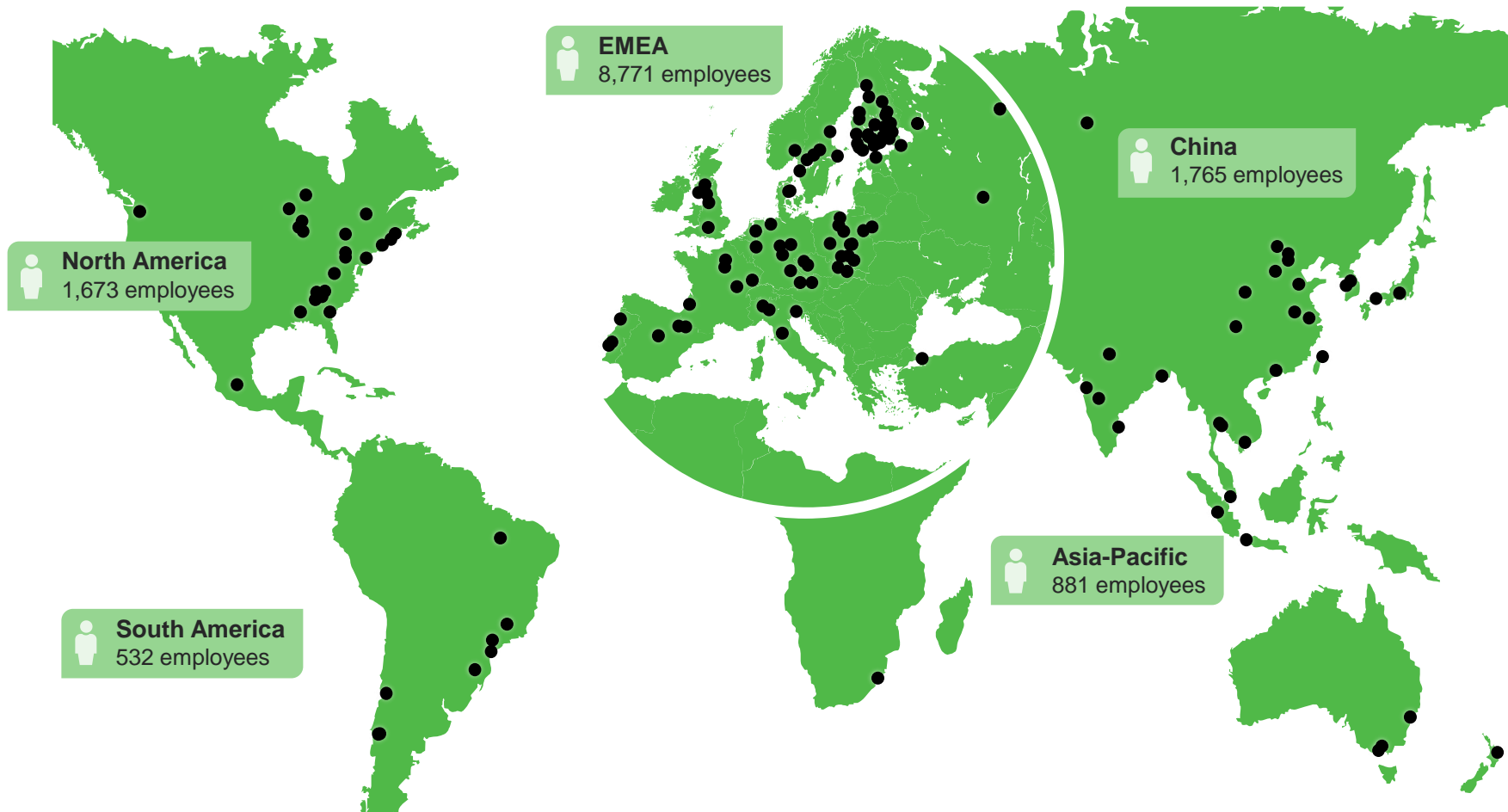
- Services
- Automation
- Pulp and Energy
- Paper

Net sales by area



- North America
- South America
- EMEA
- China
- Asia-Pacific

# Strong, global presence is a good platform for growth



~100  
service centers



85  
sales offices



35  
production units



16  
R&D centers



7  
Performance Centers



# Process technology, services and automation

Valmet's unique offering differentiates the company from its competitors





# Significant, customer focused research and development work

## R&D focus areas

- Advanced and competitive technologies and services
- Raw material, water and energy efficiency
- Promotion of renewable materials

**16**

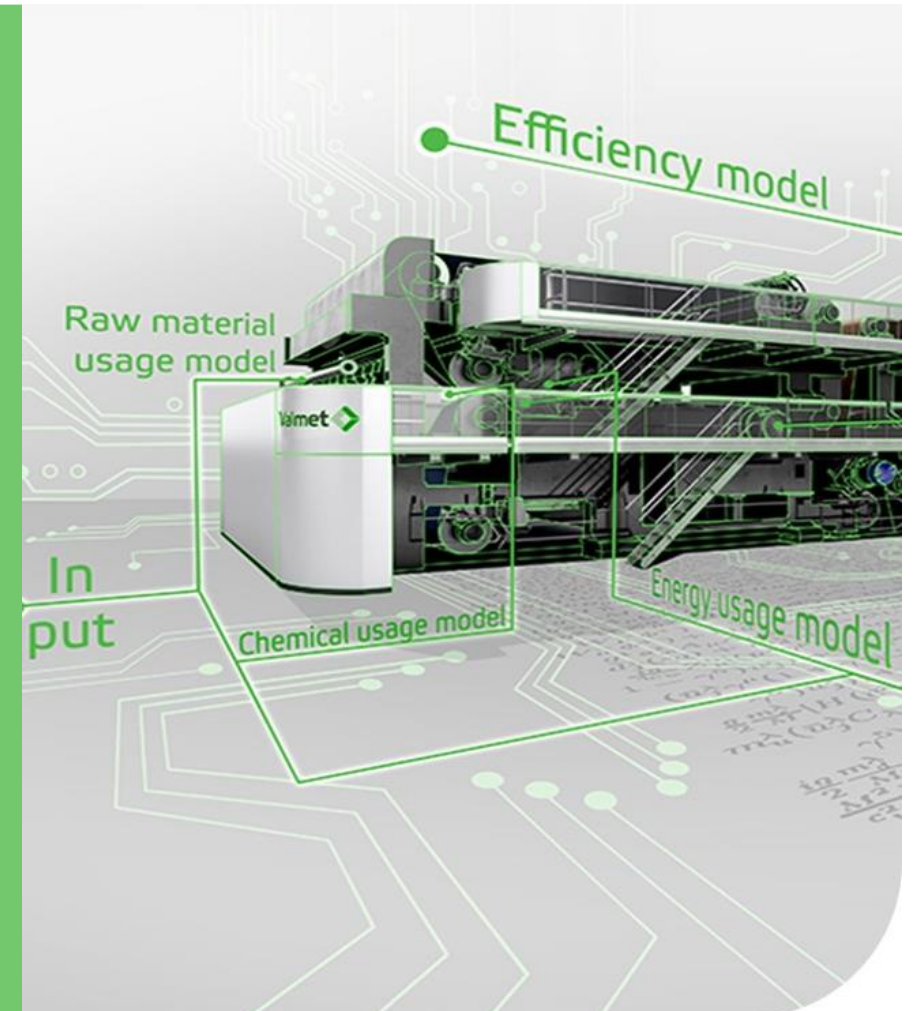
research and  
development  
centers



EUR **66** million  
R&D spending  
in 2018



**~1,500**  
protected  
inventions



# Acknowledged leader in sustainability

## 360° approach to sustainability

- In Dow Jones Sustainability Index for the fifth consecutive year
- Received RobecoSAM Bronze Class 2019 Sustainability Award
- Achieved A rating in CDP's climate program in 2018
- In Ethibel Sustainability Index Excellence Europe



Most material UN Sustainable Development Goals for Valmet



# Valmet strengthened its stable business through acquisitions

Valmet has completed the acquisitions of GL&V and J&L Fiber Services

- **GL&V** is a supplier of technologies, upgrade and process optimization services, rebuilds and spare parts for the pulp and paper industry globally
  - Focus in chemical pulping, stock preparation, papermaking and finishing
  - Key locations in the US and Canada, operations also in Europe, India and South America
- The acquired operations form a new business unit within the Services business line called Mill Process Solutions
  - A majority of the business is reported in the Services business line

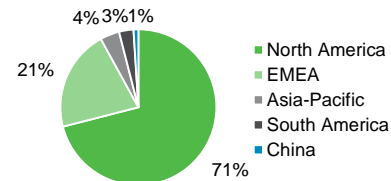
- **J&L Fiber Services** is a manufacturer and provider of refiner segments to the pulp, paper and fiberboard industry
  - Most of the employees are located in Wisconsin, U.S, with global operations through a sales representative and distribution network.
- The acquired business became a part of Valmet's Services business line

## Key information

Net sales in 2018	EUR ~160 million
EBITA margin in 2018	~11%
Number of employees	~630
Value of acquisition <sup>1</sup>	EUR ~113 million

<sup>1</sup>) Value on a cash and debt free basis subject to ordinary post-closing adjustments

## Approximate split of net sales

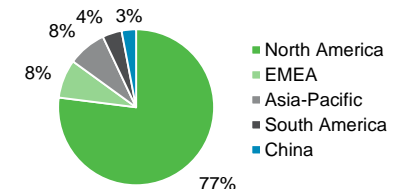


## Key information

Net sales in 2018	EUR ~30 million
EBITA margin in 2018	~15%
Number of employees	~100
Value of acquisition <sup>1</sup>	EUR ~51 million

<sup>1</sup>) Value on a cash and debt free basis subject to ordinary post-closing adjustments

## Approximate split of net sales



# Financial targets

## Growth



- Net sales for stable business to grow over two times the market growth
- Net sales for capital business to exceed market growth

## Profitability



- Comparable EBITA: 8–10%

## ROCE

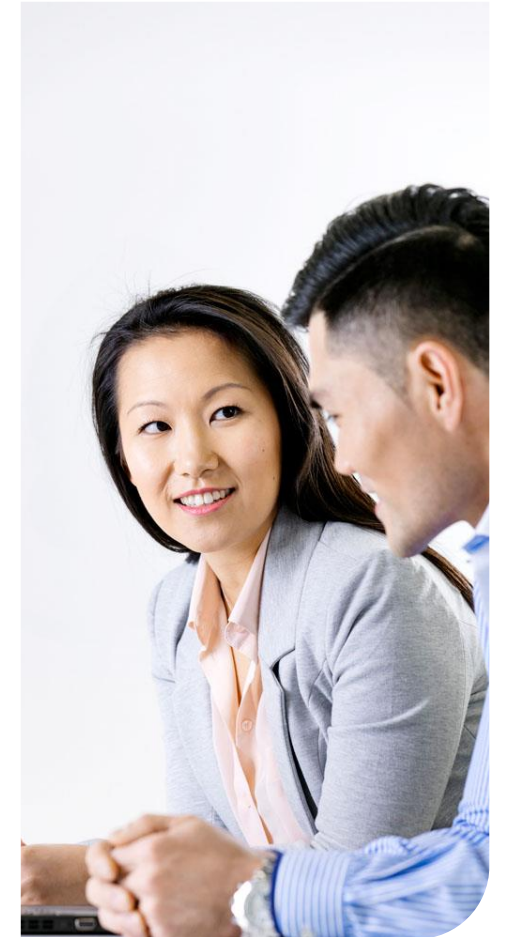


- Comparable return on capital employed (pre-tax), ROCE<sup>1</sup>: 15–20%

## Dividend policy



- Dividend payout at least 50% of net profit



1)  $ROCE \text{ (pre-tax)} = (\text{profit before taxes} + \text{interests and other financial expenses}) / (\text{balance sheet total} - \text{non-interest-bearing liabilities})$










# Investment highlights

# Investment highlights

- 1 Strong position in the growing market of converting renewables**
- 2 Widest offering combining process technology, services and automation in a unique way**
- 3 Large stable business offering growth and profitability**
- 4 Strong capital business with high market share and flexible cost structure**
- 5 Systematically building the future**



# Strong position in the growing market of converting renewables

Services	Automation	Pulp	Energy	Tissue	Board	Paper
						
<b>#1-2</b>	<b>#1-3</b>	<b>#1-2</b>	<b>#1-3</b>	<b>#1</b>	<b>#1</b>	<b>#1</b>
<b>8.0</b> EUR bn	<b>2.0</b> EUR bn	<b>1.4</b> EUR bn	<b>2.0</b> EUR bn	<b>0.7</b> EUR bn	<b>1.0</b> EUR bn	<b>0.3</b> EUR bn
<b>~1-2%</b> p.a.	<b>~1%</b> p.a.	<b>~1%</b> p.a.	<b>~1%</b> p.a.	<b>~3%</b> p.a.	<b>~2-3%</b> p.a.	<b>~1%</b> p.a.
<ul style="list-style-type: none"> <li>Increasing pulp, paper and energy production</li> <li>Demand for more efficient processes, maintenance and outsourcing of non-core operations</li> <li>Customers decreasing own resources</li> <li>Size and gradually aging installed base, capacity increases in China, South America and Asia-Pacific</li> <li>Closures of non-competitive production lines</li> <li>Demand for Industrial Internet based solutions</li> </ul>	<ul style="list-style-type: none"> <li>Aging machines and installed automation systems</li> <li>Investments in new pulp and paper machines and power plants</li> <li>Demand for raw material savings, process efficiencies and sustainability</li> <li>Demand for Industrial Internet based solutions</li> </ul>	<ul style="list-style-type: none"> <li>Growth in board and tissue consumption</li> <li>Need for virgin wood pulp. Decreasing availability of recycled paper and limitations to recycling rates</li> <li>Increased size of pulp lines and mills</li> <li>New applications for bio based products</li> <li>Increasing environmental awareness and stricter regulations</li> </ul>	<ul style="list-style-type: none"> <li>Growth in energy consumption</li> <li>Demand for sustainable energy and shutdowns of coal capacity</li> <li>Modernization of aging plants</li> <li>Incentives and regulation driven demand</li> <li>Environmental solutions driven by marine Sox regulation and target market expected temporarily to exceed 1BEUR</li> </ul>	<ul style="list-style-type: none"> <li>Rise in purchasing power and living standards</li> <li>Fast growth in emerging markets</li> <li>Demand for higher quality</li> </ul>	<ul style="list-style-type: none"> <li>World trade, e-commerce and emerging markets growth drive packaging</li> <li>Demand for light weight board</li> <li>Shift from plastic packaging to renewable materials</li> <li>Conversions from paper to board</li> </ul>	<ul style="list-style-type: none"> <li>Increasing role of digital media decreases demand for printing and writing papers</li> <li>Demand for technology driven efficiency improvements</li> <li>Demand for specialty papers</li> </ul>
<b>37%</b> of net sales	<b>9%</b> of net sales	<b>13%</b> of net sales	<b>12%</b> of net sales	<b>8%</b> of net sales	<b>16%</b> of net sales	<b>4%</b> of net sales

■ Market position    
 ■ Estimated market size for current offering (EUR)    
 ■ Anticipated long-term market growth    
 ■ Market drivers    
 ■ % of net sales (2018)



# Widest offering combining process technology, services and automation in a unique way

## Paper

- Board, paper and tissue production lines
- Rebuilds
- Stand-alone products

## Pulp

- Wood and pulp handling
- Fiber processing
- Recovery

## Energy

- Heat and power generation
- Air emission control
- Biofuels

## Services

- Spare parts and components
- Maintenance and shutdown services
- Outsourcing services
- Production consumables
- Process support and optimization

## Automation

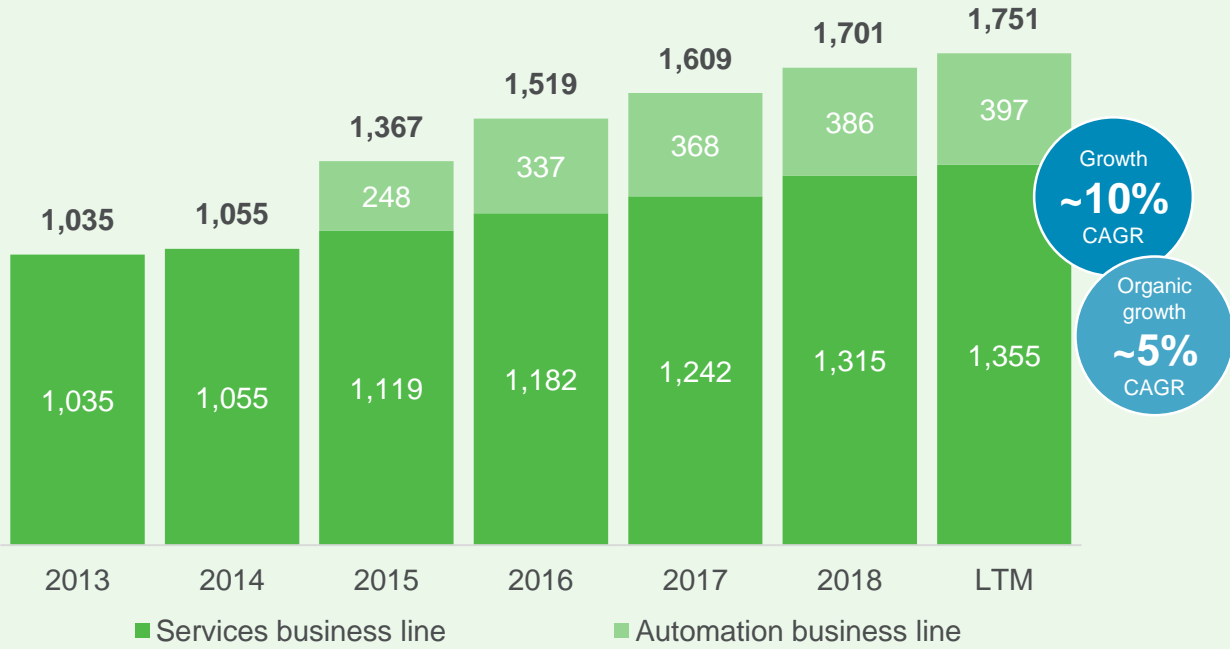
- Distributed Control Systems (DCS)
- Quality Management Systems (QMS)
- Analyzers and measurements
- Industrial Internet solutions





# Large stable business offering growth and profitability

Orders received (EUR million)



## Services

- 16% market share offers room for growth
- Wide offering to support customers' all service needs
- Opportunities to win new customers and increase share of wallet with existing customers

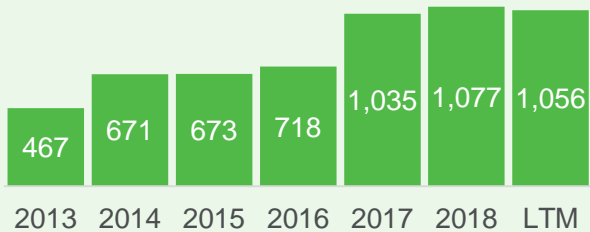
## Automation

- Strong as a stand-alone business as well as packaged with Valmet's equipment
- Growth possibilities through replacing competitors' installed base, entering new industries and capturing Valmet synergies
- Lead the market through Industrial Internet offering

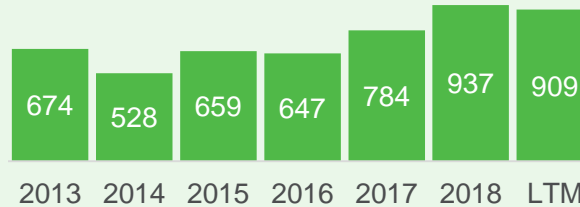
# Strong capital business with high market share and flexible cost structure

## Paper business line

Orders received (EUR million)

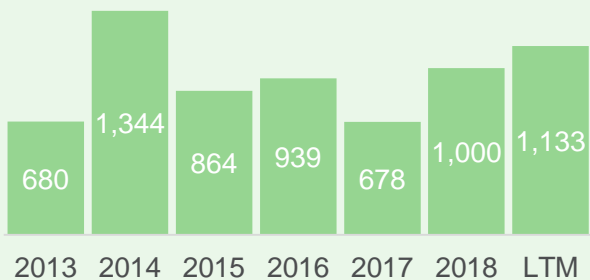


Net sales (EUR million)

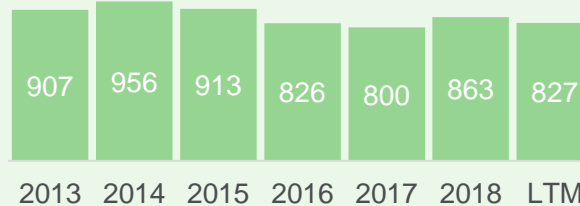


## Pulp and Energy business line

Orders received (EUR million)



Net sales (EUR million)



## Market share

- High market share in all businesses

Board and paper	Tissue	Pulp	Energy
~40%	~35%	~40%	~20%

## Flexibility

- Low capacity cost provides resilience to market fluctuations
- Capacity costs:

	2018:	2015:
<b>Paper</b>	<b>30%</b> of net sales EUR <b>277</b> million	<b>41%</b> of net sales EUR <b>270</b> million

	2018:	2015:
<b>Pulp and Energy</b>	<b>24%</b> of net sales EUR <b>203</b> million	<b>24%</b> of net sales EUR <b>218</b> million

# Systematically building the future

<b>Customer</b>	<ul style="list-style-type: none"><li>• Shared Journey Forward: a unified and unique way to serve</li><li>• Add value to customers through Industrial Internet solutions</li><li>• Ensure strong market position in capital business</li></ul>
<b>Technology</b>	<ul style="list-style-type: none"><li>• Develop new products and technologies</li><li>• Improve product cost competitiveness</li><li>• Lead the market through Industrial Internet offering</li></ul>
<b>Process</b>	<ul style="list-style-type: none"><li>• Investing in new ERP and other new business platforms</li><li>• Continue to improve project management and project execution</li><li>• Continued focus on sustainability</li></ul>
<b>People</b>	<ul style="list-style-type: none"><li>• Continue to improve safety and lower LTIF</li><li>• Continuous training of employees, e.g. Sales Journey and Innovation Pathways training programs</li><li>• Building capabilities globally</li></ul>





