



# Entering new markets in energy, strengthening position in pulp

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Valmet Capital Markets Day  
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# Agenda

## Capital Markets Day 2016

- 1 Current status
- 2 Market environment and market position
- 3 Strategic objectives
- 4 Must-Wins
- 5 Case examples
- 6 Summary



# Current status

# Pulp and Energy business line in brief

World-class pulp mill offering and complete delivery capability.

Global technology and know-how leader in bioenergy and multifuels.

A natural growth platform for environmental systems and biomass conversion technologies.

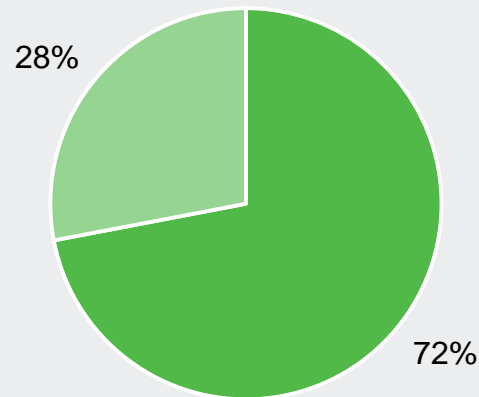
## Figures for last 12 months

**Orders received**  
EUR 884 million

**Net sales**  
EUR 903 million

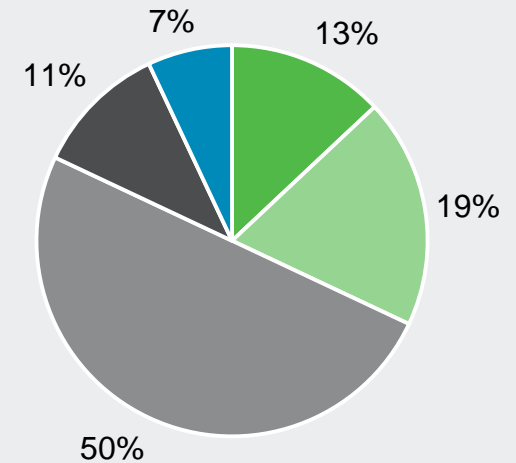
**Employees** (on June 30, 2016)  
1,749

Net sales by business<sup>1</sup>



■ Pulp  
■ Energy

Net sales by area<sup>1</sup>



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

1) Net sales during the last 12 months (July 1, 2015 – June 30, 2016).

# Pulp and Energy offering

A range of solutions and technologies adjusted to our customers' needs



## Pulp

- Wood and pulp handling
  - Wood handling, fuel handling, pulp drying
- Fiber processing
  - Complete fiber lines, cooking systems, refiners, mechanical pulping
- Recovery
  - Recovery boilers, evaporation systems, recovery islands
  - Lignin recovery using LignoBoost technology
- Odour and pulp mill balance control

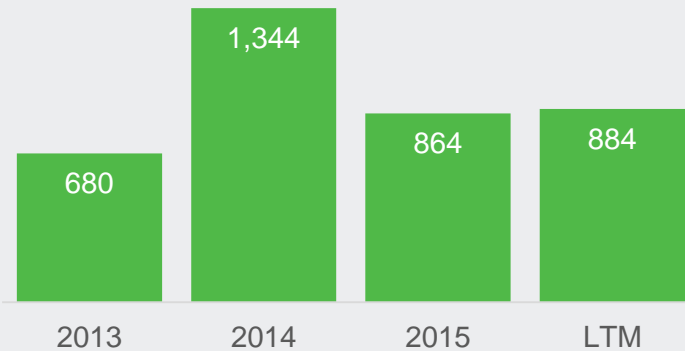
## Energy

- 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
  - Biocoal plants

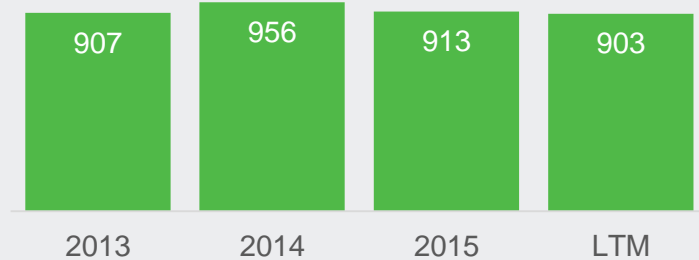
# Major achievements

Very low LTIF/TRIF achieved (LTIF = 0 since January 2016)

Orders received  
(EUR million)



Net sales  
(EUR million)



## Pulp

- Market was very active in 2014 and 2015
- We defended our market position in the Nordics and in China
- Wood and Pulp Handling handled its high order backlog with success
- LignoBoost delivery in Stora Enso, Summa

## Energy

- In 2015 projects were postponed, good start in 2016
- Partnering with EPC contractors in Asia-Pacific
- Rebuilds activity increased
- Very good development in Environmental Systems
- Pyrolysis delivery in Fortum, Joensuu

LTM = Last twelve months (July 1, 2015 – June 30, 2016)



# Market environment and market position

# Market position

## Pulp

Market position <b>#1-2</b>	Valmet's market share <b>~40%</b> <sup>1</sup>
Long-term market growth <b>~1%</b>	Estimated market size EUR <b>1.4</b> bn

