

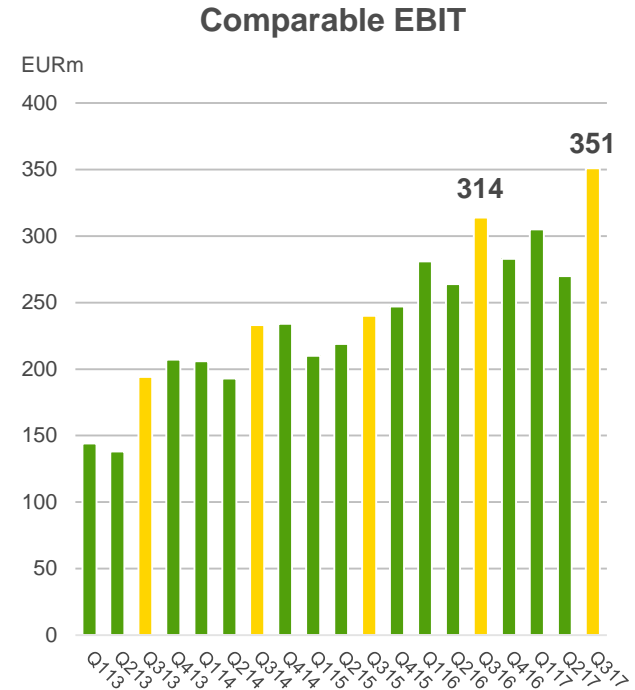
# UPM Q3 2017 RESULTS

**AIMING HIGHER**  
**WITH BIOFORE**

Jussi Pesonen  
President and CEO  
24 October 2017

# Q3 2017 – excellent quarter and further steps in transformation

- Comparable EBIT increased by 12% to EUR 351m (314m)
- Good growth in deliveries and strong operational efficiency with no significant maintenance activity
- Operating cash flow was EUR 486m (506m), net debt decreased to EUR 623m (1,479m)
- UPM transformation continues with new initiatives for future growth



# Q3 2017 – Good market demand

## UPM BIOREFINING

- Good demand, pulp deliveries +5%, strong growth in biofuels
- Pulp prices higher
- No significant maintenance

## UPM PAPER ENA

- Graphic paper deliveries –1%
- Seasonally low fixed costs, including maintenance
- Fibre costs higher

## UPM ENERGY

- Electricity deliveries –7%
- Hydropower generation recovered to normal level, below last year's high level

## UPM SPECIALTY PAPERS

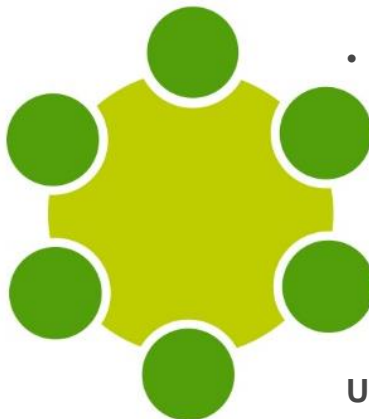
- Good demand, deliveries +3%
- Significant progress in product mix, higher release liner deliveries
- Input cost inflation mitigated