# Financials

# Key figures

EUR million	Q2/2019 <sup>1</sup>	Q2/2018	Change	Q1–Q2/2019 <sup>1</sup>	Q1–Q2/2018	Change
Orders received	<b>1,083</b>	865	25%	<b>1,918</b>	1,756	9%
Order backlog <sup>2</sup>	<b>3,216</b>	2,621	23%	<b>3,216</b>	2,621	23%
Net sales	<b>901</b>	844	7%	<b>1,587</b>	1,575	1%
Comparable EBITA	<b>69</b>	61	14%	<b>117</b>	82	41%
% of net sales	<b>7.7%</b>	7.2%		<b>7.3%</b>	5.2%	
EBITA	<b>64</b>	57	13%	<b>113</b>	76	50%
Operating profit (EBIT)	<b>56</b>	49	13%	<b>99</b>	61	61%
% of net sales	<b>6.2%</b>	5.9%		<b>6.2%</b>	3.9%	
Earnings per share, EUR	<b>0.26</b>	0.23	9%	<b>0.47</b>	0.29	62%
Return on capital employed (ROCE) before taxes <sup>3</sup>				<b>17%</b>	11%	
Cash flow provided by operating activities	<b>-44</b>	3		<b>-14</b>	22	
Gearing <sup>3</sup>				<b>17%</b>	0%	

Items affecting comparability: EUR -5 million in Q2/2019 (EUR -4 million in Q2/2018), EUR -3 million in Q1–Q2/2019 (EUR -7 million in Q1–Q2/2018)

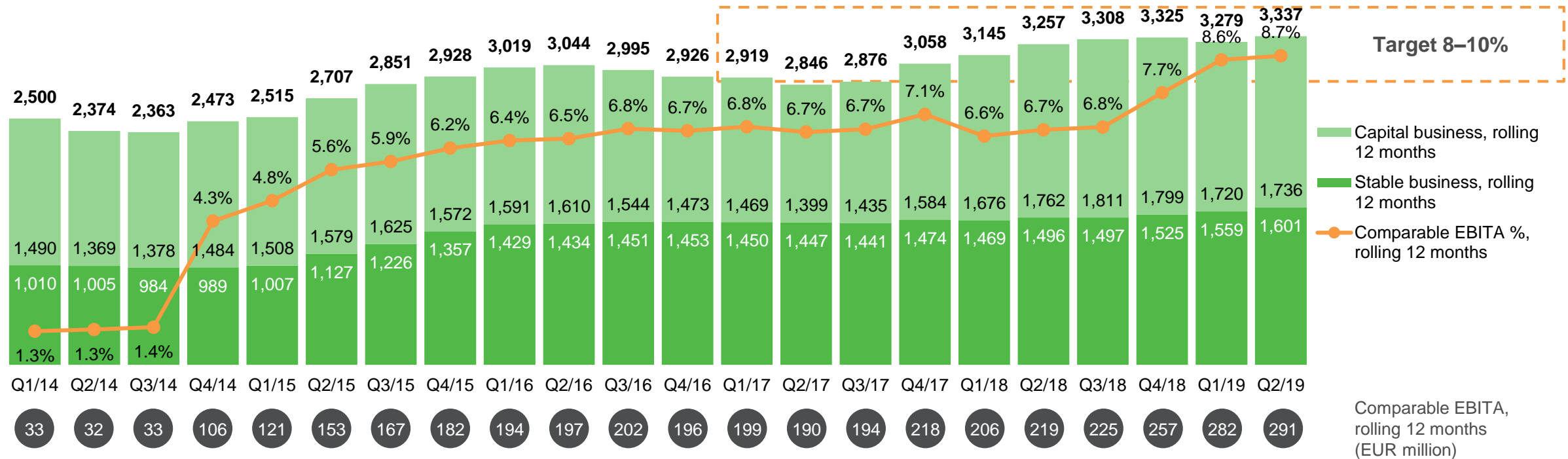
1) Valmet implemented IFRS 16 – Leases as of January 1, 2019 by applying the simplified transition method and therefore 2018 figures are not restated.

2) At the end of period

3) Annualized

# Comparable EBITA margin development

Net sales and Comparable EBITA, rolling 12 months (EUR million and %)¹




- Net sales and Comparable EBITA increased compared with Q2/2018
  - Profitability improved due to increased net sales and higher gross profit

1) Rolling 12 months. Carve-out figures for 2013 have been used in the calculation of Q1–Q3/2014 figures. In the calculation of 2017 figures, data points from 2016 that have not been restated have been used.

# Guidance and short-term market outlook

Guidance for 2019 (confirmed on April 1, 2019 following the completion of the acquisition of GL&V)

<b>Guidance</b> 	Valmet estimates that net sales in 2019 will increase in comparison with 2018 (EUR 3,325 million) and Comparable EBITA in 2019 will increase in comparison with 2018 (EUR 257 million).
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## Short-term market outlook

		Q3/2018	Q4/2018	Q1/2019	Q2/2019
Services		Good	Good	Good	Good
Automation		Good	Good	Good	Good
Pulp and Energy	Pulp	Satisfactory	Satisfactory	Good	Good
	Energy	Satisfactory	Satisfactory	Satisfactory	Satisfactory
Paper	Board and Paper	Good	Good	Good	Good
	Tissue	Good	Satisfactory	Satisfactory	Satisfactory

The short-term market outlook is based on customer activity (50%) and Valmet's capacity utilization (50%) and is given for the next six months from the end of the respective quarter. The scale is 'weak-satisfactory-good'.



# Conclusion



# Conclusion



1

**Strong position in the growing market of converting renewables**

2

**Widest offering combining process technology, services and automation in a unique way**

3

**Large stable business offering growth and profitability**

4

**Strong capital business with high market share and flexible cost structure**

5

**Systematically building the future**

# Important notice

It should be noted that certain statements herein which are not historical facts, including, without limitation, those regarding expectations for general economic development and the market situation, expectations for growth, profitability and investment willingness, expectations for company development, growth and profitability and the realization of synergy benefits and cost savings, and statements preceded by “anticipates”, “believes”, “estimates”, “expects”, “foresees” or similar expressions, are forward-looking statements. Since these statements are based on current decisions and plans, estimates and projections, they involve risks and uncertainties which may cause the actual results to materially differ from the results currently expressed. Such factors include, but are not limited to:

- 1) general economic conditions, including fluctuations in exchange rates and interest levels which influence the operating environment and profitability of customers of the company or economic growth in the company’s principal geographic markets.
- 2) industry conditions, intensity of competition situation, especially potential introduction of significant technological solutions developed by competitors, financial condition of the customers and the competitors of the company,
- 3) the company’s own operating factors, such as the success of production, product development and project management and the efficiencies therein including continuous development and improvement
- 4) the success of pending and future acquisitions and restructuring.

# Appendix

1 Financials

2 Shareholders, share price development and sustainability

3 Strategy and offering

4 Management

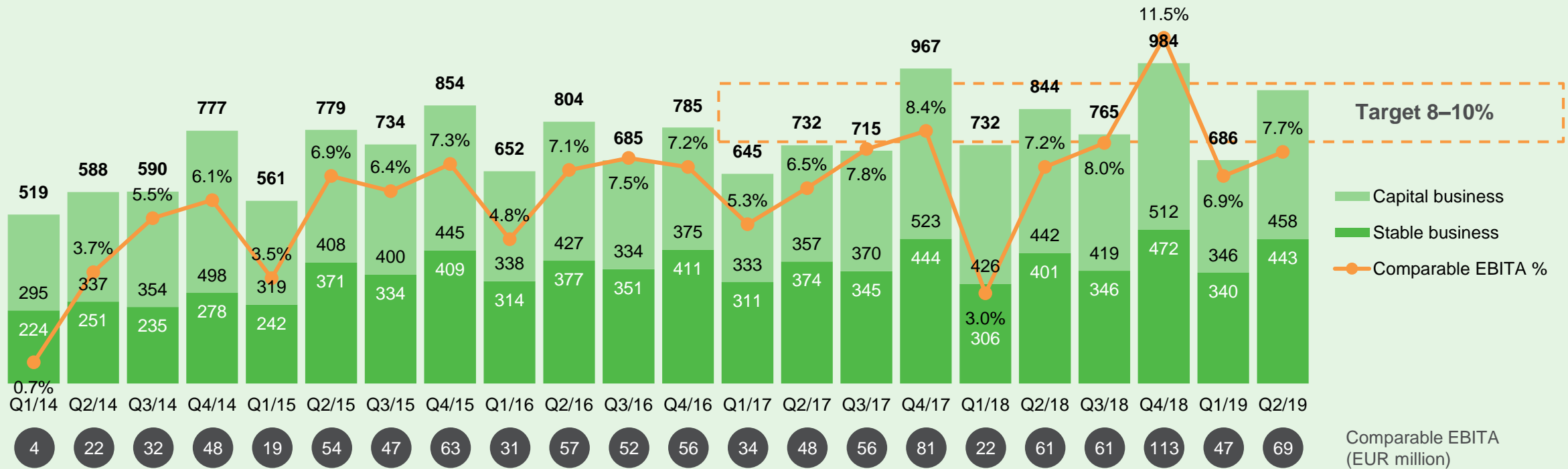


# Appendix

## Financials

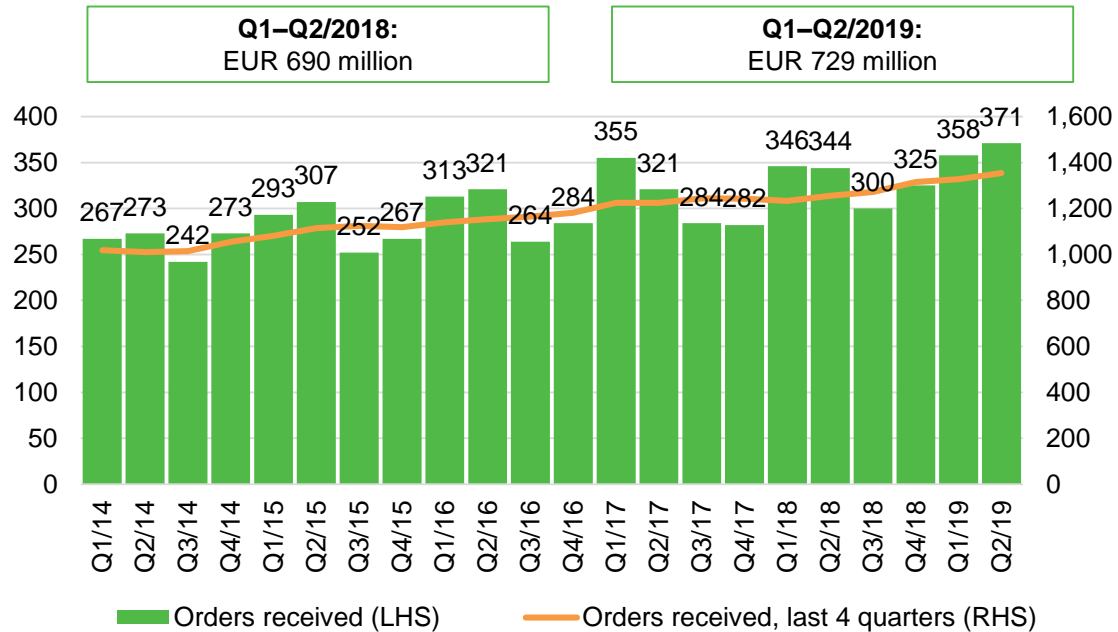
# Quarterly Comparable EBITA margin development

Net sales and Comparable EBITA (EUR million and %)

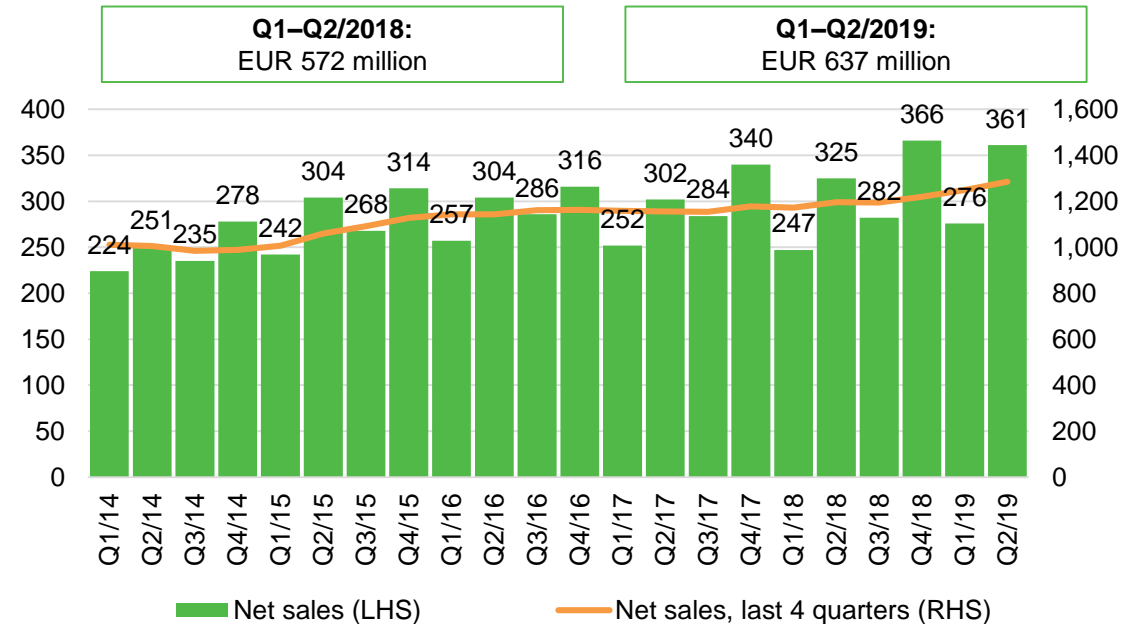


# Services: Orders received and net sales increased

## Orders received (EUR million)



## Net sales (EUR million)

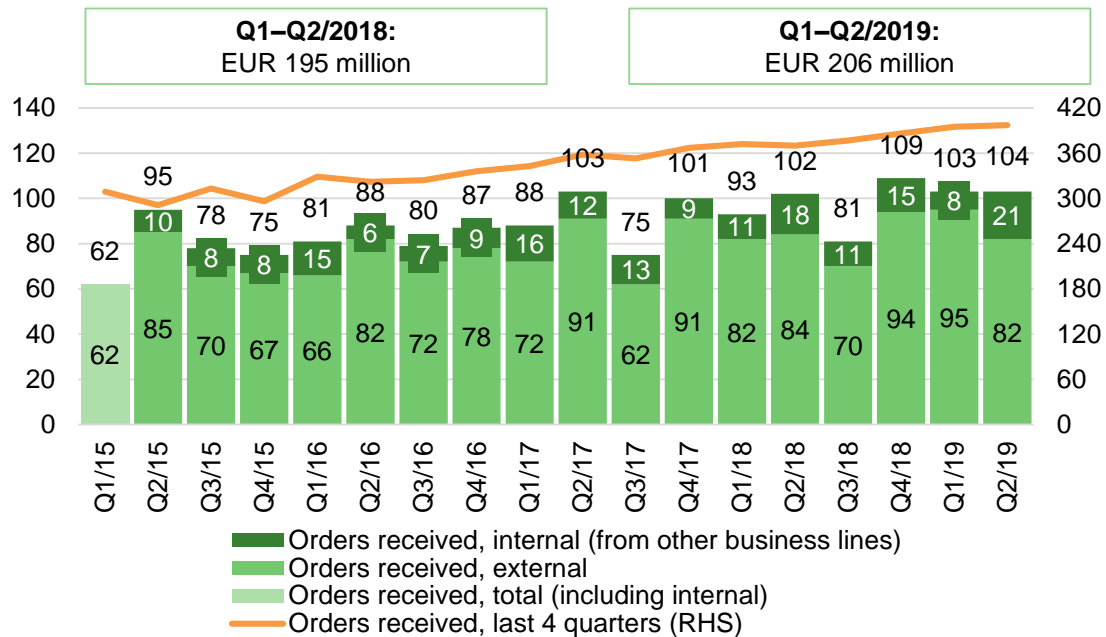


- Orders received increased compared with Q2/2018
  - Orders received of the acquired businesses amounted to EUR 43 million in Q2/2019
  - Orders received increased in South America and North America, remained at the previous year's level in Asia-Pacific and EMEA, and decreased in China
  - Orders received increased in Performance Parts, remained at the previous year's level in Energy and Environmental, and Fabrics and decreased in Mill Improvements and Rolls.
- Net sales increased compared with Q2/2018
  - Net sales of the acquired businesses amounted to EUR 38 million in Q2/2019

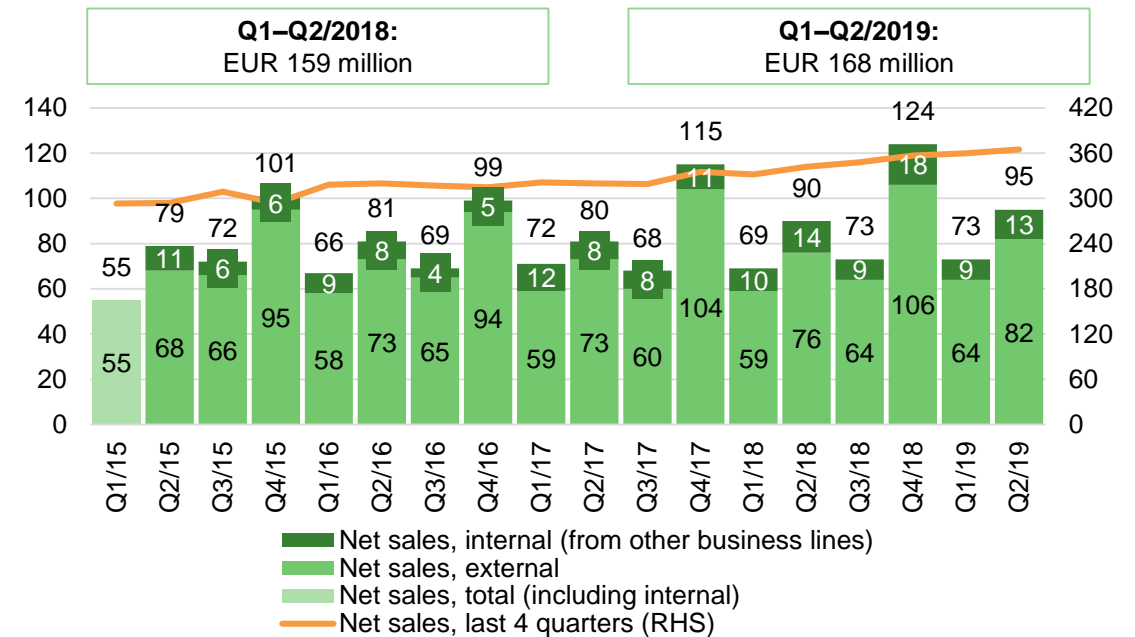


# Automation<sup>1</sup>: Orders received remained at the previous year's level and net sales increased

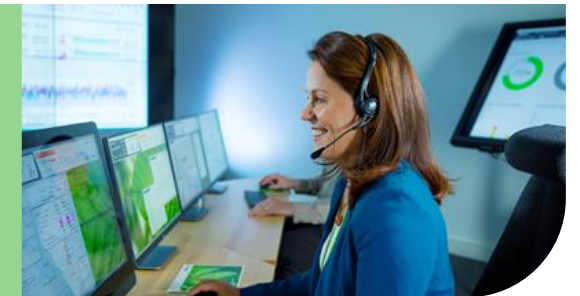
Orders received<sup>2</sup> (EUR million)



Net sales<sup>2</sup> (EUR million)



- Orders received remained at the previous year's level compared with Q2/2018
  - Orders received increased in South America and North America, remained at the previous year's level in Asia-Pacific and EMEA, and decreased in China
  - Orders received increased in Pulp and Paper, and decreased in Energy and Process
- Net sales increased compared with Q2/2018

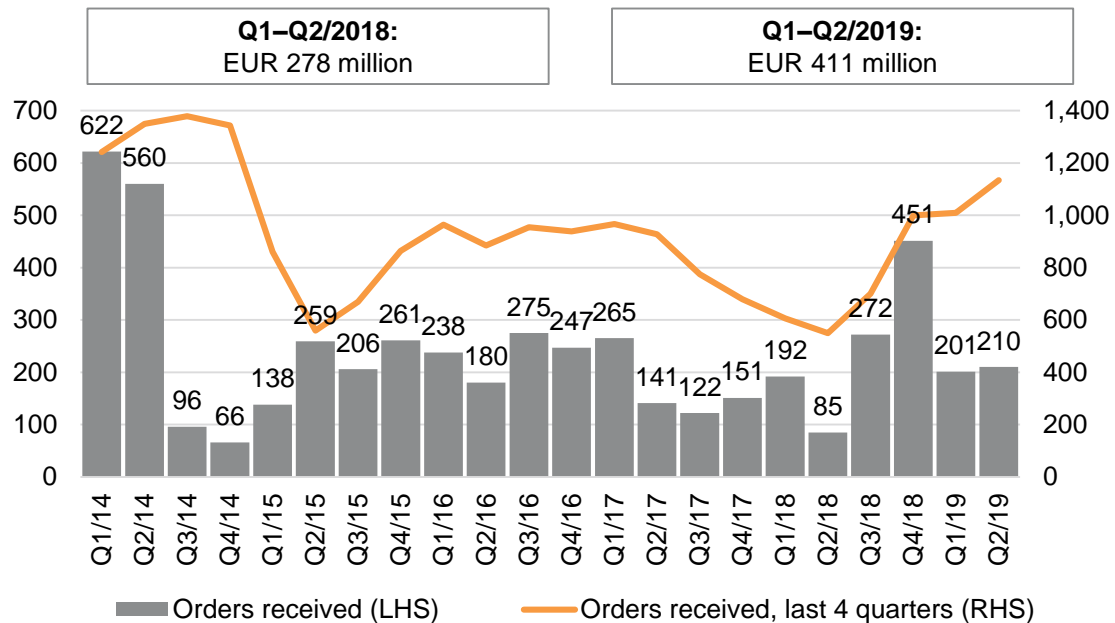


1) Comments refer to orders received and net sales including also internal orders received and net sales.