## Energy

Market position <b>#1-3</b>	Valmet's market share <b>~20%</b> <sup>2</sup>
Long-term market growth <b>~1%</b>	Estimated market size EUR <b>2.0</b> bn

## Competitors

Andritz

Andritz  
Amec Foster Wheeler  
Babcock & Wilcox

1) In 2015

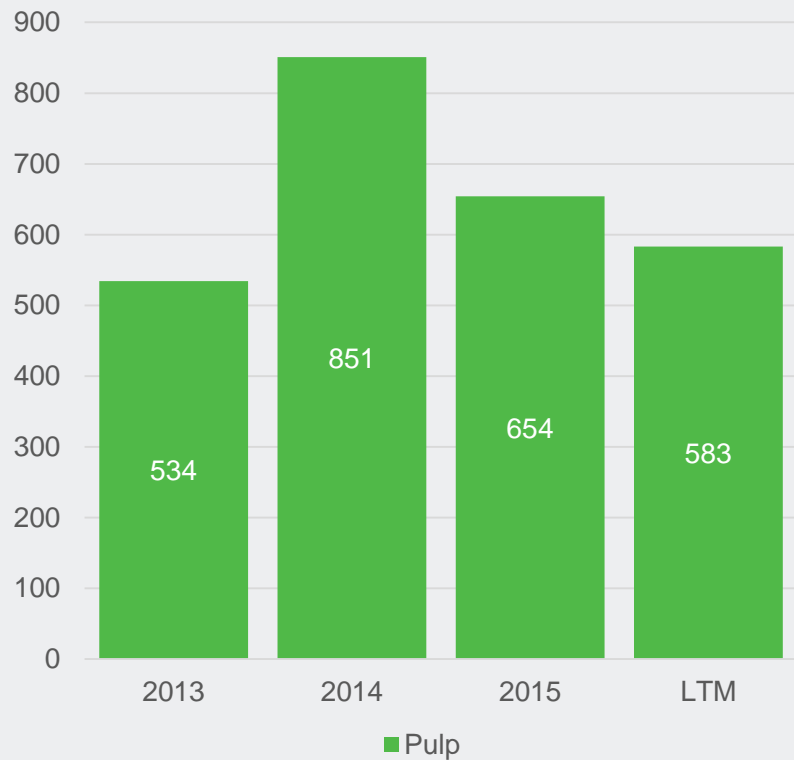
2) In biomass boiler orders in 2011–2015 excluding China



# Market environment

## Pulp mills

Orders received (EUR million)



## Pulp mills

### Become the market leader in pulp

- World pulp demand growth approximately 1% per year
- Mega mill activity exceptionally high in 2014 and 2015
- Rebuild potential in North America and EMEA, also in South America and Asia-Pacific over time
- Environmental systems for emission reduction, debottlenecking and for aging pulp mills
- Lignin separation market growth pending on downstream value chain alternatives
- Competition mainly between Andritz and Valmet

# Market environment

## Energy



## Energy

**Become a globally known supplier of Energy Solutions, which combine all Valmet capabilities**

Expand market geographically

- Position in Asia-Pacific and China (partnering), portfolio in EMEA

Biomass to Energy

- Drivers are threatened by regulations, incentives and acceptance (especially in EMEA)

Waste to Energy

- Circulated Fluidized Bed and gasification for high electricity efficiency

Multifuel to Energy

- Focus on Asia-Pacific and Eastern Europe

Air emission control, regulations drive demand

- Untapped flue gas cleaning market outside Nordics
- Rebuilds of aging power plants in EU
- Energy efficiency and heat recovery in the Nordics
- Sulphur emission regulations in Marine



# Strategic objectives

# Strategic objectives

## Strategic objectives

- Net sales growth to exceed market growth
- Improve profitability

## Business focus

- Improve customer focus and process excellence in all businesses to achieve financial targets
- Adapt and renew our offering to match market demand, and thus generate long-term growth
- Improve flexibility to control cyclicity; footprint, structure, capabilities and processes
- Leverage synergies together with Services and Automation