## UPM RAFLATAC

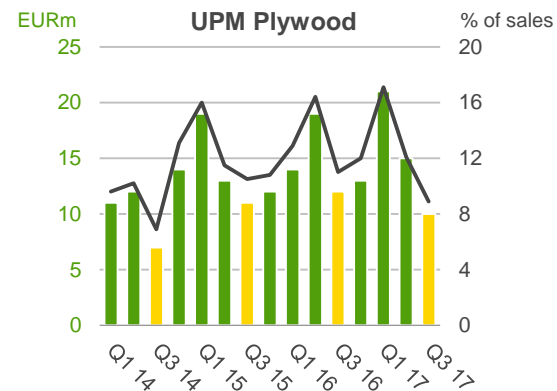
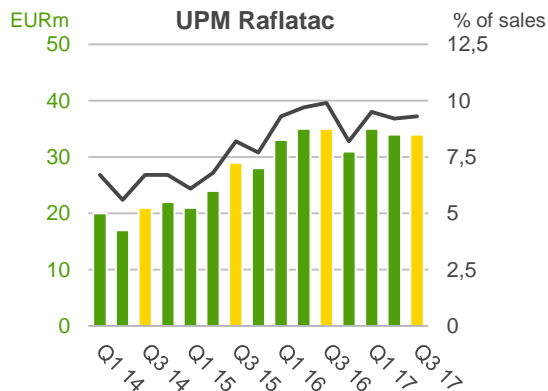
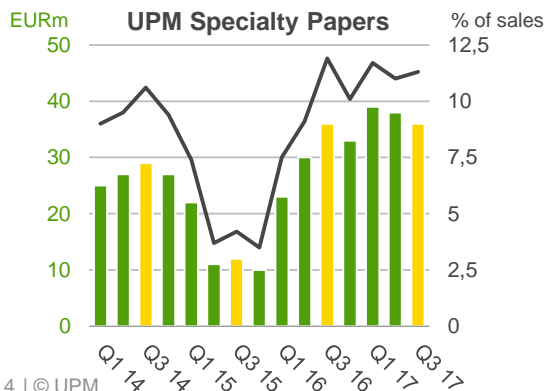
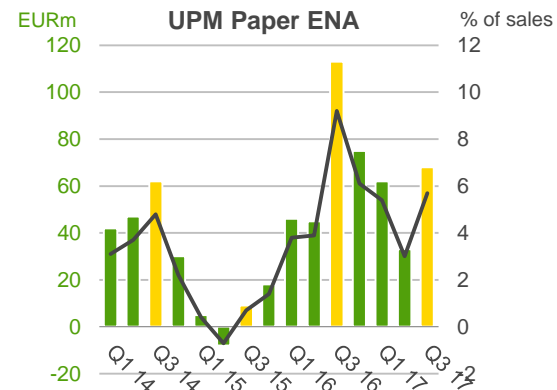
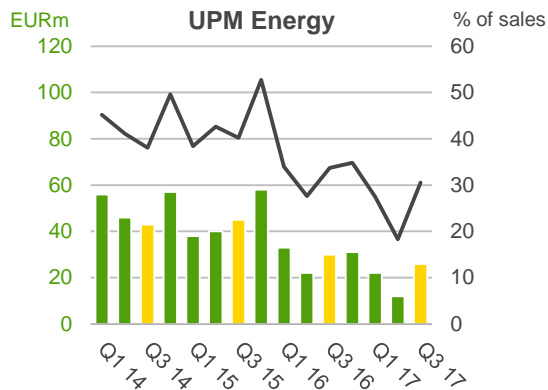
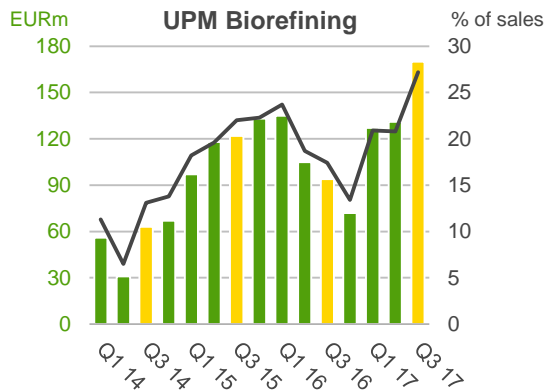
- Good demand globally, deliveries +9% driven in particular by developing markets
- Input cost inflation in sales margins