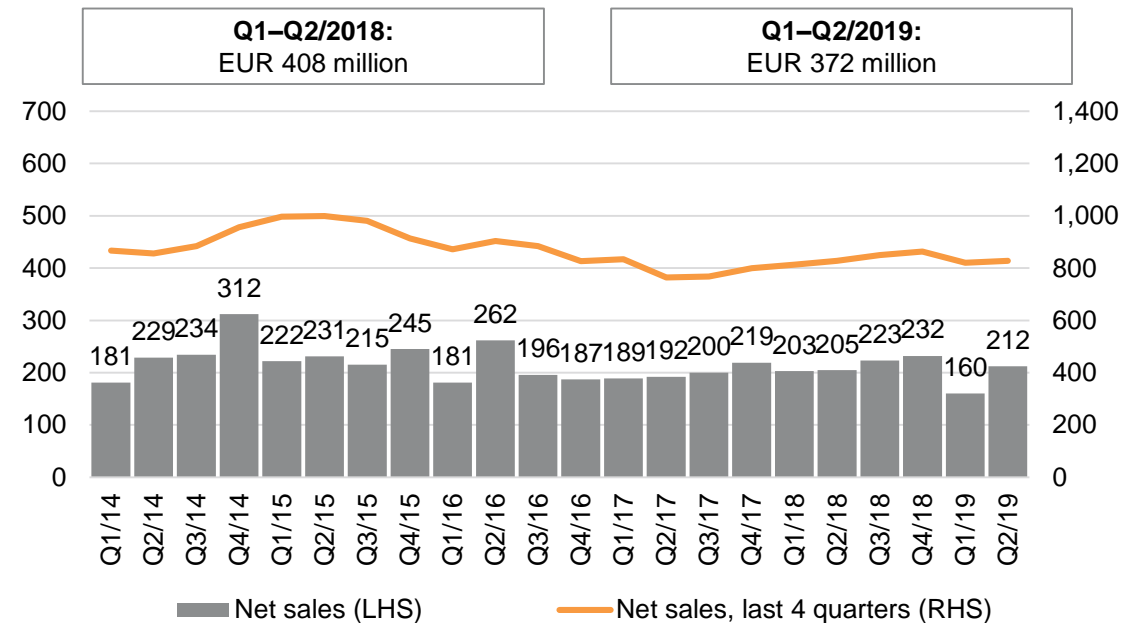
2) Q1/2015 orders received and the underlying figures for 'Orders received, last 4 quarters' and 'Net sales, last 4 quarters' are calculated based on Metso's reported figures and pro forma figures excluding Process Automation Systems and are therefore indicative only.

# Pulp and Energy: Orders received increased and net sales remained at the previous year's level

Orders received (EUR million)



Net sales (EUR million)



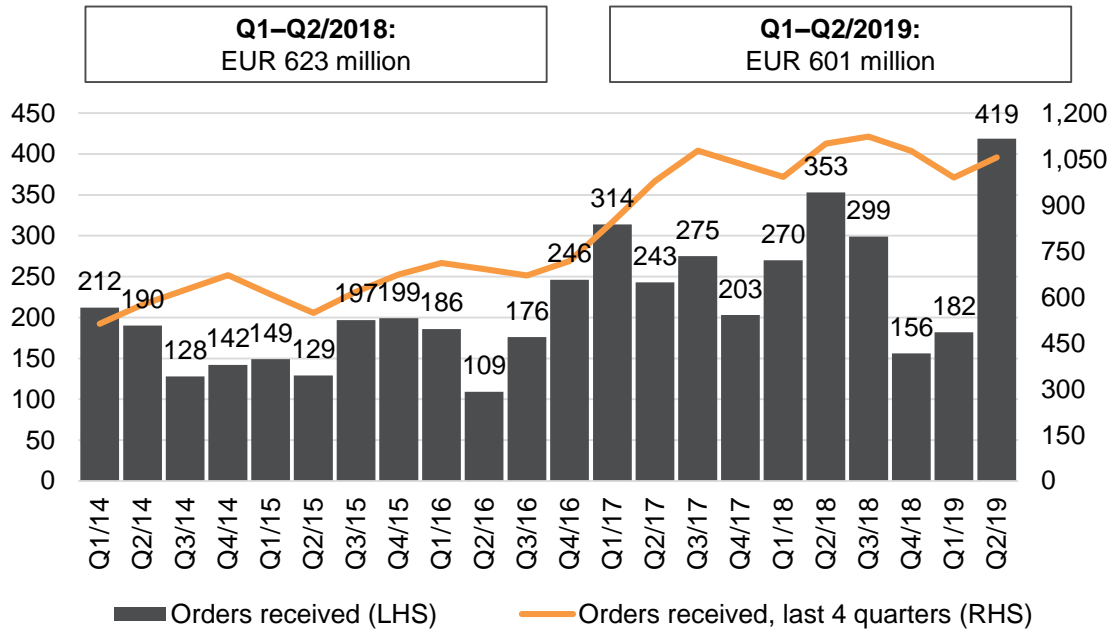
- Orders received increased compared with Q2/2018
  - Orders received increased in all areas
  - Orders received increased in both Pulp and Energy
- Net sales remained at the previous year's level compared with Q2/2018



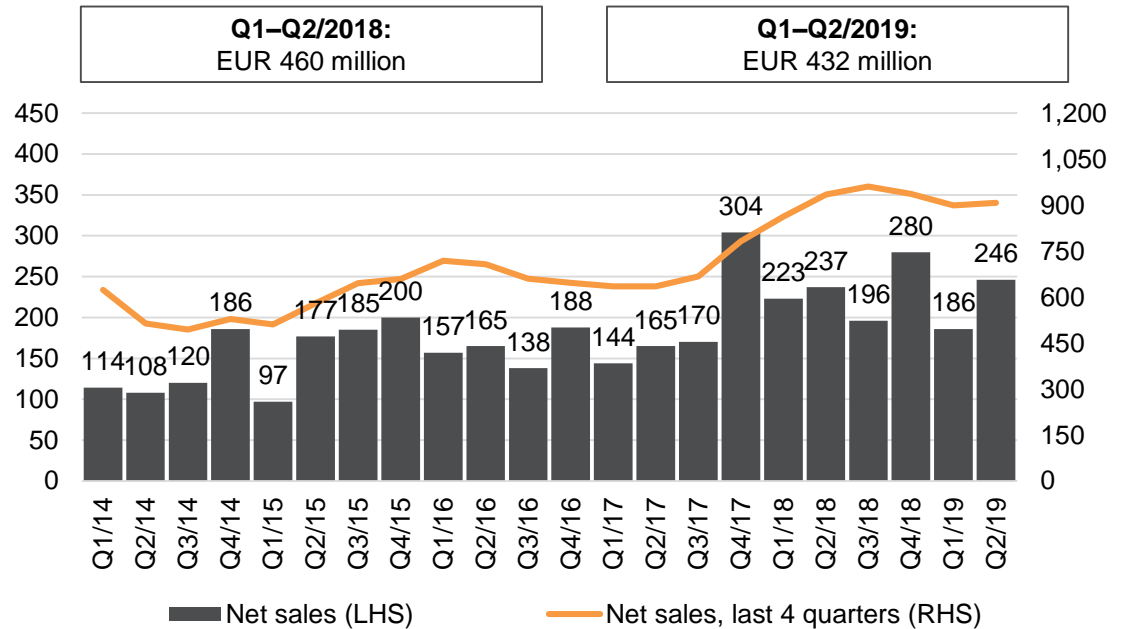


# Paper: Orders received increased and net sales remained at the previous year's level

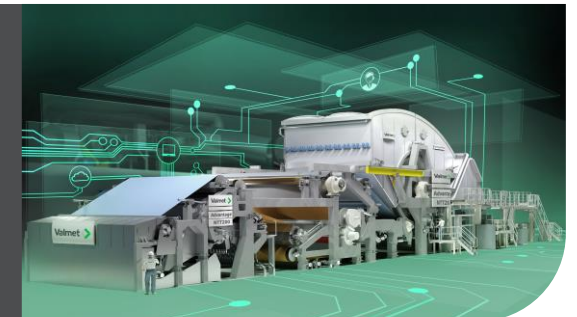
Orders received (EUR million)



Net sales (EUR million)

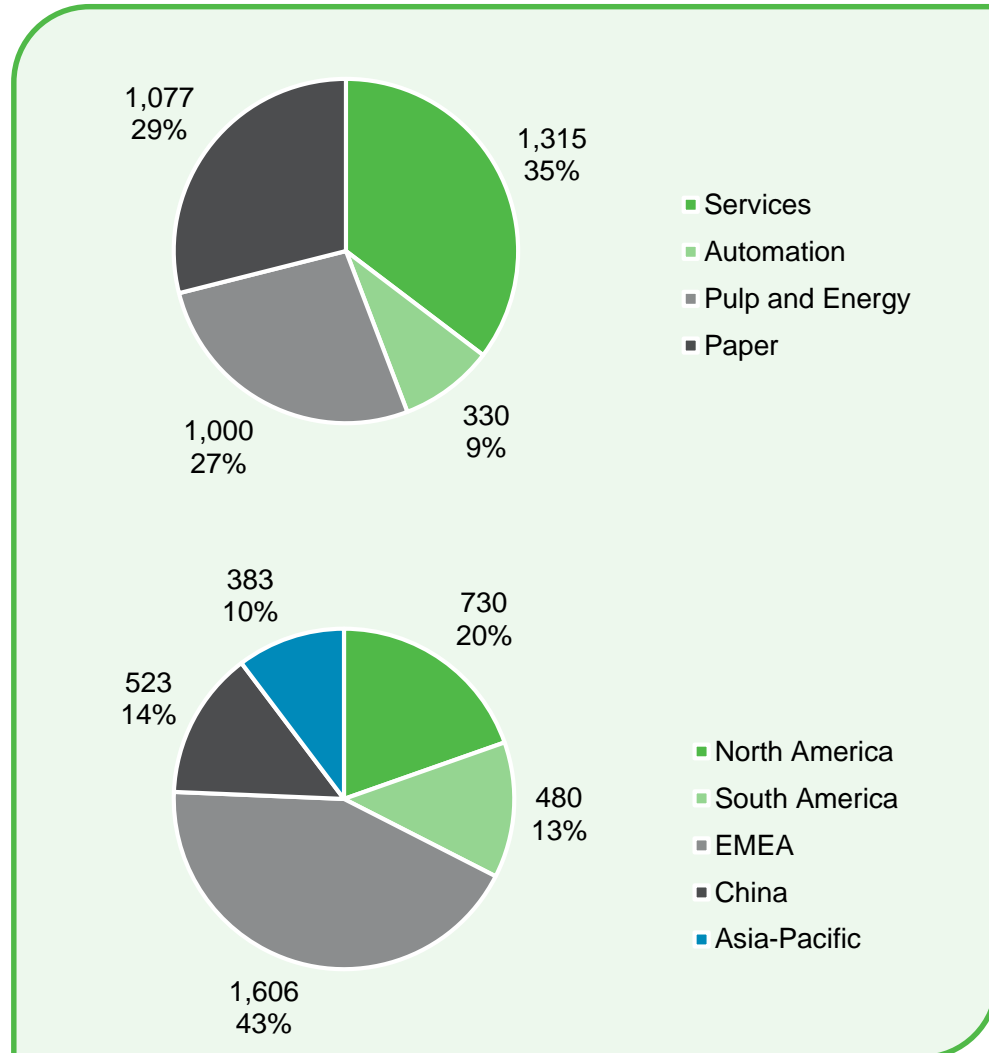


- Orders received increased compared with Q2/2018
  - Orders received increased in South America, Asia-Pacific and EMEA, and decreased in China and North America
  - Orders received increased in Board and Paper and decreased in Tissue
- Net sales remained at the previous year's level compared with Q2/2018

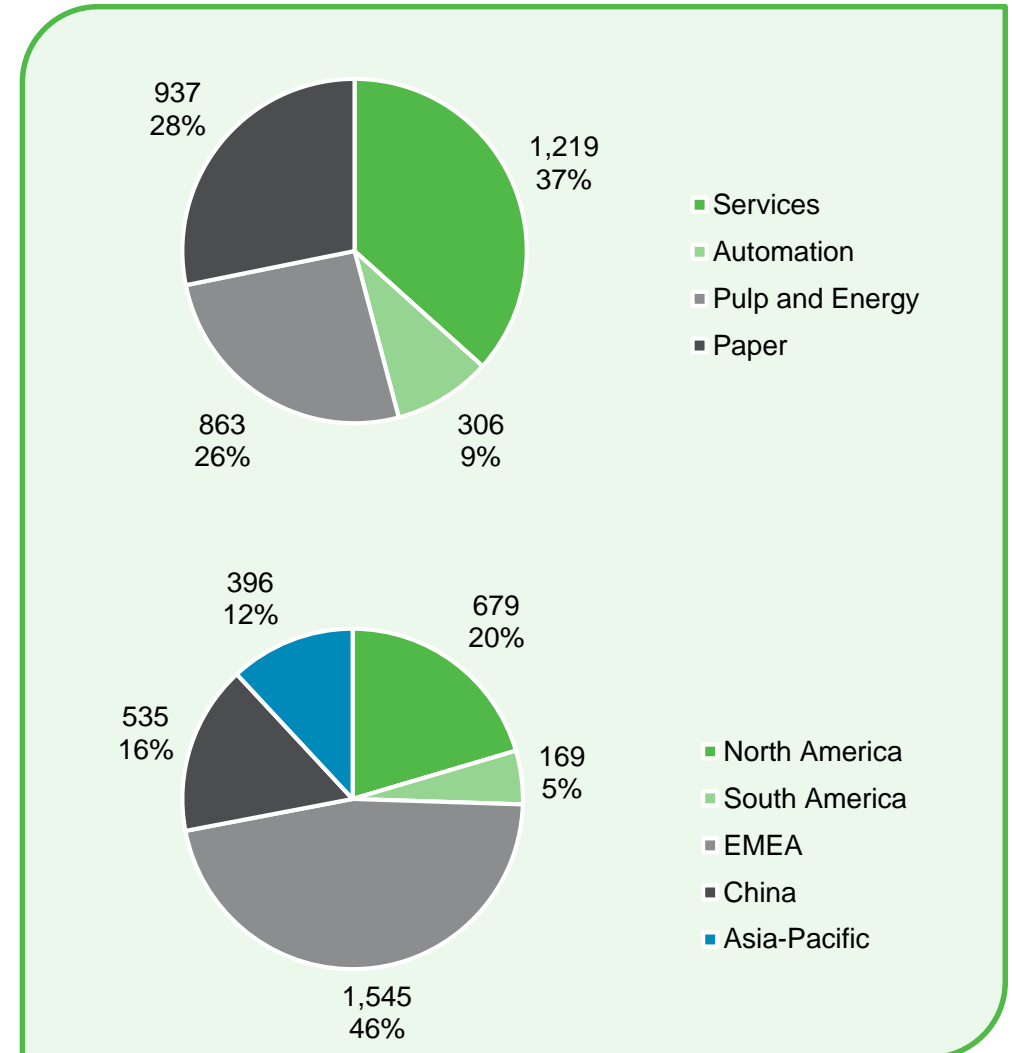


# Orders received and net sales split in 2018

Orders received (EUR million and % of total)

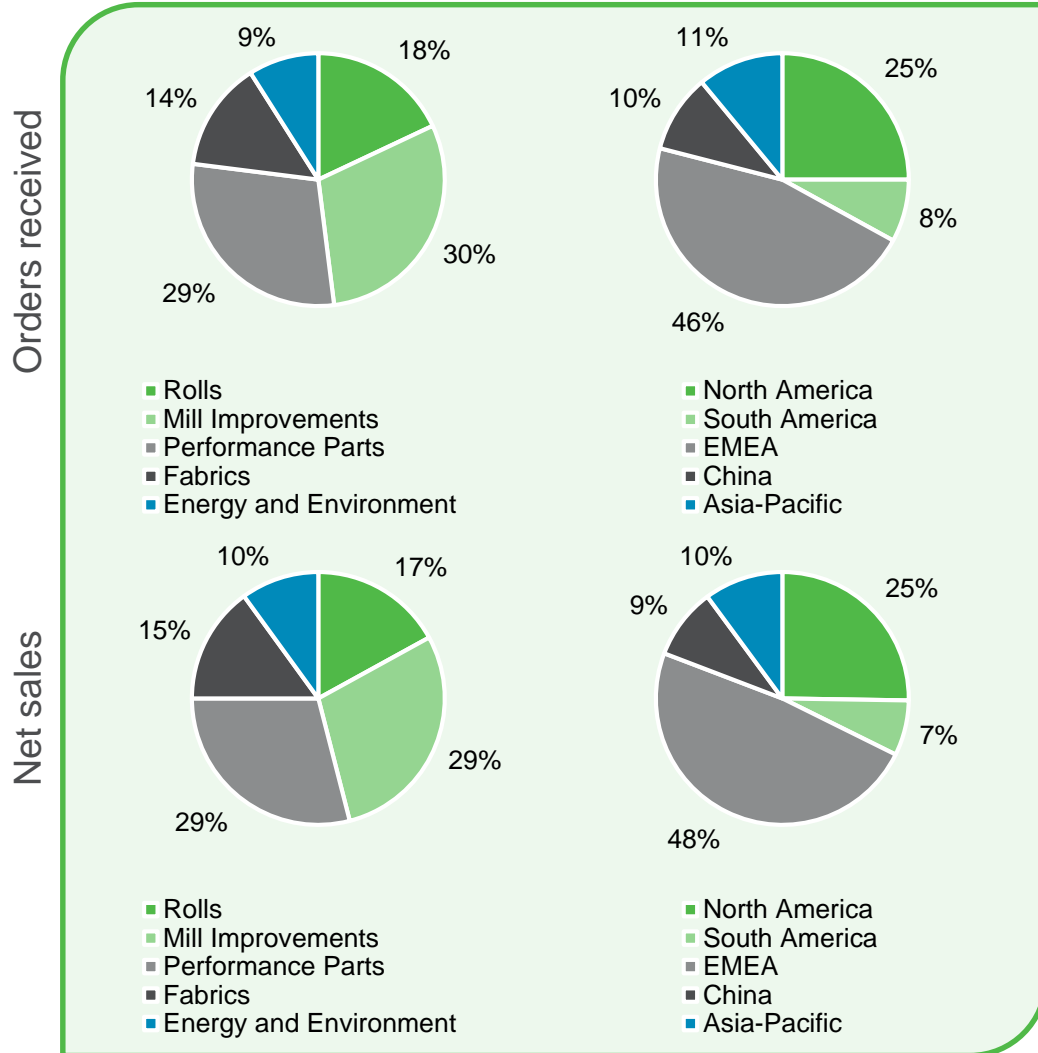


Net sales (EUR million and % of total)