# Business specific focus areas

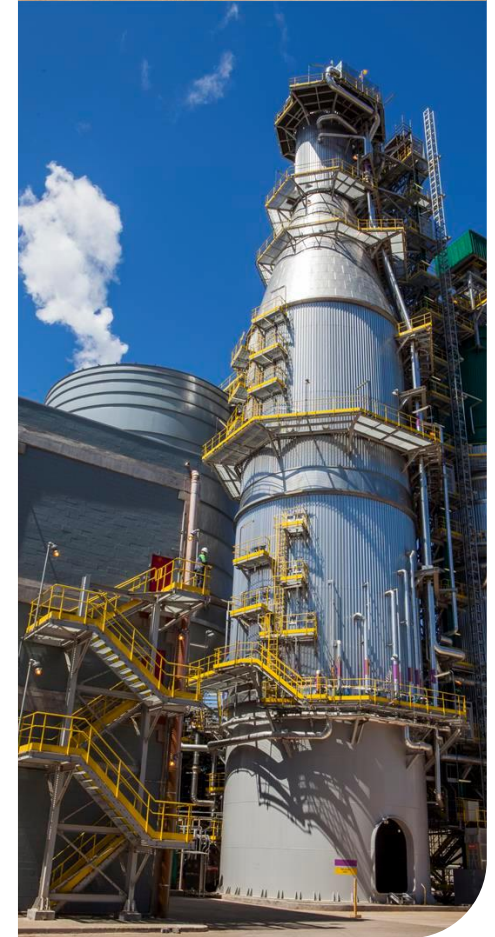
## Business specific focus areas

### Business streams

- **Pulp Mills:** Improve our market share, solution competitiveness and profitability, and drive the commercial breakthrough of selected biotechnologies
- **Energy:** Sustain profitable Energy business, expand global market presence, and secure growth in environmental systems

### Areas

- **North America:** Strengthen the role in pulp rebuilds, maintain position in energy and initiate environmental business
- **South America:** Capitalize opportunities in pulp mills and secure first references in biotechnologies
- **EMEA:** Capitalize rebuild potential in pulp, strengthen position in energy and environmental systems
- **China:** Gain leading market share in pulp and develop position in energy
- **Asia-Pacific:** Capitalize rebuilds in pulp, grow in energy, environmental systems and biotechnologies





# Must-Wins

# Must-Wins in Pulp and Energy

## Must-Wins

## Must-Win initiatives



### Customer excellence

- We aim to become the market leader in Pulp, become a known preferred partner in Asia-Pacific and China in Energy, and grow business together with Services and Automation

### Leader in technology and innovation

- We improve solution competitiveness, commercialize new solutions, and develop our offering to meet the market needs

### Excellence in processes

- We deliver the targets specified for HSE, quality and procurement, focus on project management to improve profitability, and manage better the cyclical nature of our business

### Winning team

- We develop our capabilities and ensure motivation through transparent and rewarding ways of working

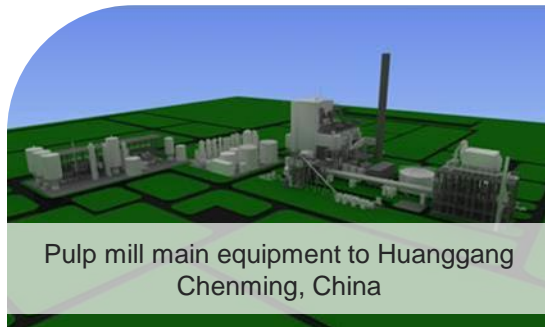


# Case examples



# Case examples

## Recent orders in Pulp



### Huanggang Chenming Pulp & Paper Co

State-of-the art technology for flexible production of softwood kraft pulp and dissolving pulp. Startup in 2017.

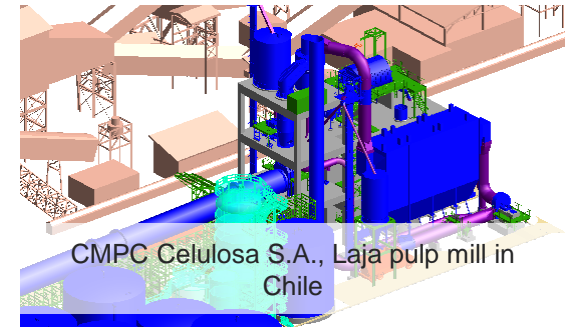
- **Scope:** Main equipment, value ~EUR 110 million



### SCA Östrand Timrå

Upgrade the production from 430,000 tons to 900,000 tons per year. Start-up of entity by May 2018.

- **Scope:** Cooking, fiber line and evaporation plant



### CMPC Celulosa S.A

Replacement of a white liquor plant to comply with new environmental permits and to increase flexibility. Start-up scheduled in February 2018.

- **Scope:** A new white liquor plant

# Case examples

## Recent orders in Energy



Biomass-fired boiler plant to HOFOR in Copenhagen, Denmark

Photo: HOFOR

### HOFOR Energiproduktion

Biomass-fired boiler plant, which will replace an old coal-fired plant. Heat and power production will start in 2019.

- **Scope:** Biomass-fired boiler plant and related biofuel storage and conveyor systems, value over EUR 150 million



Power plant maintenance to Sappi Ngodwana, South Africa

Photo: Sappi

### Sappi Ngodwana

Single-drum conversion project for PC boiler including new superheaters and economizer. Start-up was in April 2016.

- **Scope:** Boiler rebuild



Flue gas cleaning plants to CIECH Soda Polska, Poland

Photo: CIECH Soda

### CIECH Soda Polska

Flue gas cleaning plants to Soda Polska's CHP plants in Janikowo and Inowroclaw. First startup in 2017.

- **Scope:** Flue gas desulphurization technology, selective catalytic reduction plant, value ~EUR 20 & 40 million



# Summary

# Summary

- Valmet aims to become the market leader in pulp and to expand its market presence in energy in Asia-Pacific and China
- We improve solution competitiveness, commercialize new solutions, and develop our offering to support growth
- Valmet will continue to focus on operational excellence for improved deliveries and profitability