## UPM PLYWOOD

- Good demand, deliveries +4%
- Modest input cost inflation in sales margins

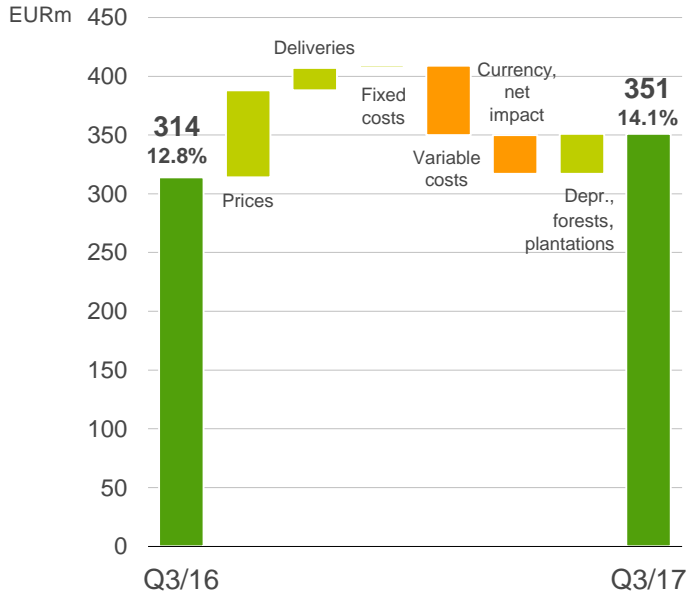


# Comparable EBIT by business area

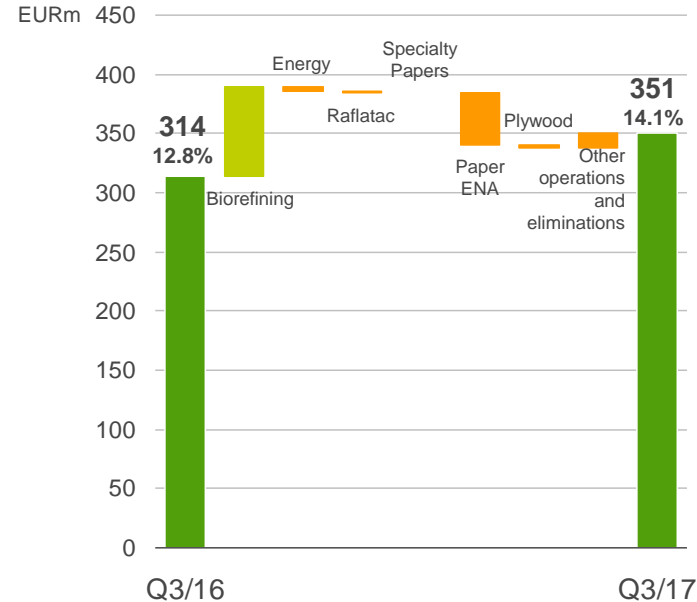


# Comparable EBIT in Q3 2017 vs. Q3 2016

Prices increased more than variable costs.  
Growth in deliveries continued.  
Currencies had a negative impact.

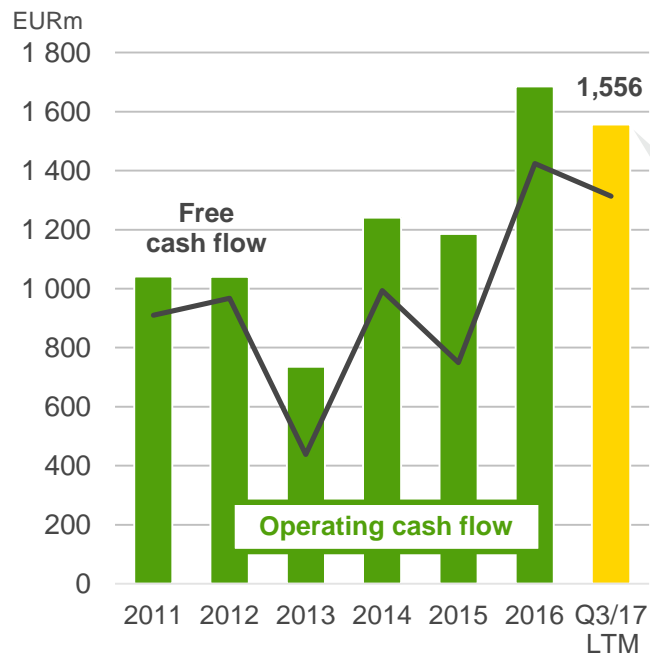


Growth in deliveries in Biorefining,  
Raflatac, Specialty Papers and Plywood.  
Pulp prices increased.