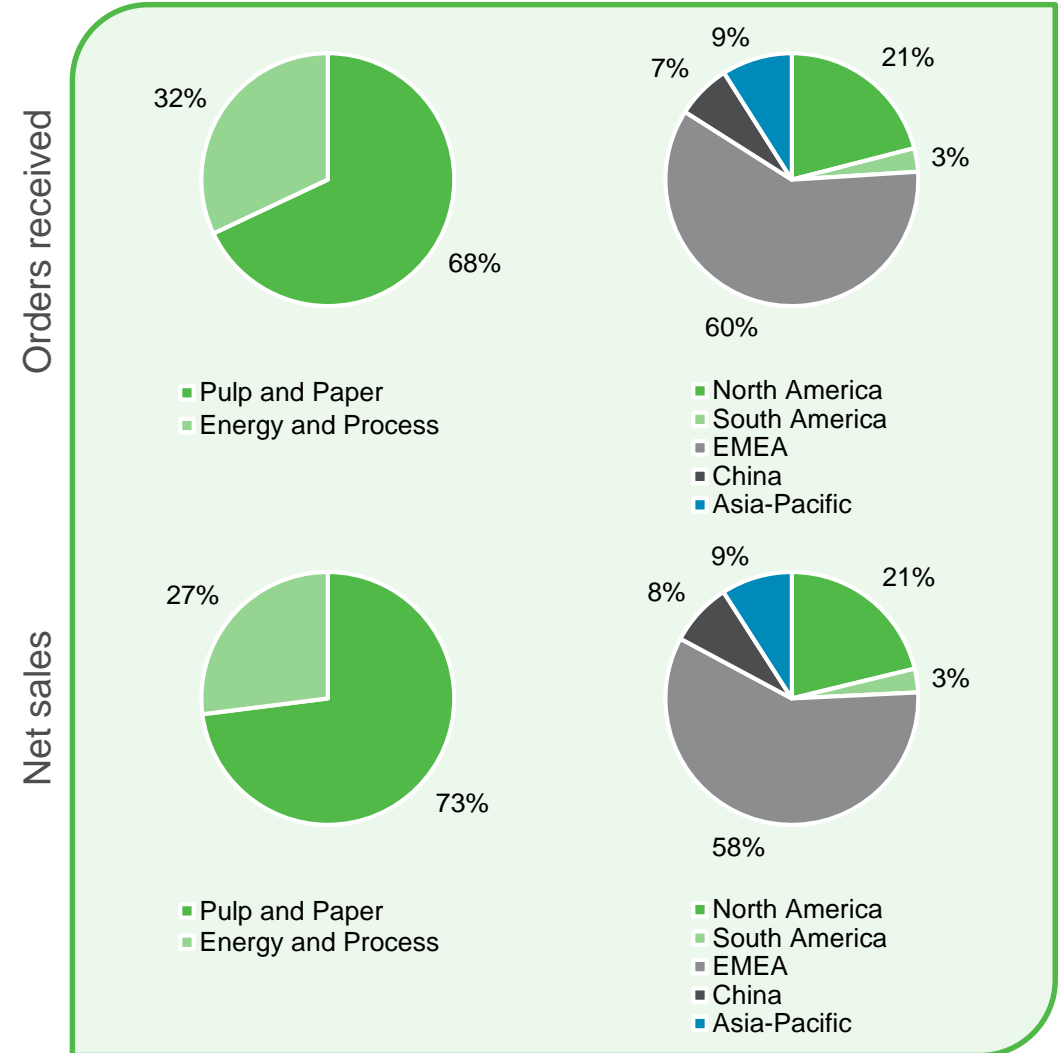


# Business lines in 2018: Stable business

## Services business line

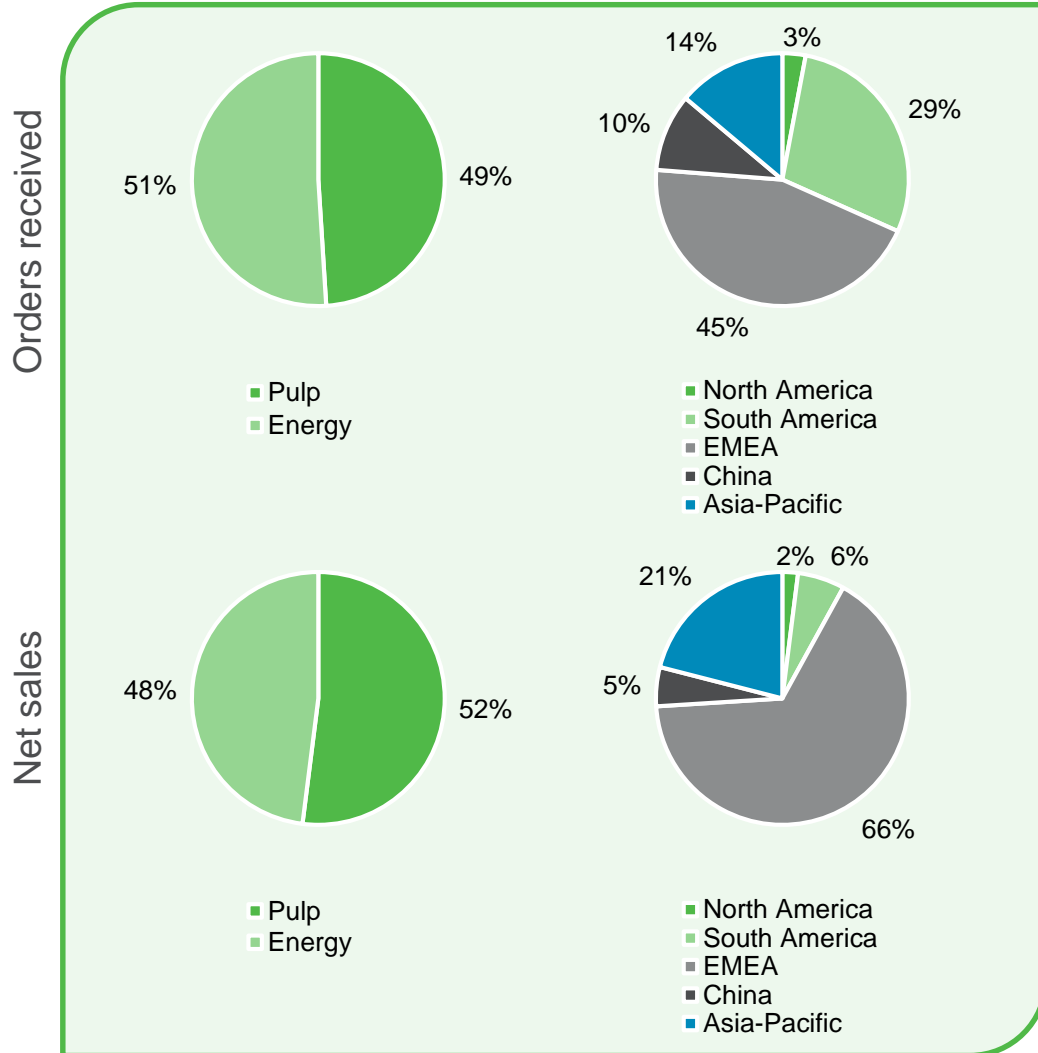


## Automation business line

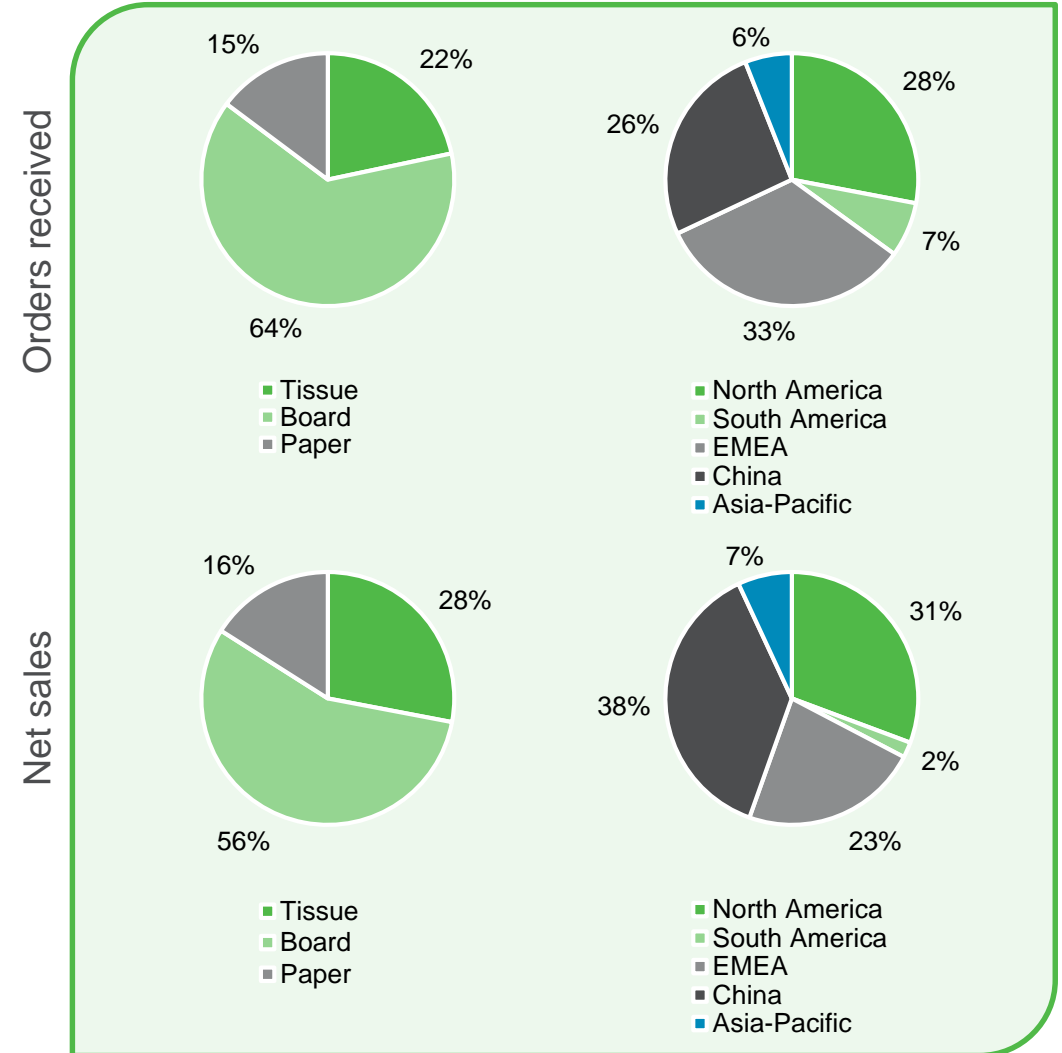


# Business lines in 2018: Capital business

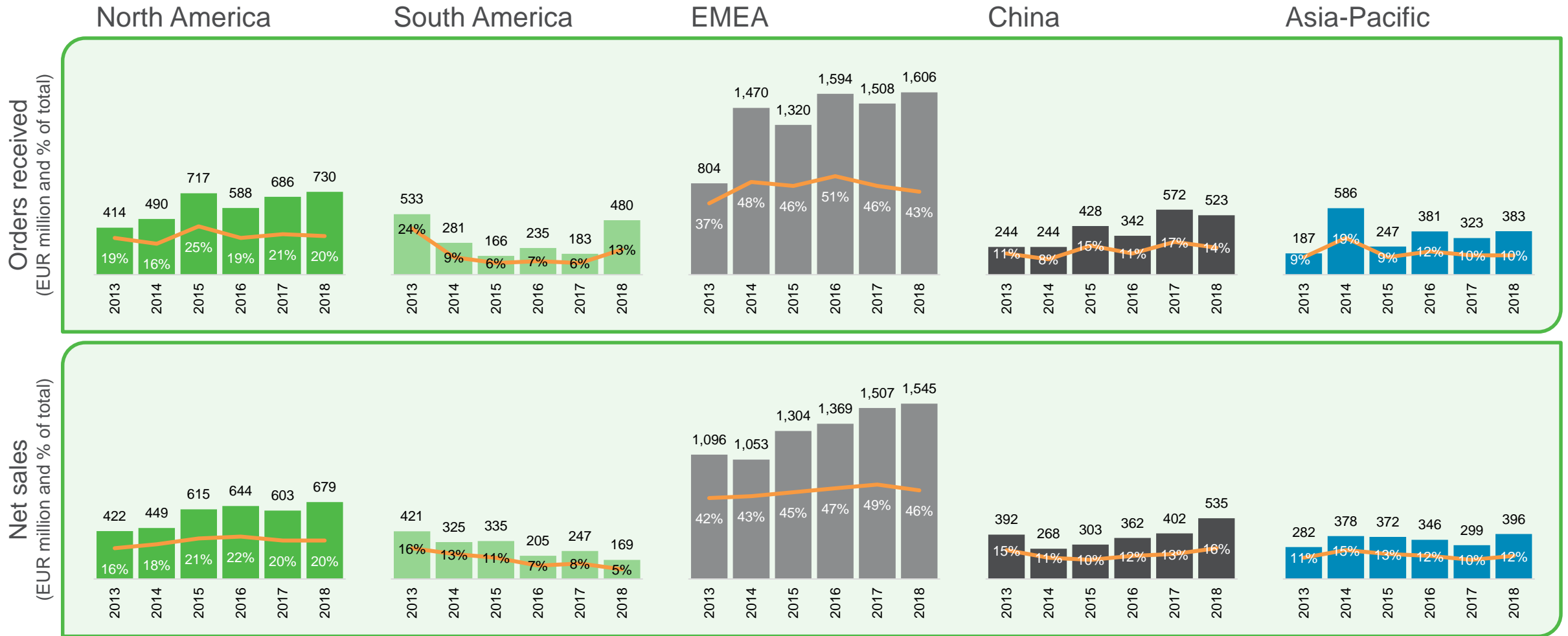
## Pulp and Energy business line



## Paper business line

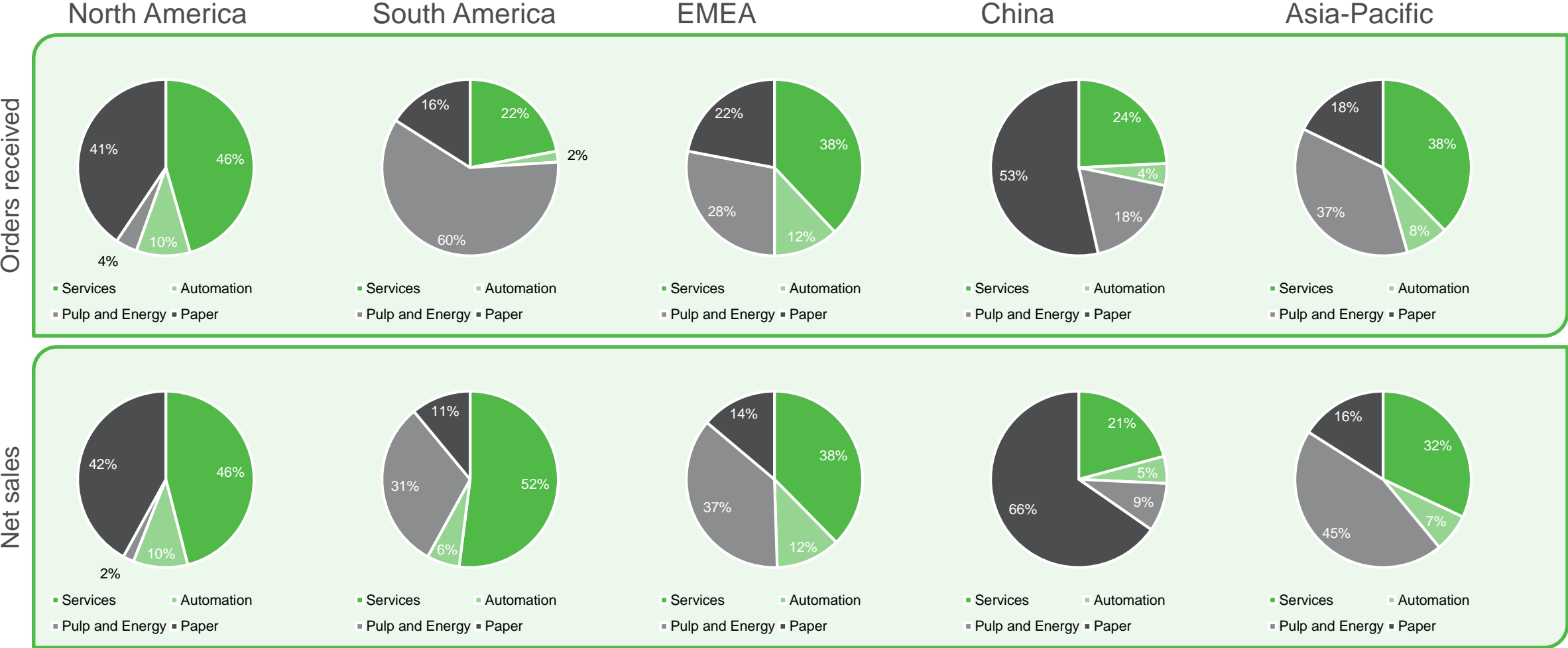


# Areas: Orders received and net sales development



2013 figures on a carve-out basis. Automation business line figures included as of Q2/2015.

# Areas: Business line split in 2018



# Announced orders in H1/2019

Date	Booked quarter	Description	Business line	Country	Value
Jan 10	Q1	Flue gas condensing and asphaltene combustion systems	Pulp and Energy	Finland	Not disclosed. The value of an order of this type is typically around EUR 10-20 million.
Jan 14	Q4	Automation for liquefied natural gas delivery	Automation	Finland	Not disclosed. The value of an order of this type is typically below EUR 5 million.
Jan 15	Q3	Two waste-to-energy boilers	Pulp and Energy	China	Not disclosed.
Jan 29	Q4	A quality control system	Automation	Spain	Not disclosed. The value of these kinds of deliveries is typically below EUR 1 million.
Jan 30	Q3	Modernizing the automation systems, the electrical and instrumentation infrastructure	Automation	UK	Not disclosed. <sup>1</sup>
Jan 31	Q4	Process and quality vision systems	Automation	France	Not disclosed. Typically, the value of these kinds of automation system deliveries is below EUR one million.
Feb 5	Q3	An automation service agreement	Automation	USA	Not disclosed.
Feb 18	Q1	Grade conversion rebuild	Paper	China	Not disclosed. The total value of order of this type is typically around EUR 20-30 million.
Feb 20	Q4	Cooking, fiberline and recausticizing technology, and a new lime kiln (Q1)	Pulp and Energy	India	Not disclosed. Typically, the value of these kinds of projects is around EUR 20-25 million.
Feb 21	Q1	A wood handling line	Pulp and Energy	Finland	Not disclosed. The value of the order is around EUR 10-15 million.
Feb 25	Q1	A ten-year operation and maintenance agreement for the biomass power plant	Services	Croatia	Not disclosed.
Mar 11		A distributor agreement for wastewater automation	Automation	Norway	Not disclosed
Mar 19	Q1	A containerboard line	Paper	Malaysia	Not disclosed. The total value of order of this type is typically around EUR 60-70 million.
Mar 27	Q4	A gas cleaning system	Pulp and Energy	South Korea	Not disclosed.
Mar 28	Q1	A tissue production line	Paper	Mexico	Not disclosed.
Apr 23	Q1	A biomass boiler	Pulp and Energy	France	Not disclosed. Typically, the value of this kind of order is EUR 20 million.
Apr 24	Q2	A containerboard making line	Paper	Germany	Not disclosed. The total value of an order of this type and scope is typically around EUR 150-200 million.
Apr 29	Q4	A repeat automation order	Automation	South Korea	Not disclosed
Apr 30	Q1	21 solids measurement units	Automation	China	Not disclosed.
May 2	Q1	Automation and quality management systems	Automation	China	Not disclosed.
May 7	Q4	A quality management solution	Automation	Mexico	Not disclosed. Typically, the value of these kinds of automation system is below EUR two million.
May 8	Q1	Key board machine technologies	Paper	Vietnam	Not disclosed.
May 9	Q1	A tissue production line	Paper	Algeria	Not disclosed.
May 13	Q4	Boiler diagnostics systems	Automation	China	Not disclosed.
May 14	Q2	A flue gas condensation system	Pulp and Energy	Finland	Not disclosed. Typically, the value of these kinds of projects is around EUR 5 million.
May 16	Q1	Replace of process and quality controls	Automation	Germany	Not disclosed. Typically, the value of these kinds of automation system is below EUR two million
May 17	Q2	A major pulp and board technology delivery	Paper	Brazil	The value of the orders is around EUR 260-290 million.
May 22	Q1	New recovery boiler	Pulp and Energy	India	The value of the order of this scope is typically around EUR 50-60 million.
May 23	Q1	Green liquor clarifier	Pulp and Energy	Sweden	Not disclosed.
Jun 10	Q1	Automation and solids measurements	Automation	Finland	Not disclosed.
Jun 18	Q2	Forming section rebuild	Paper	Korea	Not disclosed.
Jun 18	Q2	Extensive paper machine grade conversion rebuild	Paper	Finland	Not disclosed.
Jun 27	Q2	Automation system and measurements	Automation	China	Not disclosed.
Jun 27	Q2	Board machine rebuild	Paper	India	Not disclosed. The value of a rebuild of this type and scope is typically around EUR 10-15 million

# Announced orders in H2/2019

Date	Booked quarter	Description	Business line	Country	Value
Jul 1	Q4 / Q2	Exhaust gas cleaning systems	Pulp and Energy	China	Not disclosed.
Jul 2	Q3	Two defibrator systems	Pulp and Energy	China	Not disclosed.
Aug 21	Q3	Boiler diagnostics system	Automation	China	Not disclosed.
Aug 29		Extended roll service agreement	Services	Southeast Asia	Not disclosed.
Sep 2	Q2	Biomass boiler and flue gas treatment plant	Pulp and Energy	Germany	The total value of the order is around EUR 50 million.

1) Typically the order value of automation system deliveries ranges from below EUR 1 million to EUR 3 million



# Announced orders in H1/2018

Date	Booked quarter	Description	Business line	Country	Value
Jan 4	Q3	Anti-surge and load-sharing control	Automation	Russia	Not disclosed. <sup>1</sup>
Jan 17	Q4	OptiConcept M board production line	Paper	USA	Not disclosed. The value of an order of this type is typically around EUR 40-50 million.
Jan 25	Q1	Multifuel boiler and a flue gas treatment plant	Pulp and Energy	Finland	Around EUR 70 million
Jan 29	Q4	Mill waste-fired boiler plant	Pulp and Energy	China	Not disclosed.
Jan 30	Q4	Online measurements, consistency transmitters and analyzers	Automation	Sweden	Not disclosed. <sup>1</sup>
Feb 2	Q1	Flue gas condensation system	Pulp and Energy	Finland	Not disclosed.
Feb 8	Q4	Automation system to a board mill	Automation	Finland	Not disclosed. <sup>1</sup>
Feb 12	Q4	Cooking plant rebuild and brown stock washing equipment	Pulp and Energy	Sweden	Not disclosed.
Feb 13	Q1	Wet end rebuild to a paper machine	Paper	Austria	Not disclosed. The value of an order of this type is typically around EUR 10-20 million.
Feb 22	Q1	Repeat order of three winders	Paper	China	Not disclosed. The value of an order of this type is typically around EUR 10-20 million.
Mar 6	Q4	Automation upgrade to a cruise ship	Automation		Not disclosed. <sup>1</sup>
Mar 19	Q1, Q3	Two containerboard machines with automation systems	Paper	China	Not disclosed. The value of an order of this type is typically around EUR 90-110 million.
Mar 20	Q1	Linerboard production line	Paper	USA	Not disclosed.
Mar 22	Q4	Baling line	Paper	Finland	Not disclosed.
Mar 26	Q4	Warp control system	Automation	Poland	Not disclosed. <sup>1</sup>
Mar 29	Q1	Multifuel boiler	Pulp and Energy	Turkey	Not disclosed.
Apr 5	Q1	Automation to a board machine	Automation	Indonesia	Not disclosed. <sup>1</sup>
Apr 9	Q1	Three quality control systems with optical sensors	Automation	Italy	Not disclosed. <sup>1</sup>
Apr 30	Q1	Valmet DNA automation system	Automation	Indonesia	Not disclosed. <sup>1</sup>
May 9	Q2	Containerboard making line and automation	Paper	Germany	Not disclosed. The total value of an order of this type is typically around EUR 70-90 million.
May 15	Q2	Containerboard making line	Paper	China	Not disclosed. The total value of an order of this type and scope is typically around EUR 25-35 million.
Jun 6	Q2	Cooking plant to a pulp mill	Pulp and Energy	Belgium	Not disclosed.
Jun 7	Q1	Multifuel power boiler and a flue gas cleaning system	Pulp and Energy	Japan	Not disclosed. The value of this kind of order is typically around EUR 40 million.
Jun 13	Q2	Large automation order for bio heating plant	Automation	Finland	The value of the order is approximately EUR 2 million.
Jun 20	Q2	Off-machine multinip calender	Paper	Germany	Not disclosed. The total value of an order of this type is typically around EUR 20-30 million.

1) Typically the order value of automation system deliveries ranges from below EUR 1 million to EUR 3 million

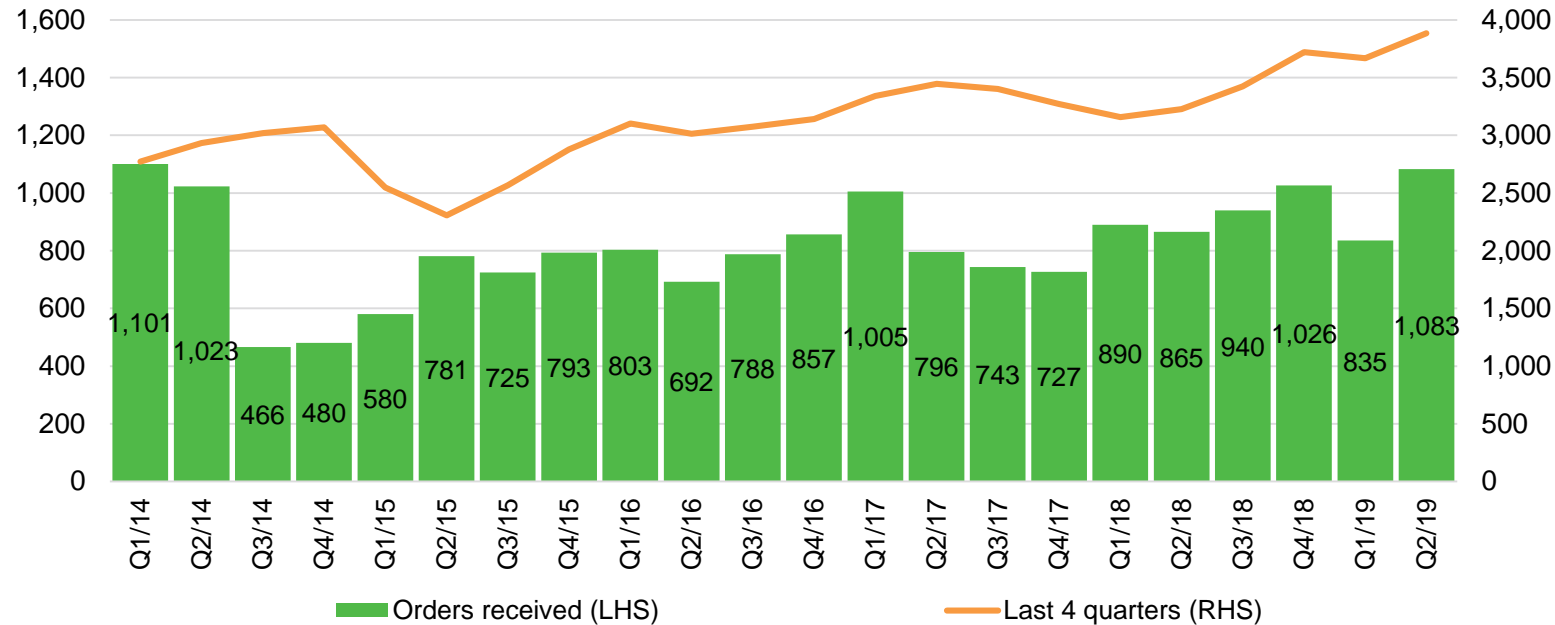
# Announced orders in H2/2018

Date	Booked quarter	Description	Business line	Country	Value
Jul 11	Q2	Valmet Pulp Analyzer and Valmet Kappa Analyzer	Automation	China	Not disclosed. <sup>1</sup>
Jul 13	Q2	Advantage DCT 200 tissue line	Paper	Turkey	Not disclosed.
Aug 6	Q2	Advantage DCT100HS tissue production line and automation	Paper	Argentina	Not disclosed.
Aug 7	Q2	Advantage DCT 200 tissue line	Paper	Argentina	Not disclosed.
Aug 9	Q2	BCTMP plant conversion, slab press and conveyor systems	Pulp and Energy, Services	Estonia	Not disclosed. A project of this size and scope is typically valued at EUR 5-10 million.
Aug 13	Q2	Recovery boiler and surrounding systems to a pulp mill	Pulp and Energy	Sweden	Not disclosed. The value of this kind of order is typically above EUR 10 million.
Aug 14	Q2	OptiConcept M containerboard making line	Paper	China	Not disclosed. The total value of an order of this type is typically around EUR 30-40 million.
Aug 22	Q2	Nonwoven bonding system	Paper	China	Not disclosed.
Aug 27	Q3	Extensive paper machine grade conversion rebuild	Paper	Italy	Not disclosed. The total value an order of this type is typically around EUR 40-60 million.
Sep 4	Q3	Extensive information management system	Automation	Finland	Not disclosed. <sup>1</sup>
Sep 11	Q2	Continuous steam explosion system for production of black pellets	Pulp and Energy	France	Not disclosed.
Sep 13	Q1	Automation technology to two new power plants	Automation	Lithuania and Spain	Not disclosed. <sup>1</sup>
Sep 17	Q2	Automation and safety system to a gas compression station	Automation	Finland	Not disclosed. <sup>1</sup>
Sep 20	Q1, Q2	Web monitoring systems for two paper machines	Automation	China	Not disclosed. <sup>1</sup>
Sep 24	Q3	Winding technology	Paper	Germany	Not disclosed. The total value of an order of this type is typically around EUR 5-10 million.
Oct 1	Q3	Automation system for coal washing	Automation	Russia	Not disclosed. <sup>1</sup>
Oct 3	Q3	Biomass boiler	Pulp and Energy	Spain	Not disclosed.
Oct 22	Q3	Biomass pretreatment system	Pulp and Energy	Romania	Not disclosed.
Oct 22	Q2	Automation solution for a biopower plant	Automation	Finland	Not disclosed. <sup>1</sup>
Nov 12	Q4	Flue gas cleaning and heat recovery plant	Pulp and Energy	Finland	Not disclosed. The total value of an order of this type is typically between EUR 2-10 million.
Nov 15	Q4	Biomass-fired boiler plant	Pulp and Energy	Finland	Not disclosed.
Nov 19		OCC and containerboard lines	Paper	Slovakia	Not disclosed.
Nov 28		Automation services to seven power plants	Automation	France	Not disclosed.
Nov 29	Q3	IQ steam profiler	Automation	China	Not disclosed.
Dec 4	Q4	On-line performance monitoring agreement	Pulp and Energy	Germany	Not disclosed.
Dec 5	Q3	Nonwovens rewinder	Paper	Spain	Not disclosed.
Dec 12	Q4	IQ web monitoring system	Automation	Austria	Not disclosed. Typically below EUR one million.
Dec 13	Q4	Tissue line	Paper	India	Not disclosed.
Dec 17	Q4	Automation technology to biomass power plant	Automation	Finland	Not disclosed. Typically from below EUR 1 million to EUR 3 million.
Dec 18	Q3	New baling line and cutter layboy upgrade	Pulp and Energy	South Africa	Not disclosed. An order with this scope of supply is typically valued around EUR 4 million.
Dec 19	Q4	Key pulp mill technology for a new pulp line	Pulp and Energy	Chile	Not disclosed. A project of this size and scope is typically valued at EUR 250-300 million.
Dec 20	Q3	Brown stock washing and screening line	Pulp and Energy	South Africa	Not disclosed. An order with this scope of supply is usually valued in the range of EUR 5-10 million.

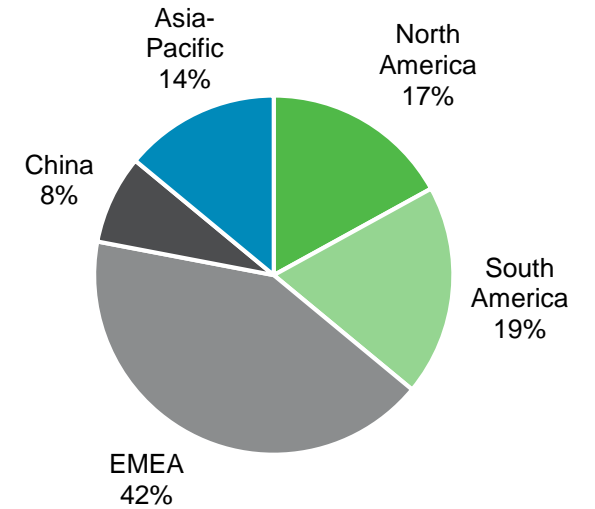
1) Typically the order value of automation system deliveries ranges from below EUR 1 million to EUR 3 million

# Orders received increased to EUR 1,083 million in Q2/2019

Orders received (EUR million)



Orders received in Q1–Q2/2019 by area

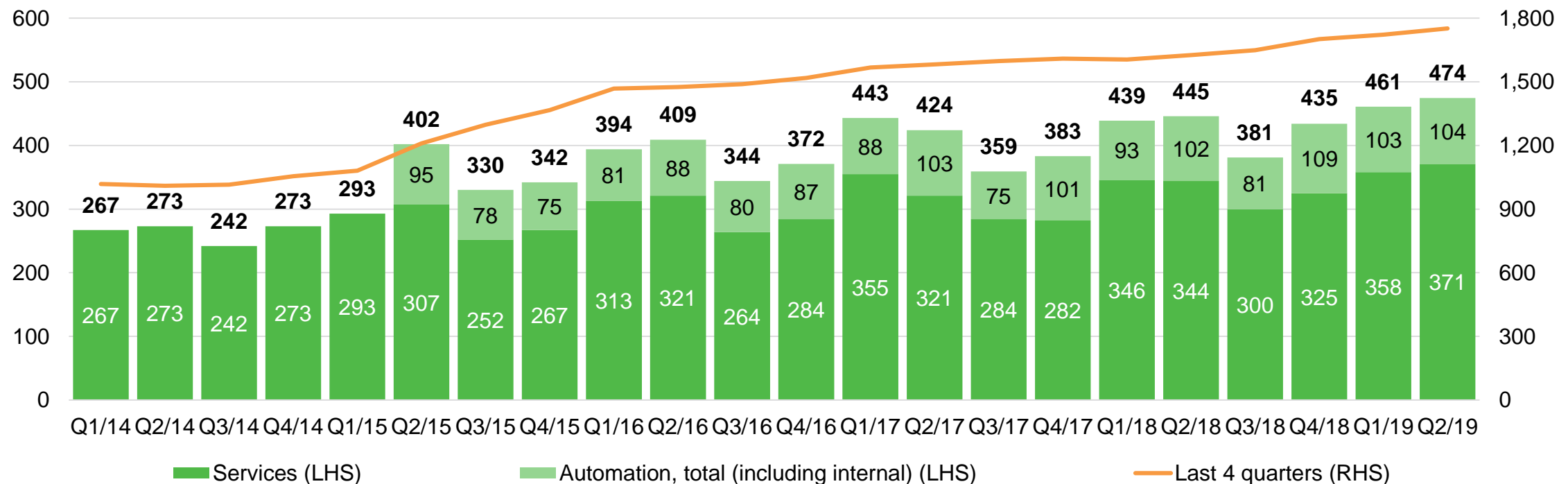


- In stable business, orders received increased to EUR 474 million in Q2/2019<sup>1</sup>
- In capital business, orders received increased to EUR 629 million in Q2/2019
- Orders received increased in emerging markets and remained at the previous year's level in developed markets during first half of the year
  - South America, China and Asia-Pacific together accounted for 41% of orders received

1) Including internal orders received for the Automation business line.

# Stable business orders received totaled EUR 1,751 million during last four quarters

Orders received (EUR million) in stable business<sup>1</sup>

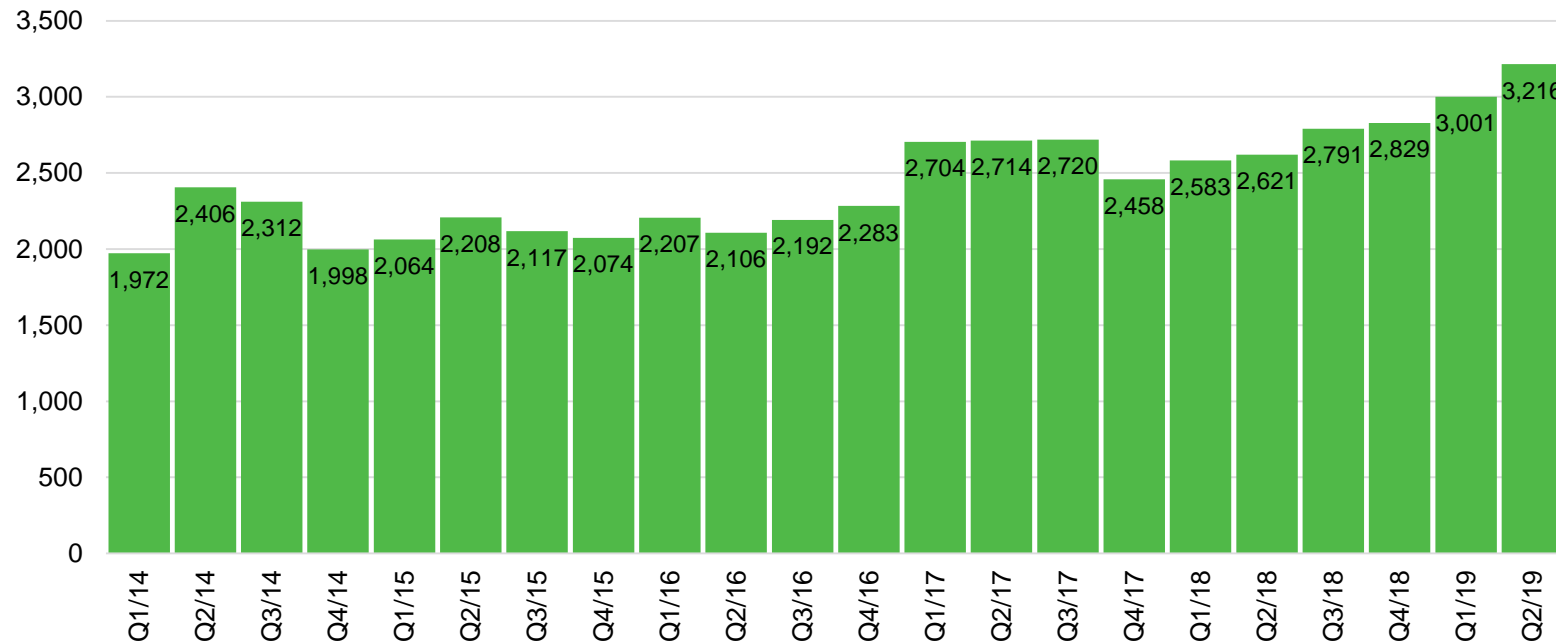


- Total orders received in stable business increased by EUR 29 million in Q2/2019

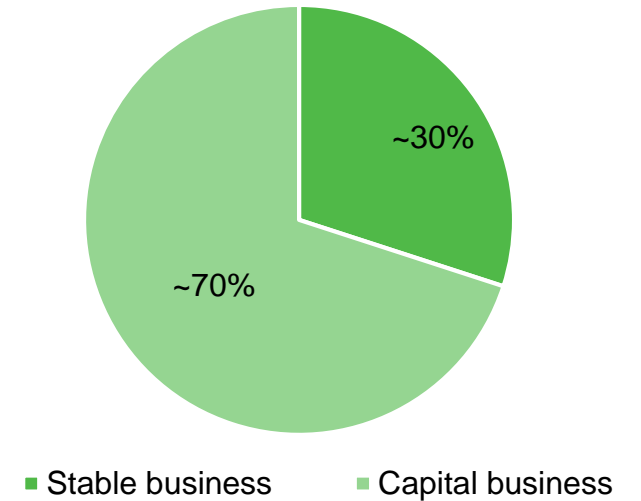
1) Including internal orders received for the Automation business line.

# Order backlog at EUR 3,216 million at the end of Q2/2019

Order backlog (EUR million)



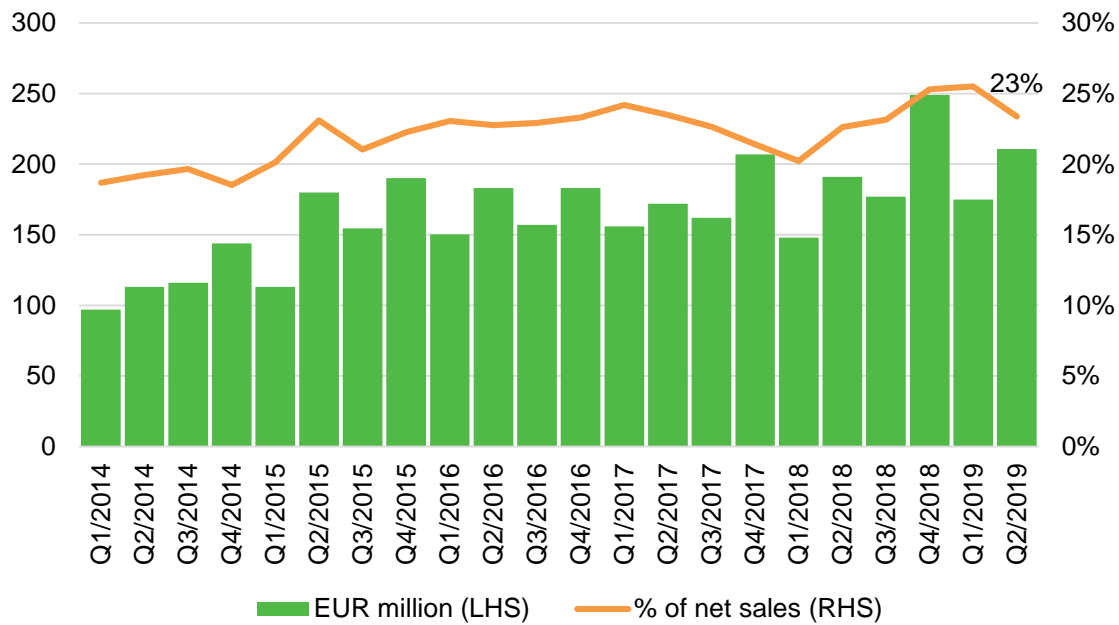
Structure of order backlog



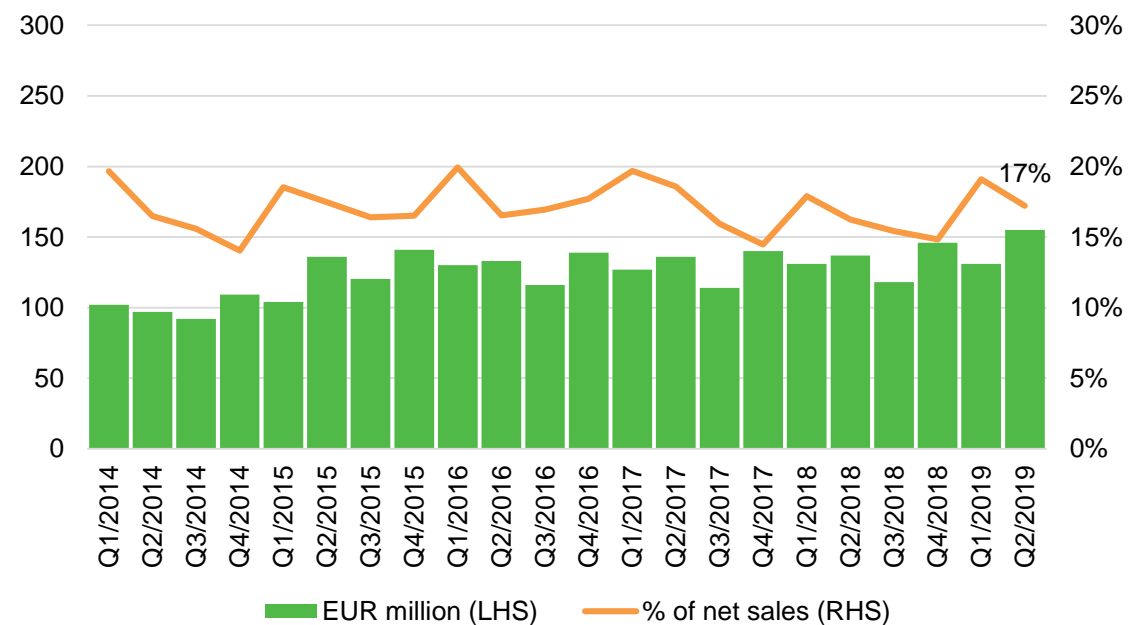
- Order backlog was EUR 216 million higher than at the end of Q1/2019
- Approximately 50% of the order backlog is currently expected to be realized as net sales during 2019 (at the end of Q2/2018, ~55% during 2018)
- Approximately 30% of the order backlog relates to stable business (~30% at the end of Q2/2018)

# Gross profit and SG&A development

Gross profit (EUR million and % of net sales)



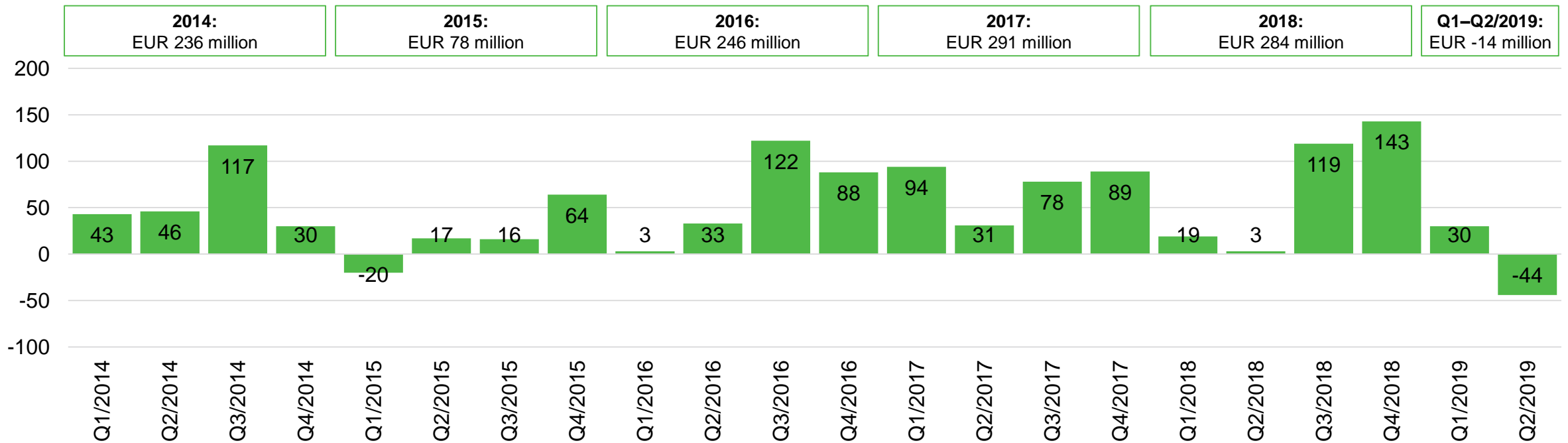
SG&A (EUR million and % of net sales)



- Gross profit was 23% of net sales (23% in Q2/2018)
- Selling, general & administrative (SG&A) expenses increased by EUR 19 million
  - SG&A was 17% of net sales (16% in Q2/2018)

# Cash flow provided by operating activities

Cash flow provided by operating activities (EUR million)



- Change in net working capital<sup>1</sup> EUR -93 million in Q2/2019
- Cash flow provided by operating activities EUR -44 million in Q2/2019
- CAPEX<sup>2</sup> EUR 19 million in Q2/2019

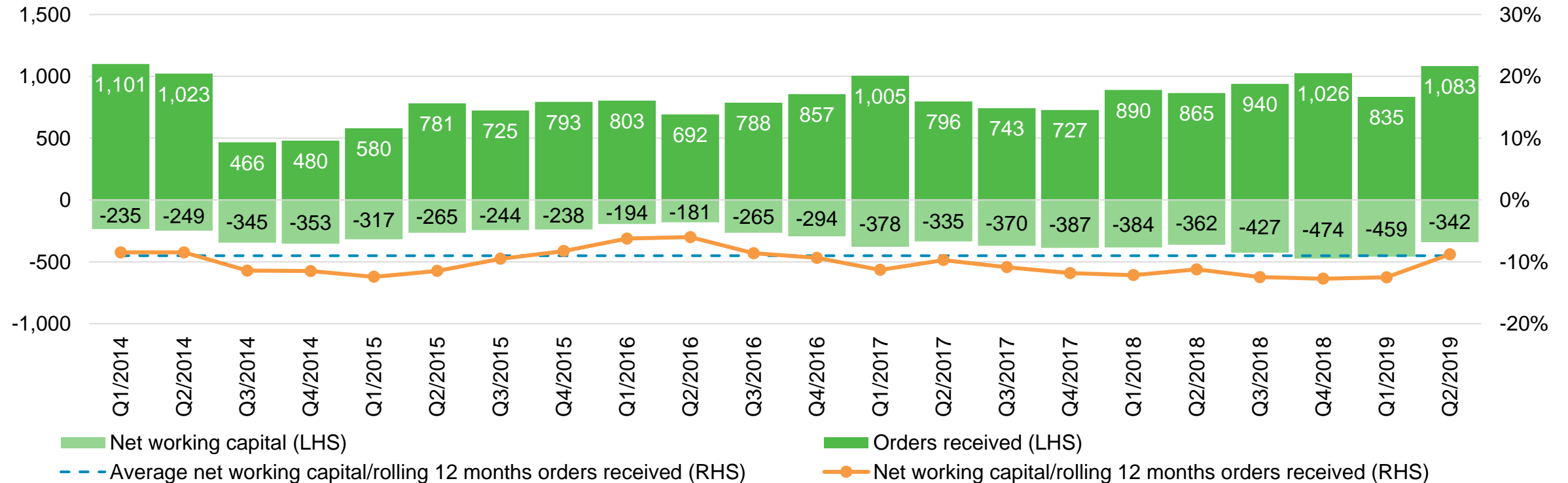
Valmet implemented IFRS 16 – Leases as of January 1, 2019 by applying the simplified transition method and therefore 2018 figures are not restated.