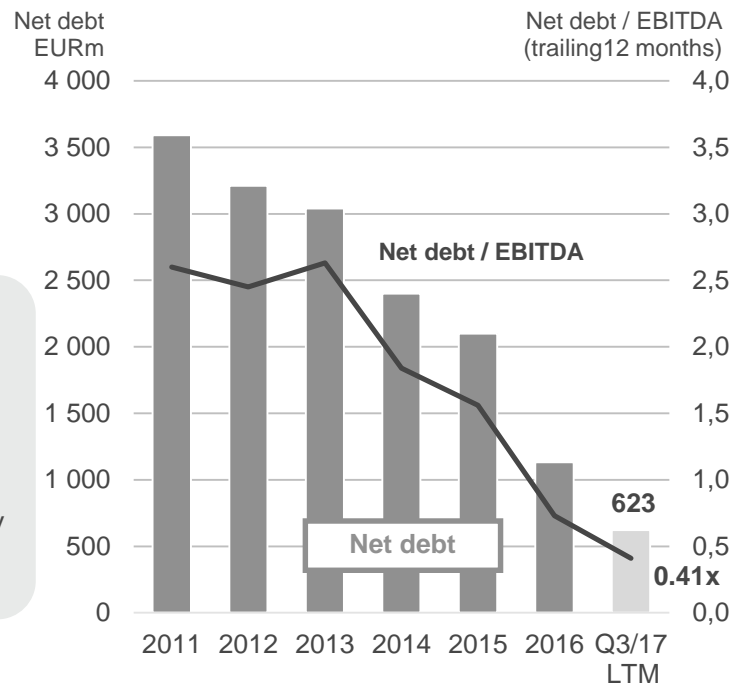
# Strong cash flow and balance sheet

## Operating cash flow



Q3/17 operating cash flow EUR 486m  
Working capital decreased by EUR 54m

## Net debt



# Outlook for 2017

- UPM's profitability improved significantly in 2016 and is expected to continue on a good level in 2017. Comparable EBIT is expected to increase in 2017 compared with 2016.
- Demand growth is expected to continue for most of UPM's businesses, while demand decline is expected to continue for UPM Paper ENA. The focused growth projects continue to contribute to UPM's performance.
- Following a deflationary environment in recent years, 2017 is expected to show modest input cost inflation. UPM will continue measures to reduce fixed and variable costs to mitigate this.
- Q4 2017 is expected to include more maintenance activity than Q3 2017 in UPM Biorefining and UPM Paper ENA.

# UPM invests in the top performing plywood business by expanding the competitive UPM Chudovo mill

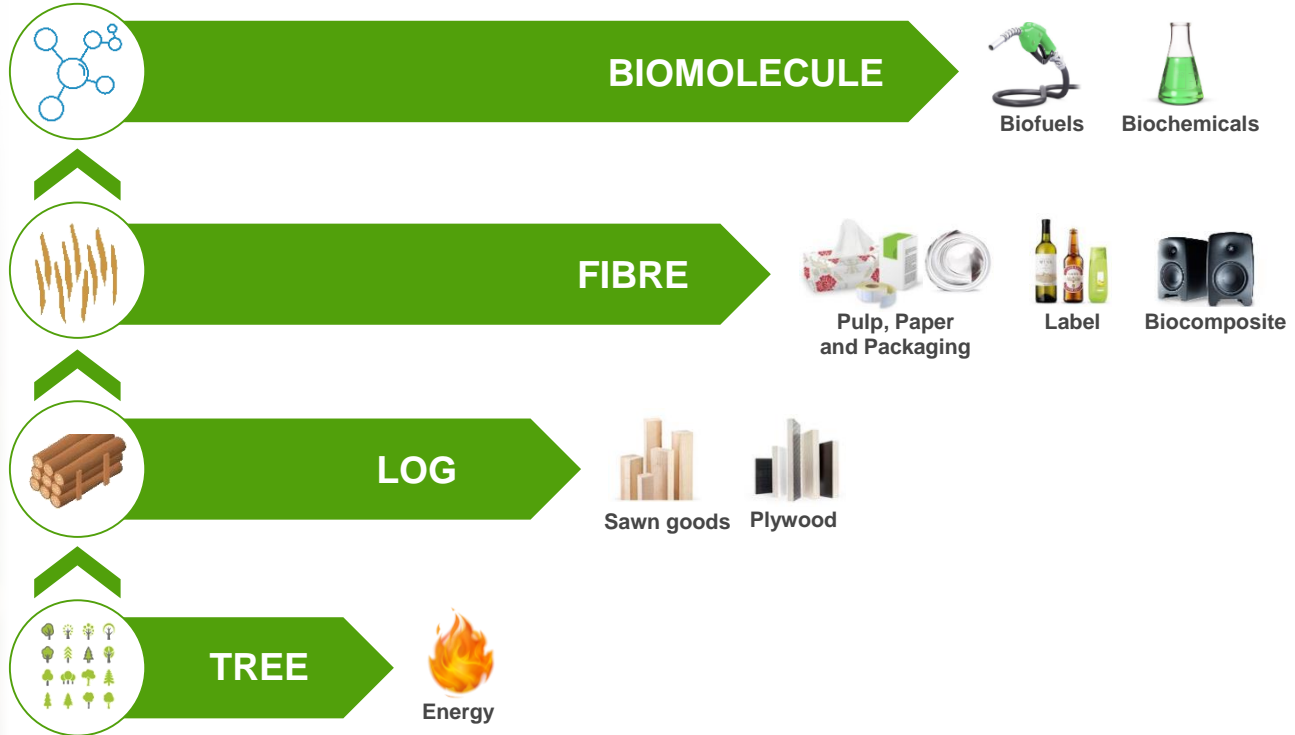
- UPM expands the competitive UPM Chudovo plywood mill in Russia following the successful growth project in UPM Otepää plywood mill in Estonia
- Mill production capacity to increase by 45,000 m<sup>3</sup> to 155,000 m<sup>3</sup>
- The total investment of EUR 50m is estimated to be completed by the end of 2019
- Further strengthen top position in priority end-use areas of construction, vehicle flooring and LNG carriers





# Biofuels and biochemicals are natural evolutionary steps in wood-based value creation

EVOLUTION OF WOOD USAGE



# UPM moves forward in sustainable biochemicals business

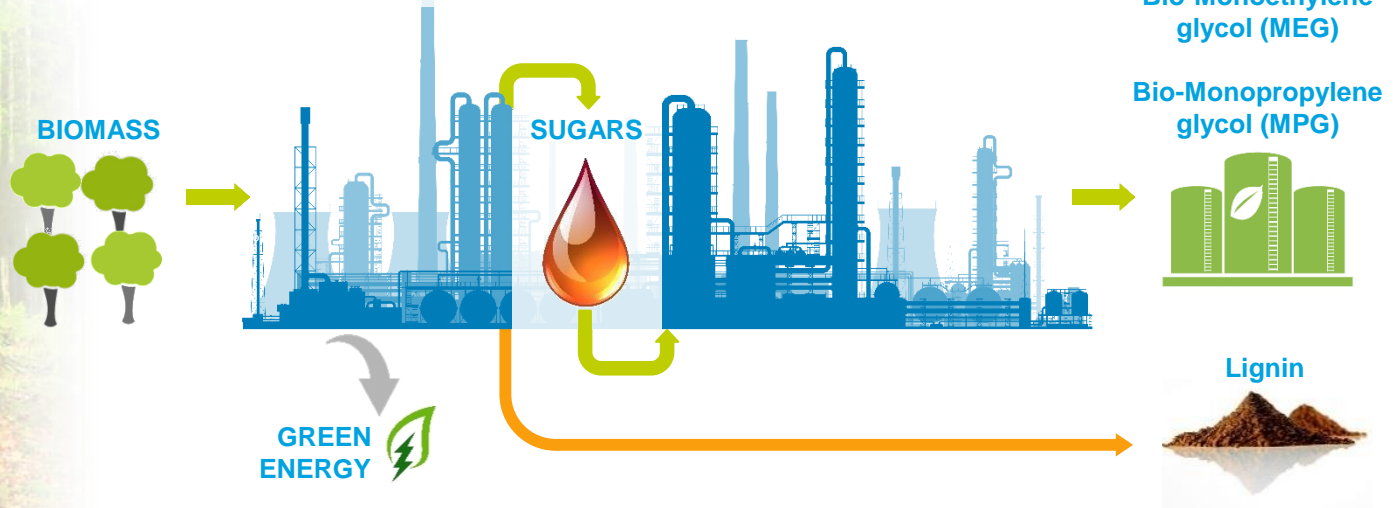
- UPM evaluates potential of building a biorefinery in the Chemical Park Frankfurt-Höchst in Germany
- The planned industrial scale biorefinery would convert wood into bio-monoethylene glycol (bMEG), bio-monopropylene glycol (bMPG) and lignin up to 150,000 metric tons per year
- UPM proceeds with detailed commercial and basic engineering study. The estimated duration of this phase is about 12 months
- If this phase is concluded successfully, UPM would initiate the company's regular process of analysing and preparing an investment decision