1) Change in net working capital in the consolidated statement of cash flows.

2) Excluding business combinations and leased assets.

# Net working capital at -9% of rolling 12 months orders received

Net working capital and orders received (EUR million)



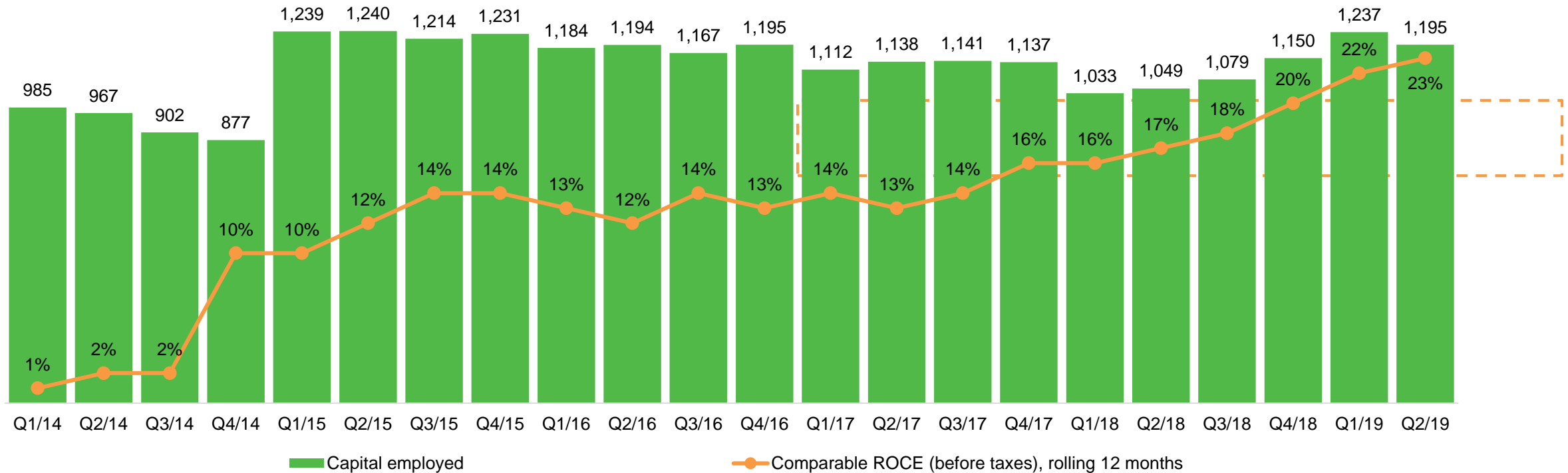
- Net working capital EUR -342 million, which equals -9% of rolling 12 months orders received

Net working capital excluding non-cash net working capital impact from dividend liability.



# Capital employed and Comparable ROCE

Capital employed (EUR million) and Comparable return on capital employed (ROCE), before taxes<sup>1</sup> (%)



- Target for Comparable return on capital employed (ROCE): 15–20%

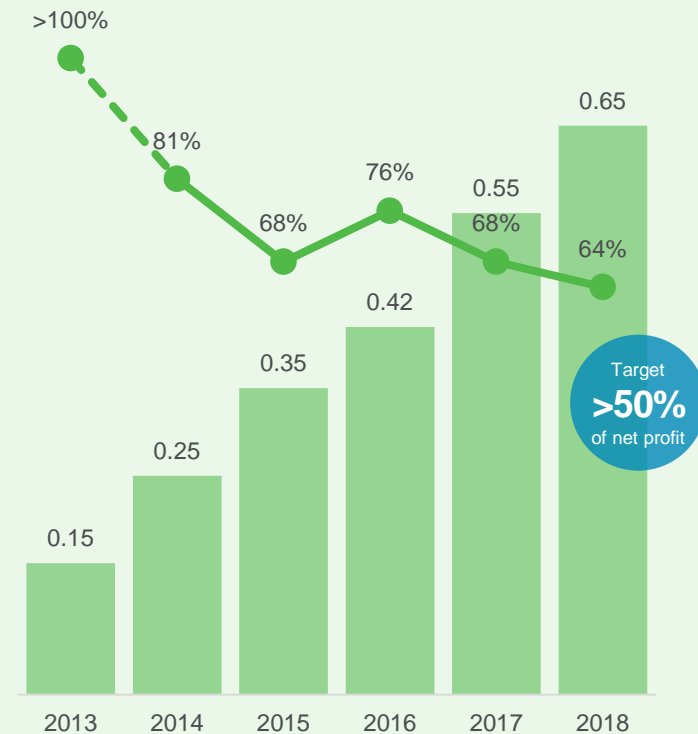
Valmet implemented IFRS 16 – Leases as of January 1, 2019 by applying the simplified transition method and therefore 2018 figures are not restated.

1) Rolling 12 months. Carve-out figures for 2013 have been used in the calculation of Q1–Q3/2014 figures. In the calculation of 2017 figures, data points from 2016 that have not been restated have been used.

# Dividend and balance sheet

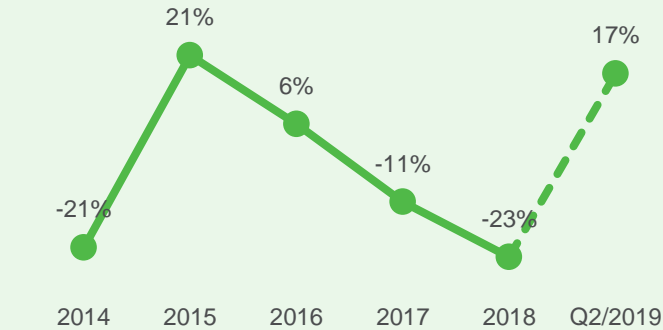
## Track record

Dividend per share (EUR) and payout ratio (%)

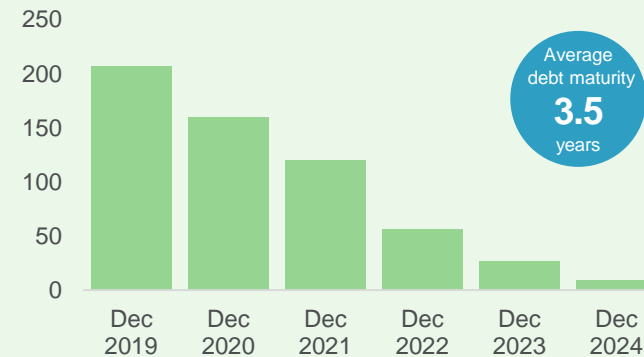


## Balance sheet figures

Gearing (%)



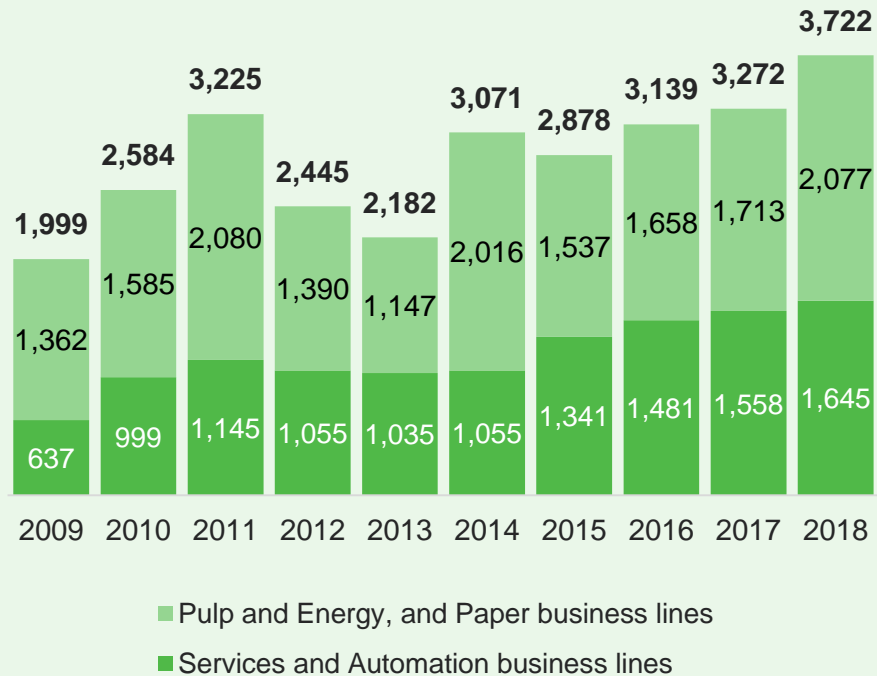
Debt maturity structure (EUR million)



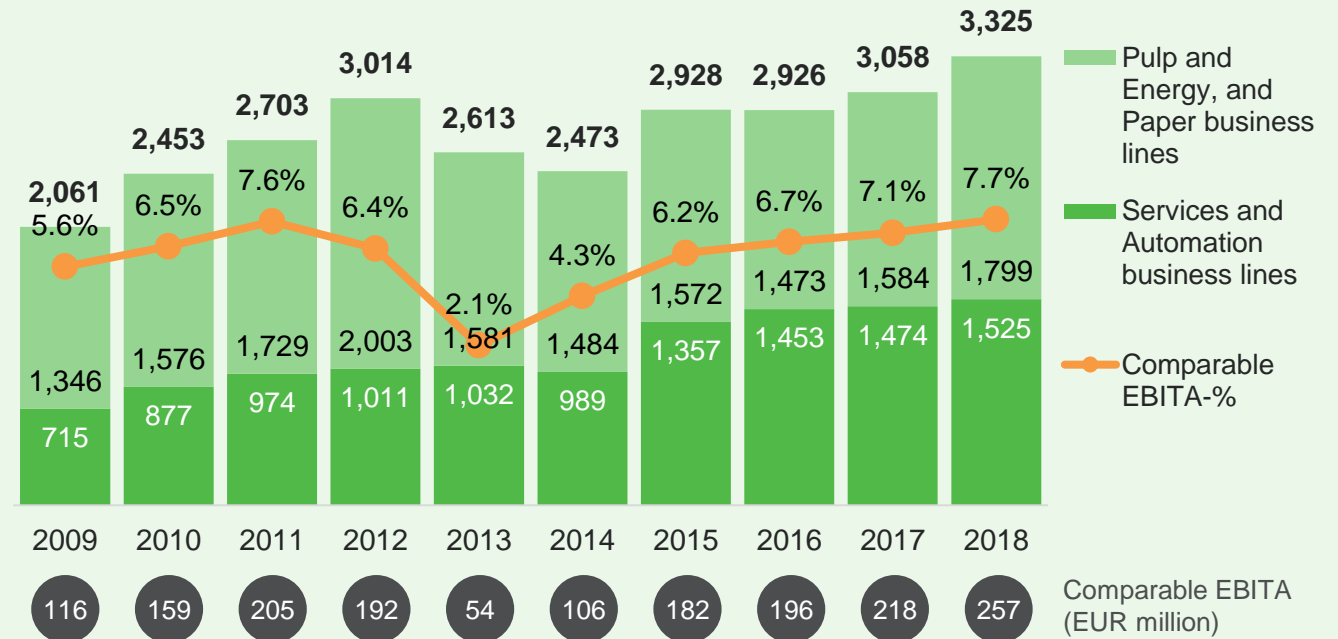
- Net debt was EUR 152 million at the end of Q2/19
- Back-up credit facilities:
  - EUR 200 million of committed facilities
  - EUR 200 million of uncommitted facilities, of which EUR 25 million was outstanding at the end of Q2/19
- Valmet needs to have a strong balance sheet to be able to participate in large projects and to cope with swings in market activity

# Orders received and profitability development, annual

Orders received (EUR million)<sup>1</sup>



Net sales and Comparable EBITA (EUR million)<sup>1</sup>



1) Carve-out figures for 2010-2013; as reported for Metso's Pulp, Paper and Power segment for 2006-2009. Automation has been consolidated into Valmet's financials since April 1, 2015, when the acquisition of Automation was completed.

# Effects of IFRS 16

- IFRS 16, effective as of January 1, 2019, requires to recognize almost all lease contracts as an asset and liability

## Approximate effects of IFRS 16 for 2019<sup>1</sup>

Depreciation	Increases (approx. EUR 20 million)
EBITA	Increases (approx. EUR 2 million)
Net debt	Increases (approx. EUR 50 million)
Fixed assets	Increases (approx. EUR 50 million)
Cash flow from operating activities	Increases (approx. EUR 20 million)
Cash flow from financing activities	Decreases (approx. EUR 20 million)

1) As announced in conjunction with Q1/2019 results. Approximate effects for the full year and are subject to change.



# Appendix

Growth and profitability improvement

# Recent development at Valmet

## Recent development

Customer	<ul style="list-style-type: none"> <li>• Good progress with Shared Journey Forward service concept</li> <li>• All-time high Valmet package sales in Automation</li> </ul>	<ul style="list-style-type: none"> <li>• #1 position in tissue, board and paper</li> <li>• Increased orders received from small and medium sized pulp projects</li> </ul>
Technology	<ul style="list-style-type: none"> <li>• Industrial Internet solutions and digitalized services commercialized, e.g. Valmet Performance Centers operational</li> </ul>	<ul style="list-style-type: none"> <li>• New products<sup>1</sup> ~29% of orders received in 2018</li> <li>• Improvement in product cost competitiveness</li> </ul>
Process	<ul style="list-style-type: none"> <li>• ERP renewal proceeding</li> <li>• Valmet in Dow Jones Sustainability Index for the fifth consecutive year</li> </ul>	<ul style="list-style-type: none"> <li>• Positive project margin deviation in Paper and in most Pulp and Energy projects. Cost overrun in one project in Pulp and Energy</li> <li>• Procurement savings continue</li> </ul>
People	<ul style="list-style-type: none"> <li>• LTIF<sup>2</sup> for own employees at 2.3 (Dec 2018)</li> <li>• Sales Journey and Innovation Pathways training programs ongoing</li> </ul>	<ul style="list-style-type: none"> <li>• Developing local competences close to customers</li> <li>• Strengthened service capability in new regions</li> <li>• ~1,400 Valmet employees in new or refurbished offices and facilities</li> </ul>



<sup>1</sup> Commercialized within 5 years  
<sup>2</sup> Lost time incident frequency rate

# Actions to keep growing faster than the market

## Stable business

- Long term co-operation with customers through agreements
- Develop local service capability
- Leverage and develop Field services as differentiator
- Lead the market through Industrial Internet offering
- Competitor replacements in Automation
- Grow through new industries in Automation

## Capital business

- Continue to bring advanced technology to the market
- Improve product cost competitiveness
- Secure mega pulp mill cases
- Create customer value with digitalization and Industrial Internet



# Actions to reach Comparable EBITA target of 8–10%

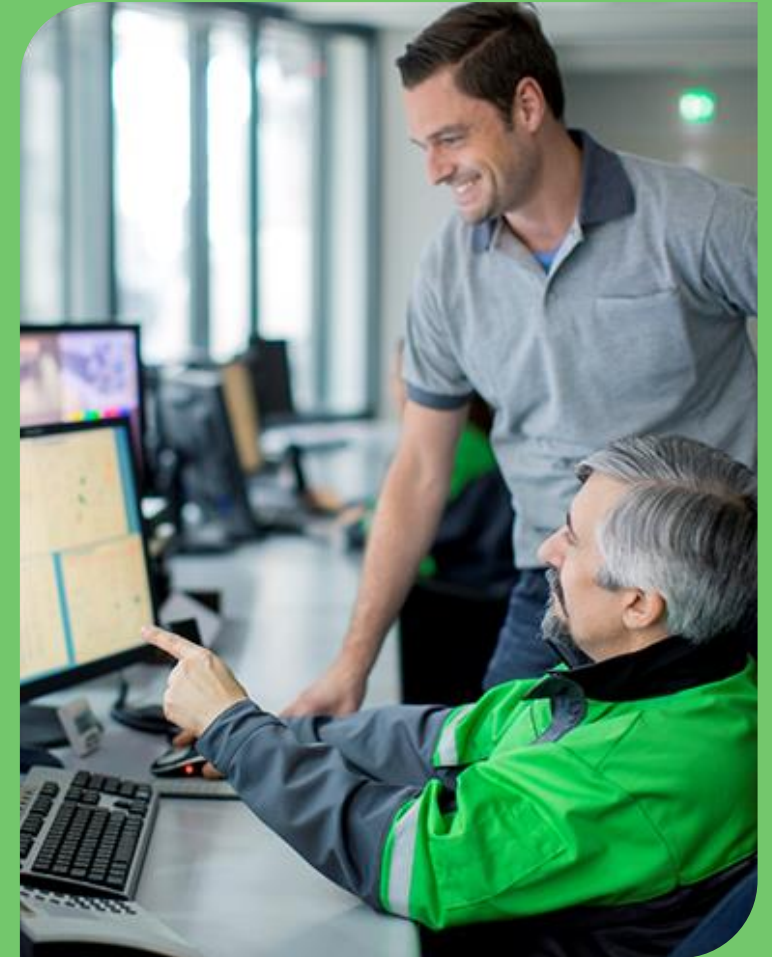
## Track record

Comparable EBITA margin (%) and stable business net sales (EUR million)



## Actions to reach Comparable EBITA target:

- Grow the stable business
- No negative margin deviation in capital projects
- Continued actions to save in procurement
- Increase flexibility in operations through global footprint development
- R&D and new product launches
- Internal efficiencies through digitalization
- ERP project (from 2021 onwards)

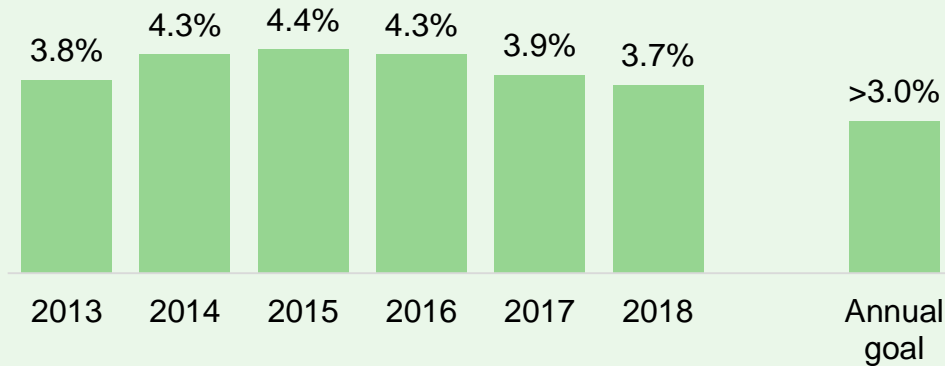


LTM = Last twelve months (October 1, 2017 – September 30, 2018)



# Procurement and quality cost development

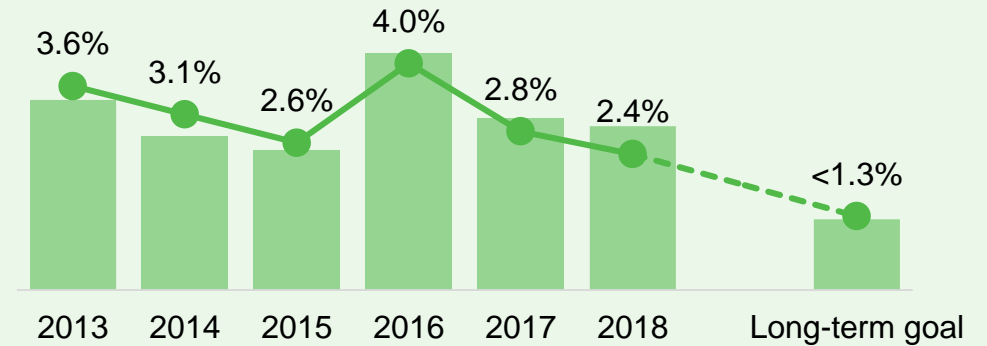
## Implemented procurement savings of annual direct spend



### Targeting >3% of procurement savings annually

- Increasing design-to-cost (DTC) to create new sources for savings
- More supplier involvement through supplier relationship management
- Continuing sustainable supply chain implementation

## Quality costs (% of net sales)



### Long-term quality costs goal <1.3% of net sales

- Adding focus in root cause analysis of the quality deviations
- Extensive Lean implementation and training
  - Over 4,000 Valmet employees completed Lean e-learning
  - Lean being deployed in all major locations and businesses

# Acquisitions

- Focus on organic growth
- Selective acquisitions can be done to support growth

## Acquisition themes

- **Strengthening Services**
  - Complementing existing portfolio
  - Expansion in consumables
- **Strengthening Automation**
  - Stronger Pulp & Paper automation
  - Expansion in Industrial Internet
  - Stronger presence in growth markets
- **Expanding business in pulp, paper and energy value chain**





# Appendix

Shareholders, share price development and sustainability

# Largest shareholders on August 31, 2019

Based on the information given by Euroclear Finland Ltd

#	Shareholder name	Number of shares	% of shares and votes
1	Solidium Oy	16,695,287	11.14%
2	Ilmarinen Mutual Pension Insurance Company	4,547,500	3.03%
3	Elo Pension Company	3,700,000	2.47%
4	Varma Mutual Pension Insurance Company	2,712,465	1.81%
5	OP Funds	2,266,004	1.51%
6	The State Pension Fund	1,545,000	1.03%
7	Keva	1,502,166	1.00%
8	Nordea Bank ABP	826,426	0.55%
9	Danske Invest funds	765,943	0.51%
10	Nordea Funds	727,406	0.49%
	10 largest shareholders, total	35,288,197	23.55%
	Other shareholders	114,576,422	76.45%
	<b>Total</b>	<b>149,864,619</b>	<b>100.00%</b>

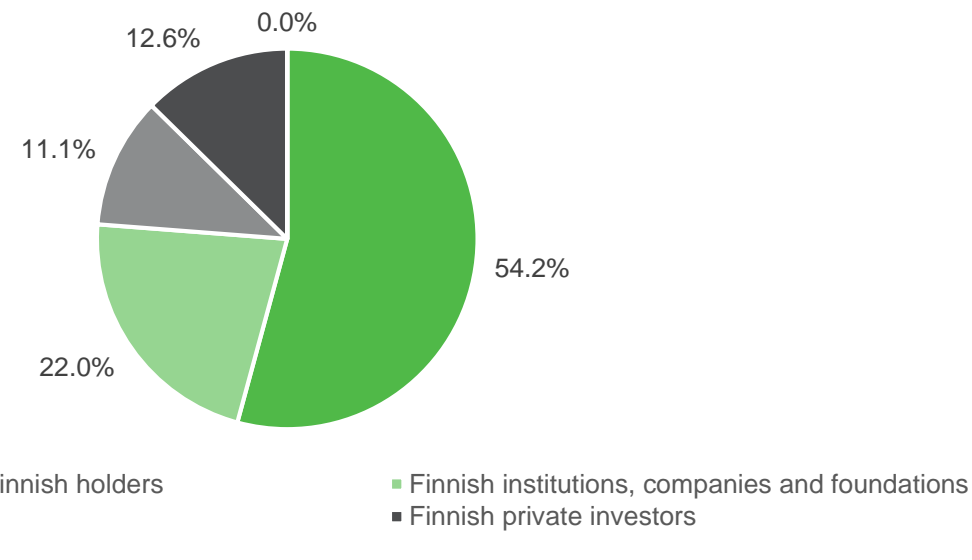
## Five latest flagging notifications

Date of transaction	Shareholder	Number of shares	% of shares and votes
Aug 9, 2019	The Goldman Sachs Group, Inc.	7,523,217	5.02%
Aug 12, 2019	The Goldman Sachs Group, Inc	Below 5%	Below 5%
Aug 28, 2019	BlackRock, Inc.	Below 5%	Below 5%
Aug 29, 2019	BlackRock, Inc.	7,740,836	5.16%
Aug 30, 2018	BlackRock, Inc.	Below 5%	Below 5%



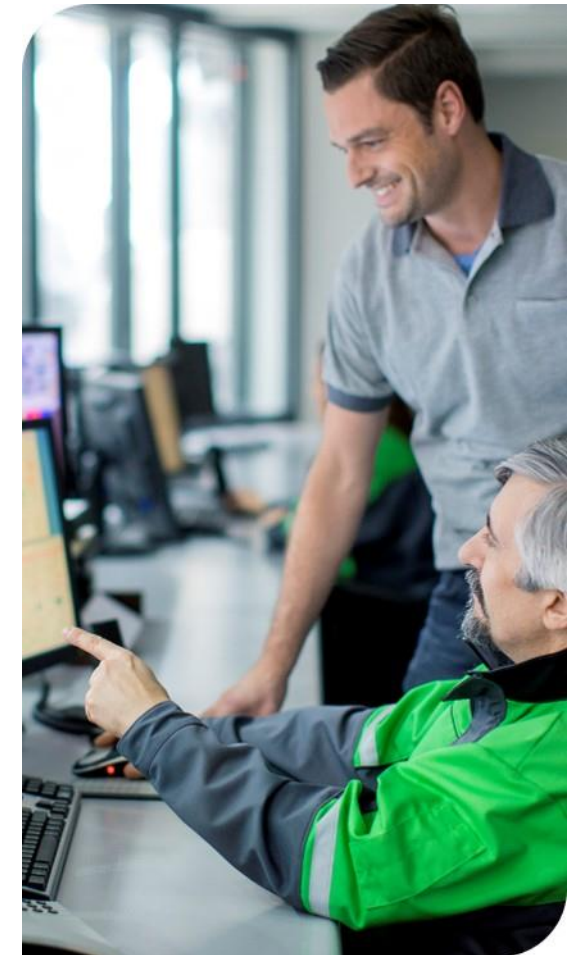
# Shareholder structure on August 31, 2019

The shareholder structure is based on the classification of sectors determined by Statistics Finland



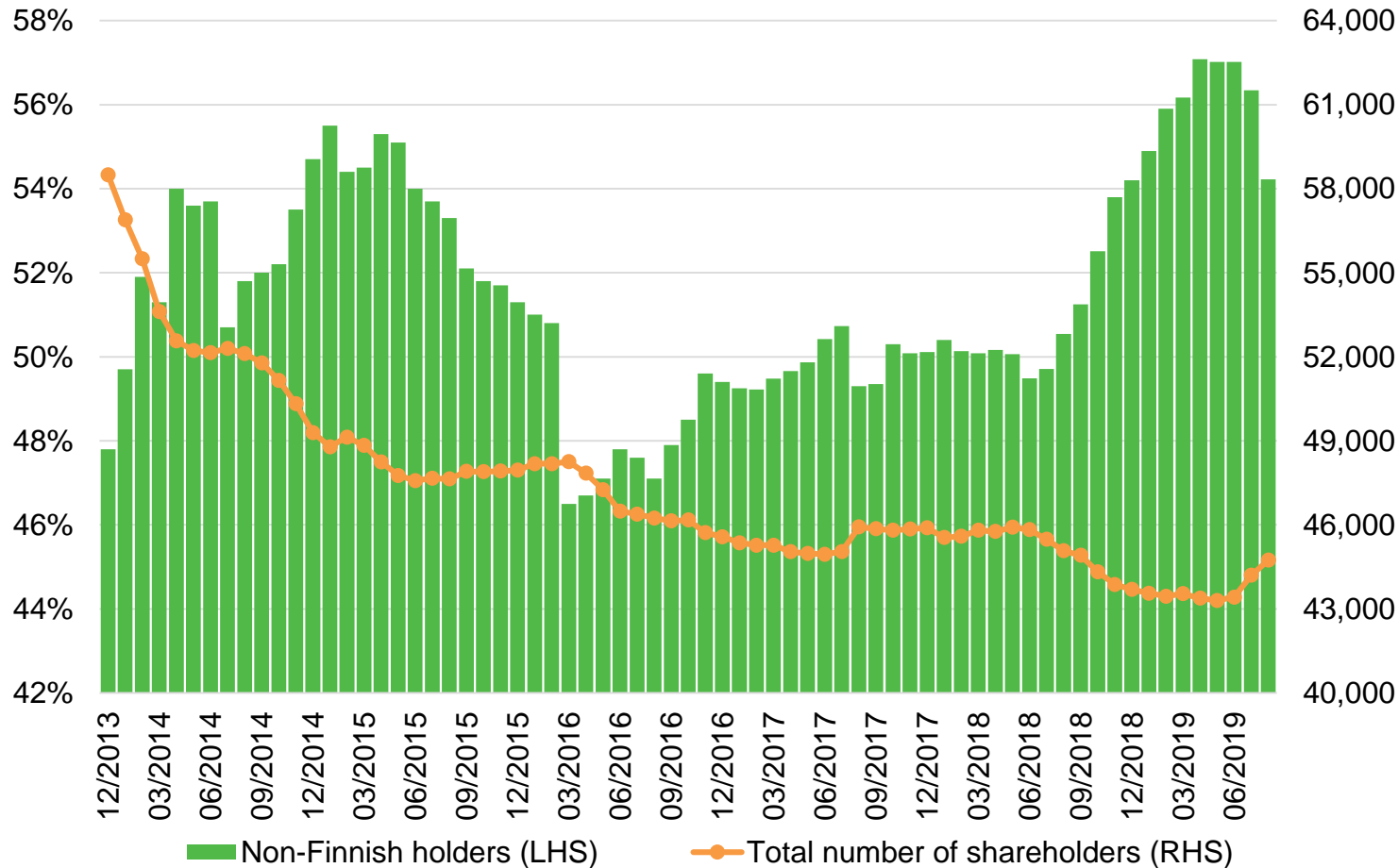
Sector	Number of shareholders	% of total shareholders	Number of shares	% of shares
Nominee registered and non-Finnish holders	327	0.74%	81,262,419	54.22%
Finnish institutions, companies and foundations	2,187	4.89%	32,969,533	22.00%
Solidium Oy*	0	0.00%	16,695,287	11.14%
Finnish private investors	42,224	94.38%	18,929,360	12.63%
On issuer account	0	0.00%	8,020	0.01%
<b>Total</b>	<b>44,738</b>	<b>100.00%</b>	<b>149,864,619</b>	<b>100.00%</b>

\*) Solidium is a holding company that is wholly owned by the Finnish State

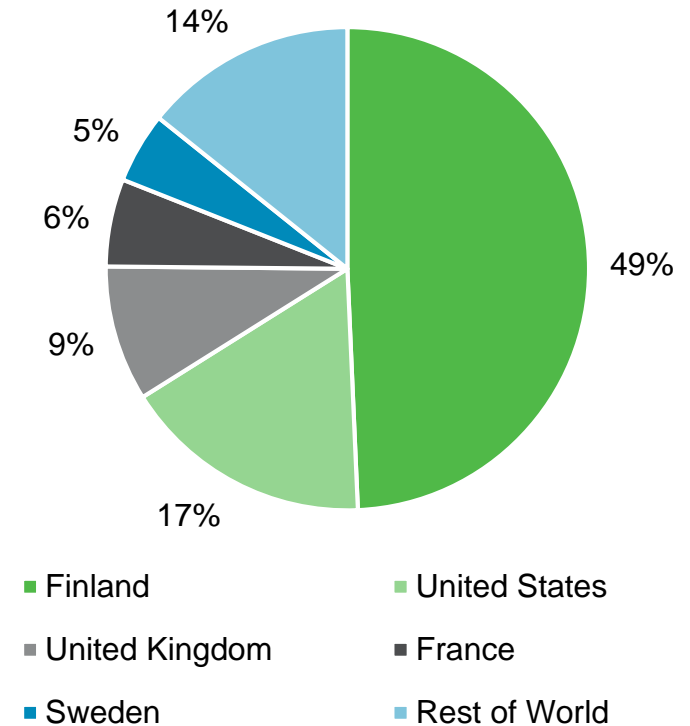


# Share of non-Finnish holders and area split of shareholders

Share of non-Finnish holders and number of shareholders








Approximate geographical split of institutional shareholders\*



\*) in December 2018. Source: CMi2i

# Progress on Sustainability 360° agenda

	Targets	Key actions for 2019	
Sustainable supply chain	<ul style="list-style-type: none"> <li>Develop sustainable procurement practices globally</li> <li>Support selected key suppliers to meet the level of sustainability expected by Valmet</li> </ul>	<ul style="list-style-type: none"> <li>Continue supplier sustainability audits while ensuring high quality audit follow-up process</li> <li>Continue to increase traceability in supply chain</li> <li>Develop carbon footprint calculation of our supply chain</li> <li>Make guidelines for sustainable purchasing of logistic services</li> <li>Implement sustainability gates and guidance in site works purchasing</li> </ul>	<ul style="list-style-type: none"> <li>Implement sustainability engagement program for key suppliers globally</li> <li>Launch sustainability e-learning for key suppliers to increase awareness of Valmet's Sustainable Supply Chain Policy requirements</li> <li>Set CO2 reduction targets to highest emitting direct suppliers</li> </ul> 
Health, safety and environment	<ul style="list-style-type: none"> <li>Investing in safety culture and effective HSE processes and practices</li> <li>Collaborating with customers and partners to improve HSE results</li> </ul>	<ul style="list-style-type: none"> <li>Create roadmap for transition to ISO 45001 and expansion of HSE certificates coverage for all workshop locations</li> <li>Put safety dialogue training concept in place and start implementation</li> <li>Establish local action plans towards 2025 HSE targets for own operations</li> </ul>	<ul style="list-style-type: none"> <li>Implement activities to increase understanding of the environmental impacts of our work</li> <li>Implement preventive safety initiatives</li> </ul> 
People and performance	<ul style="list-style-type: none"> <li>Boost employee engagement</li> <li>Develop the best talent</li> <li>Be a responsible employer</li> <li>Promoting diversity</li> </ul>	<ul style="list-style-type: none"> <li>Place more focus on sustainability in OurVoice survey renewal</li> <li>Utilize competence transfer concept</li> <li>Enhance global training portfolio to strengthen strategic skillset</li> <li>Make the current training portfolio available for a larger number of employees</li> <li>Make sustainability more visible to the candidates during the recruitment process</li> </ul>	<ul style="list-style-type: none"> <li>Introduce work-life integration approach</li> <li>Ensure local wellbeing activities cover at least 70% of employees globally</li> <li>Increase internal mobility between businesses and geographies</li> <li>Continue support and partner with organizations that promote diversity in the workplace</li> </ul> 
Sustainable solutions	<ul style="list-style-type: none"> <li>Continuously develop the sustainability performance of our technologies</li> <li>Promote the sustainable aspects of Valmet's offering</li> </ul>	<ul style="list-style-type: none"> <li>Investigate whether consumables or spare parts can be manufactured from renewable or recyclable materials</li> <li>Study and utilize opportunities of additive manufacturing to save raw materials and increase the usage of renewable materials in Valmet's products</li> <li>Continue to reduce the environmental footprint in Valmet's operations</li> <li>Develop sales organization's competence as well as sales tools and systems on sustainability</li> <li>Interact with key customers about the sustainability benefits of our offering</li> </ul>	
Corporate citizenship	<ul style="list-style-type: none"> <li>Ensure respect for human rights and compliance with guiding principles across the value chain</li> <li>Promote transparent reporting and active stakeholder collaboration</li> </ul>	<ul style="list-style-type: none"> <li>Continue human rights action plans and implement internal training</li> <li>Conduct location human rights impact assessments in selected high-risk countries</li> <li>Update Code of Conduct, anti-corruption and bribery policy</li> <li>Systematic follow up of Code of Conduct and sustainability e-learning completion rates</li> </ul>	<ul style="list-style-type: none"> <li>Annual sustainability reporting according to the GRI Standards</li> <li>Report to leading sustainability ratings</li> <li>Ensure stakeholder feedback through a specific stakeholder survey</li> <li>Implement new social responsibility program</li> <li>Highlight sustainability in investor relations activities</li> </ul> 



# Appendix

Strategy and offering



# Valmet's way forward

## Our Mission

Converting renewable resources into sustainable results

## Our Strategy

Valmet develops and supplies competitive process technology, services and automation to the pulp, paper and energy industries.

We are committed to moving our customers' performance forward with our unique offering and way to serve.

## Our Must-Wins

- Customer excellence
- Leader in technology and innovation
- Excellence in processes
- Winning team

## Growth accelerators

- Field services
- Industrial Internet and digitalization

## Our Vision

To become the global champion in serving our customers

## Our Values



### Customers

We move our customers' performance forward



### Renewal

We promote new ideas to create the future



### Excellence

We improve every day to deliver results



### People

We work together to make a difference

## Megatrends

- Resource efficient and clean world
- Digitalization and new technologies
- Urban, responsible and global consumer

# Business opportunities

## eCommerce



Global sales in 2017 reached  
**USD 2.3 trillion**  
Forecasted to grow **141%**  
from 2016 to 2021

## Replacing plastic



2017 - Total size of packaging  
business **EUR 600 billion p.a.**  
Fiber based 36%  
Plastic 40%  
Growing 3-6% p.a.

## Emerging markets



Expected to drive the global  
tissue growth, accounting for  
**83%** of incremental demand  
by 2030

# Services business line offering

## Shared Journey Forward offering

### Reliability

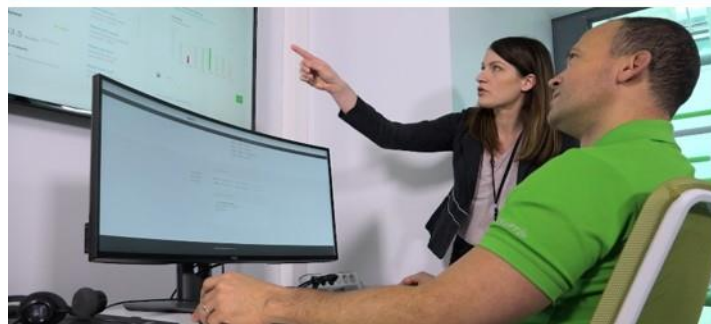
- Spare parts and components
- Maintenance and shutdown services
- Outsourcing services

### Performance

- Production consumables
- Process support and optimization

### New Technology

- Process and automation upgrades
- Industrial Internet and remote solutions



## Services business units

### Performance Parts

- Spare parts and consumables

### Fabrics

- Paper machine clothing and filter fabrics

### Energy and Environmental

- Services for energy and environmental systems

### Rolls and Workshop Services

- Rolls, roll covers and maintenance, workshop services

### Mill Improvements

- Upgrades, components and expert services

# Automation business line offering and market overview

## Advanced automation and process monitoring solutions and services:

- Distributed Control System (DCS) – Valmet DNA
- Performance solutions
- Quality Control System (QCS)
- Profilers
- Analyzers and measurements
- Industrial internet solutions
- Automation services
- Process simulators
- Safety systems and solutions

Over 4,500 automation systems and over 40,000 analyzers and measurements delivered


**Distributed Control System (DCS)**  #3

Scope/product
<ul style="list-style-type: none"> <li>• DCS for process and plant controls</li> <li>• Condition monitoring</li> <li>• Information management</li> <li>• APC (advanced process control)</li> <li>• Industrial Internet applications</li> </ul>

Market size
Pulp and paper DCS market: <ul style="list-style-type: none"> <li>• EUR 900 million</li> </ul> Power DCS market: <ul style="list-style-type: none"> <li>• EUR 700 million</li> </ul>

Main competitors
<ul style="list-style-type: none"> <li>• ABB</li> <li>• Honeywell</li> <li>• Emerson</li> <li>• Siemens</li> <li>• Yokogawa</li> </ul>




**Quality Management System**  #1-2

<ul style="list-style-type: none"> <li>• QCS (Quality Control Systems)</li> <li>• Profilers</li> <li>• Web inspection and web break analysis systems</li> </ul>
---

Estimated market size: <ul style="list-style-type: none"> <li>• &gt;EUR 200 million</li> </ul>
--

<ul style="list-style-type: none"> <li>• ABB</li> <li>• Honeywell</li> <li>• Voith</li> <li>• Paperchine</li> <li>• Procemex</li> </ul>	<ul style="list-style-type: none"> <li>• Procemex</li> <li>• Cognex</li> <li>• Isra Vision</li> </ul>
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**Analyzers and measurements**  #1

<ul style="list-style-type: none"> <li>• Paper analyzers</li> <li>• Pulp analyzers</li> <li>• Pulp consistency measurements</li> <li>• Conductivity measurements</li> <li>• Power analyzers</li> </ul>
--

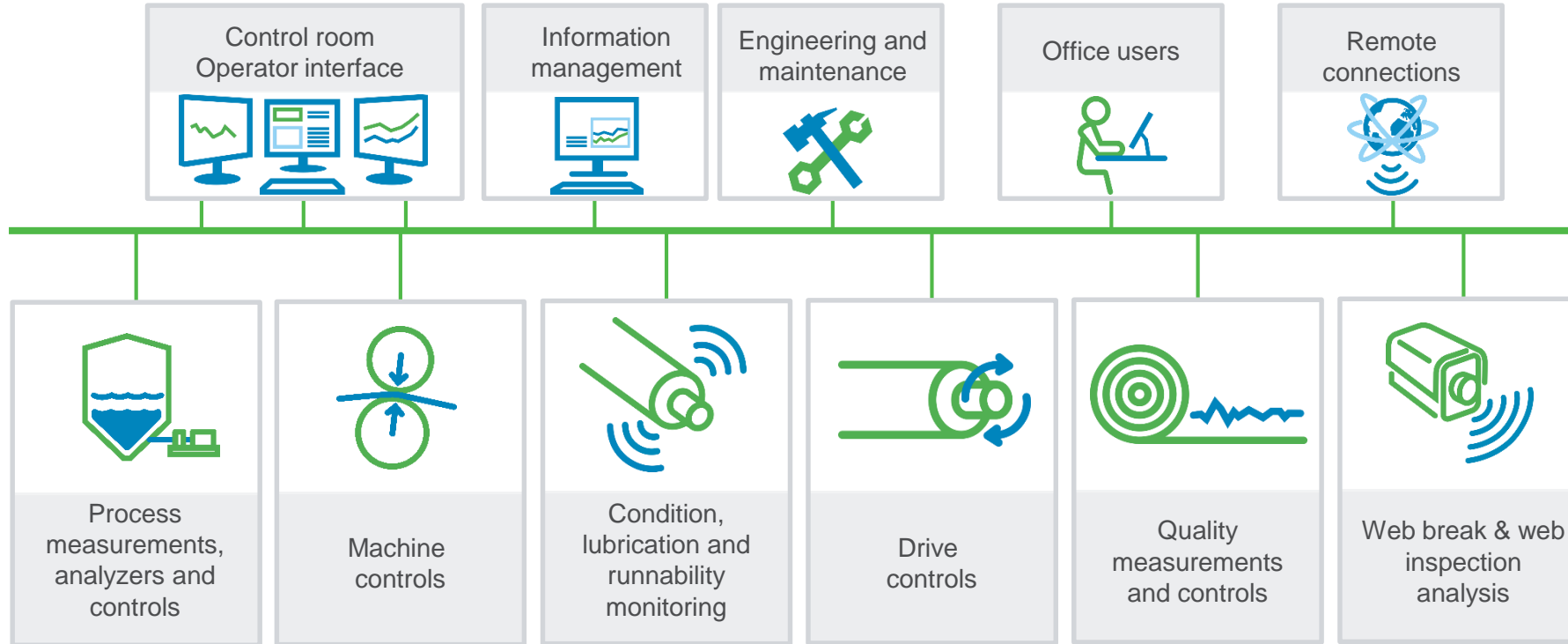
Estimated market size: <ul style="list-style-type: none"> <li>• &lt;EUR 200 million</li> </ul>
--

<ul style="list-style-type: none"> <li>• ABB</li> <li>• BTG</li> </ul>
--



# Automation projects and services: Board and Tissue machines

## Automation delivery content and service scope



**Board machine**  
3,000-7,000 I/O  
Price: EUR 2–6 million

**Tissue machine**  
1,000-3,000 I/O  
Price: EUR 1–4 million



- Total control solution
- Industrial Internet embedded
- Single supplier – efficient project management
- Faster start-up of assets



# Pulp and Energy business line offering



## Pulp

- Wood and pulp handling
  - Wood handling, fuel handling, pulp drying
- Fiber processing
  - Complete fiber lines, cooking systems, recausticizing
  - Mechanical pulping
  - Black pellet and pre-hydrolysis technologies
- Recovery
  - Recovery boilers, evaporation systems, lime kilns
  - Mill wide odorous gas handling, ash treatment
  - Sulfuric acid plants and lignin extraction



## Energy

- Heat and power generation
  - Fluidized bed boilers, bio-grate boilers, biomass and waste gasification
  - Boiler islands and small power plants
- Air emission control
  - Flue gas cleaning and heat recovery for boilers
  - Emission control for process industry and marine
- Biofuels
  - Pyrolysis plants with emission control and burners

# Paper business line offering



## Board and paper

- Board and paper production lines
  - Recycled fiber lines
  - Tailor-made OptiConcept machines
  - OptiConcept M modularized machines
- Rebuilds
  - Modernizations and grade conversions
- Stand-alone products
  - From stock preparation to roll handling
  - e.g. headboxes, sizers, winders



## Tissue

- Tissue production lines
  - Advantage DCT
  - Advantage NTT/QRT/eTAD
  - Advantage Thru Air (TAD)
- Rebuilds
- Stand-alone products
  - From stock preparation to roll handling
  - e.g. Yankee cylinders, ViscoNips, Re-Winders

# Full scope offering for the pulp and paper industry

## Technologies

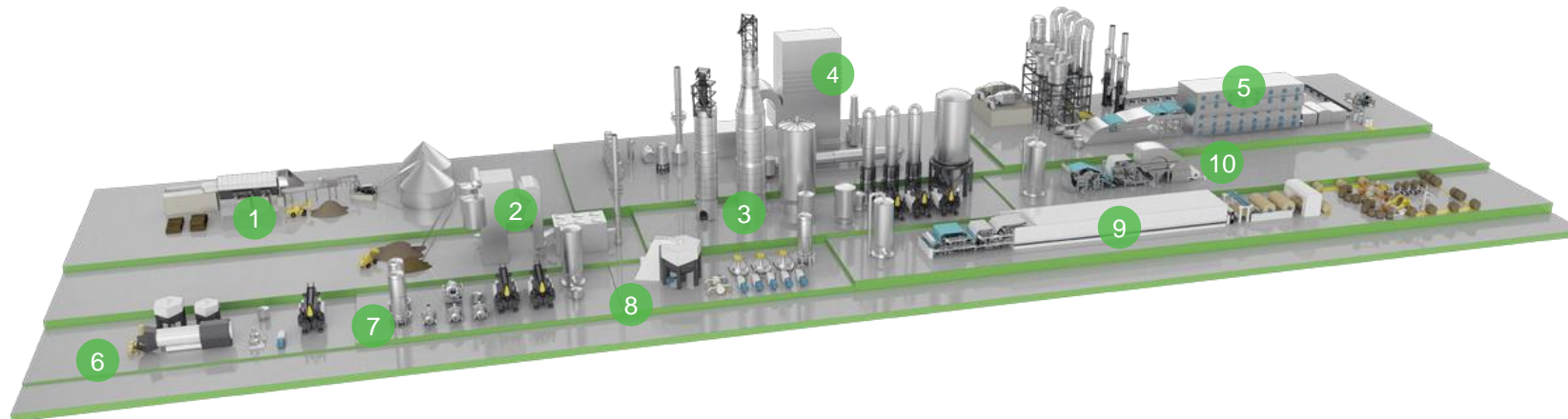
- 1 Wood handling
- 2 Heat and power production
- 3 Chemical pulping
- 4 Chemical recovery
- 5 Pulp drying
- 6 Recycled fiber
- 7 Mechanical fiber
- 8 Stock preparation
- 9 Board and paper making
- 10 Tissue making

## Automation

- Distributed Control System (DCS)
- Performance solutions
- Quality Control System (QCS)
- Profilers
- Analyzers and measurements
- Industrial internet solutions
- Automation services
- Process simulators
- Safety systems and solutions

## Services

- Mill and plant improvements
- Spare and wear parts
- Paper machine clothing and filter fabrics
- Roll services
- Services for evaporation plants, power and recovery boilers
- Services for environmental equipment





# Our offering for energy industry and biotechnologies

## Technologies

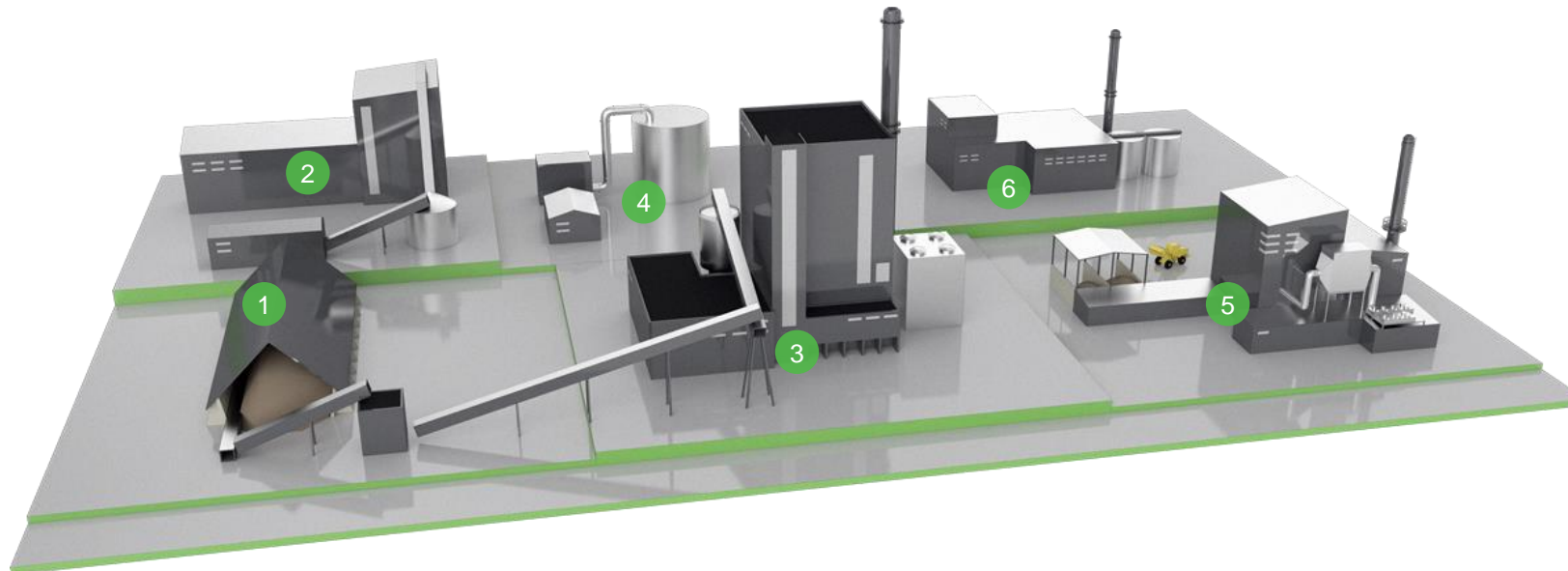
- 1 Fuel handling
- 2 Gasification
- 3 Boiler and flue gas cleaning
- 4 Bio-oil production
- 5 Modularized power plants
- 6 Prehydrolysis  
For biofuels, biomaterials and biochemicals, and bio coal production

## Automation

- Distributed Control System (DCS)
- Performance solutions
- Analyzers and measurements
- Industrial internet solutions
- Automation services

## Services

- Plant improvements
- Rebuilds
- Performance services
- Services for environmental equipment
- Components and spare parts
- Training



# Continuous investment in research and development to improve customers' processes



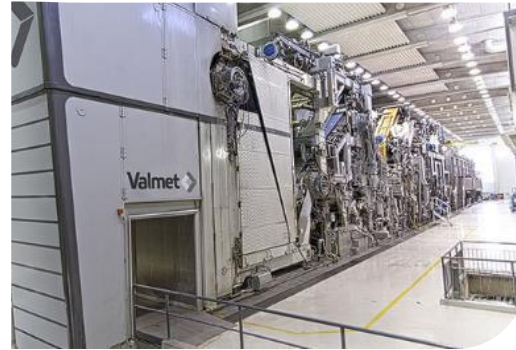
## Customers' needs

- Increase production efficiency
- Improve competitiveness
- Maximize value of raw materials
- Widen raw material base
- Provide high-value end products
- Develop new innovations and technologies



## Valmet's R&D focus

- Modularized and standardized products
- Energy, water and raw material efficiency
- Automation technology
- Biomass conversion technologies



## Valmet's R&D resources

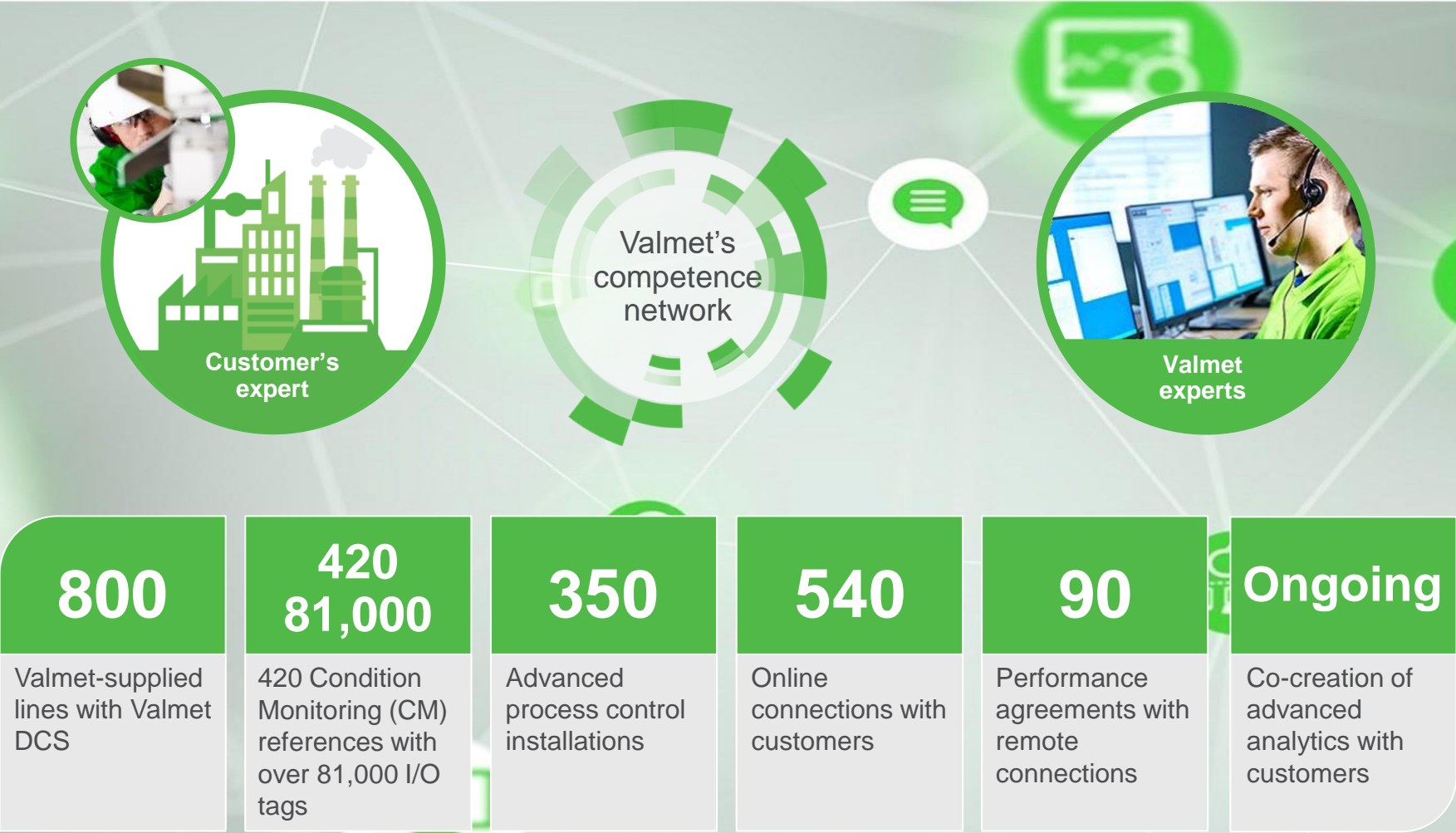
- Own R&D centers and pilot facilities
- Annual R&D spend about EUR 65 million
- Around 1,500 protected inventions
- Cooperation with universities and research institutions



## Example of our R&D work – OptiConcept M board and paper machine

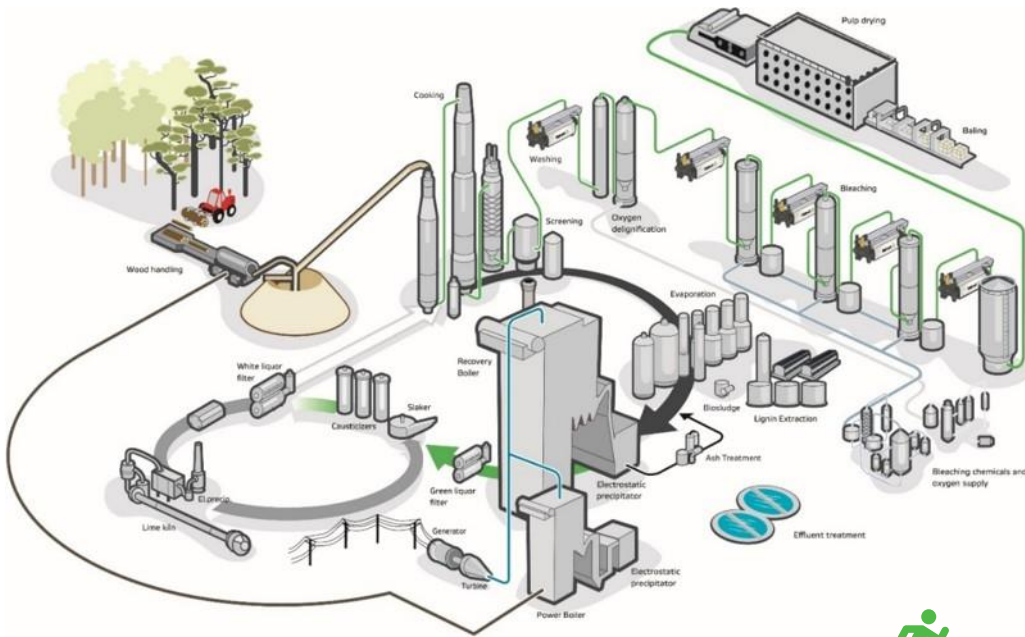
- Cost-efficient, high-quality, safe and flexible board making concept
- Significant savings in energy, water and raw material use
  - Energy efficiency improvement up to 30%
- Modular and compact size
  - Short delivery times, quick start-ups, and less production space
- Functional design brings increased safety and accessibility
  - Design acknowledged in Finnish design competition in 2014

# Today, customers are extensively utilizing our Industrial Internet capabilities



# Typical dimensions of pulp mills, and paper, board and tissue machines

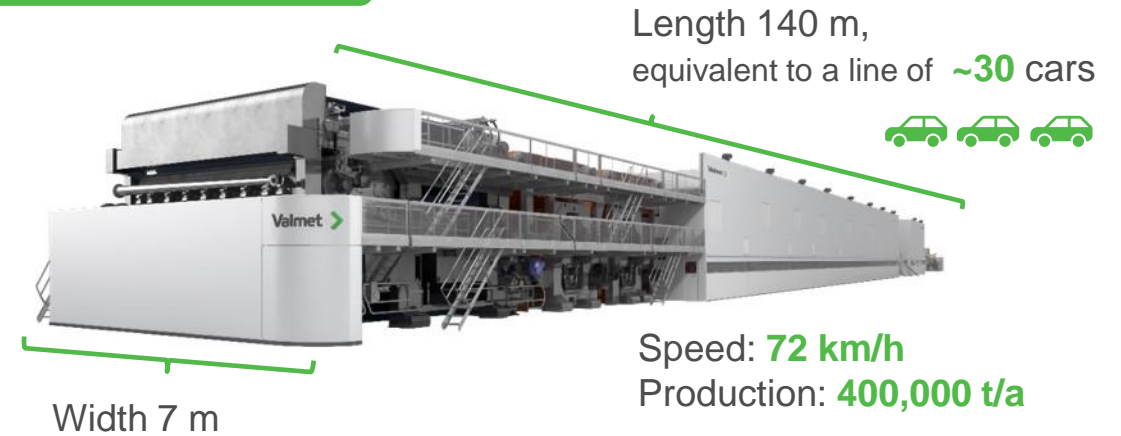
## Pulp mill



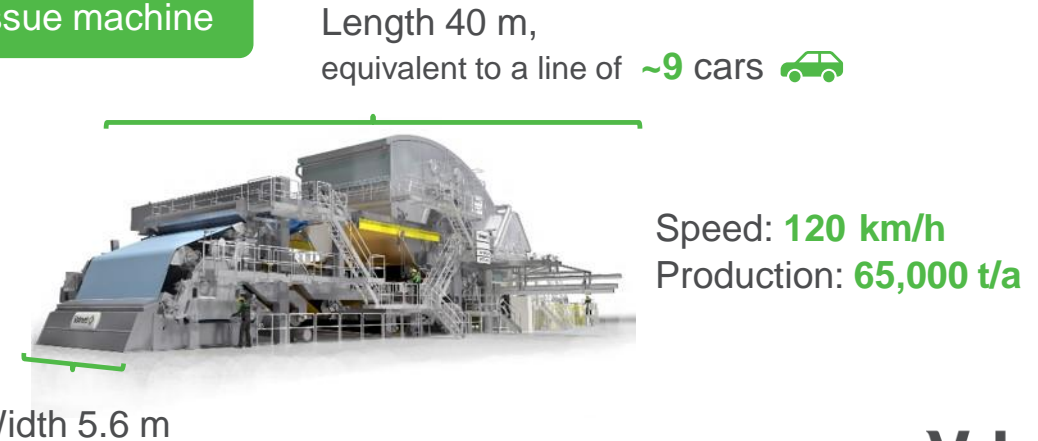
- Mill site area:  
500,000 – 5,000,000 m<sup>2</sup>, equivalent to **~70–700** football fields
- Built area:  
40,000 – 100,000 m<sup>2</sup>, equivalent to **~6–14** football fields



## Paper and board machine



## Tissue machine





# Appendix

## Management

# Executive Team

## Corporate



**Pasi Laine**

President and CEO  
Share ownership: 136,042



**Kari Saarinen**

CFO  
Share ownership: 39,514



**Julia Macharey**

SVP, Human Resources and  
Operational Development  
Share ownership: 26,892



**Anu Salonsaari-Posti**

SVP, Marketing &  
Communications  
Share ownership: 21,527

## Business lines



**Aki Niemi**

Business Line President,  
Services  
Share ownership: 50,730



**Sami Riekkola**

Business Line President,  
Automation  
Share ownership: 5,620



**Bertel Karlstedt**

Business Line President,  
Pulp and Energy  
Share ownership: 36,157



**Jari Vähäpesola**

Business Line President,  
Paper  
Share ownership: 47,585

## Business areas



**Dave King**

Area President,  
North America  
Share ownership: 24,912



**Celso Tacla**

Area President,  
South America  
Share ownership: 74,990



**Vesa Simola**

Area President,  
EMEA  
Share ownership: 39,846



**Xiangdong Zhu**

Area President,  
China  
Share ownership: 17,451



**Jukka Tiitinen**

Area President,  
Asia Pacific  
Share ownership: 78,473

# Board of Directors



**Mikael Mäkinen**  
(b. 1956)  
Chairman of the Board  
Finnish citizen

- MSc. (Eng.)
- Selected experience:
  - President, Marine at Rolls-Royce Plc
  - Member of the BoD of Finnlines Oyj
- Share ownership: 1,764
- Independent of company: Yes
- Independent of owners: Yes



**Aaro Cantell**  
(b. 1964)  
Vice-Chairman of the Board  
Finnish citizen

- M.Sc. (Tech.)
- Selected experience:
  - CoB of Normet Group Oy, VTT Technical Research Centre of Finland Ltd
  - Member of the BoD of Solidium Oy, Federation of Finnish Technology Industries
- Share ownership: 5,506
- Independent of company: Yes
- Independent of owners: No



**Pekka Kemppainen**  
(b. 1954)  
Board member  
Finnish citizen

- Lic.Sc. (Tech.)
- Selected experience:
  - Member of the BoD of Bittium Oyj and Junttan Oyj
  - Several positions within KONE, including Managing Director of KONE Elevators Australia
- Share ownership: 2,063
- Independent of company: Yes
- Independent of owners: Yes



**Monika Maurer**  
(b. 1956)  
Board member  
German citizen

- Diploma in Physics and Chemistry, Diploma in Pedagogy
- Selected experience:
  - CEO of Radio Frequency Systems
  - Chief Operating Officer of Nokia Group
- Share ownership: 2,063
- Independent of company: Yes
- Independent of owners: Yes



**Eriikka Söderström**  
(b. 1968)  
Board member  
Finnish citizen

- M.Sc. (Econ.)
- Selected experience:
  - CFO of F-Secure Corporation
- Share ownership: 3,193
- Independent of company: Yes
- Independent of owners: Yes



**Tarja Tyni**  
(b. 1964)  
Board member  
Finnish citizen

- LL.M.
- Selected experience:
  - CoB of Mandatum Life Investment Services Ltd
- Share ownership: 4,989
- Independent of company: Yes
- Independent of owners: Yes



**Rogério Ziviani**  
(b. 1956)  
Board member  
Brazilian citizen

- BSc in Business Management, MBA
- Selected experience:
  - Member of the BoD of Innovatech Negócios Florestais
- Share ownership: 9,176
- Independent of company: Yes
- Independent of owners: Yes