# Biochemicals biorefinery targeting to produce bio-MEG, bio-MPG and lignin from hardwood

## BIOREFINERY PROCESS

**STEP 1: SUGAR PULPING**  
Disintegrating wood into sugars,  
lignin and green energy

**STEP 2: CHEMICAL CONVERSION**  
Conversion of sugars into targeted  
biochemicals



40%  
Cellulose

30%  
Hemi-cellulose

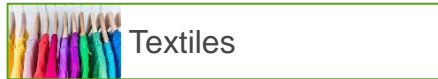
25%  
Lignin

# Biochemicals products are sustainable and competitive drop-in alternatives for brand owners



## Mono Ethylene Glycol

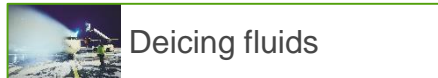
- Existing fossil-based market
- Market demand > 26 mio tons
- CAGR >3%
- Application examples:



Textiles



Bottles & Packaging

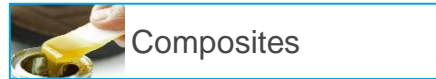


Deicing fluids

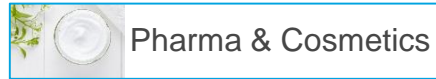


## Mono Propylene Glycol

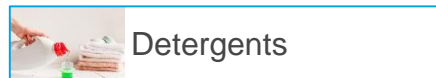
- Existing fossil-based market
- Market demand >2 mio tons
- CAGR >5%
- Application examples:



Composites



Pharma & Cosmetics

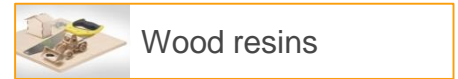


Detergents



## Lignin

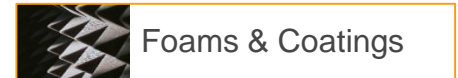
- Performance chemical
- Application driven
- Strong IP position
- Application examples:



Wood resins



Plastics



Foams & Coatings

# Growth initiatives – focused growth projects have contributed well to UPM's profits and returns



## Current ongoing focused growth projects

- Kymi pulp mill expansion 2
- Raflatac expansions in Poland and Finland
- Kaukas pulp mill expansion 2
- Chudovo plywood mill expansion

## Long term growth opportunity in pulp

- Discussions continue with the Government of Uruguay concerning infrastructure development

## New biomolecule businesses

- Evaluation of building a biochemicals refinery
- Lappeenranta Biorefinery reached designed capacity and generates a good financial return

# Summary

- Consistent and continued improvement in profitability and financial standing for several years, despite seasonal quarterly variations
- Favourable market demand continued
- Comparable EBIT is expected to increase in 2017 compared with 2016
- UPM transformation continues with new initiatives for future growth





**UPM**

The Biofore  
Company

# AIMING HIGHER

WITH BIOFORE

## Direction: grow businesses with strong long-term fundamentals and sustainable competitive advantage

### Operating model

→ *Better than sum of parts*

- Separate businesses
- Top performance
- Corporate benefits

### Performance

→ *Continuous improvement*

- Profit focus
- High performing people
- Value-based leadership
- Responsibility
- Innovation

### Capability

→ *Foundation for opportunities*

- Strong cash flow
- Strong balance sheet
- Corporate structure

### Capital allocation

→ *Attractive returns*

- Attractive dividend
- Focused growth investments
- Selected larger investments
- Synergistic M&A

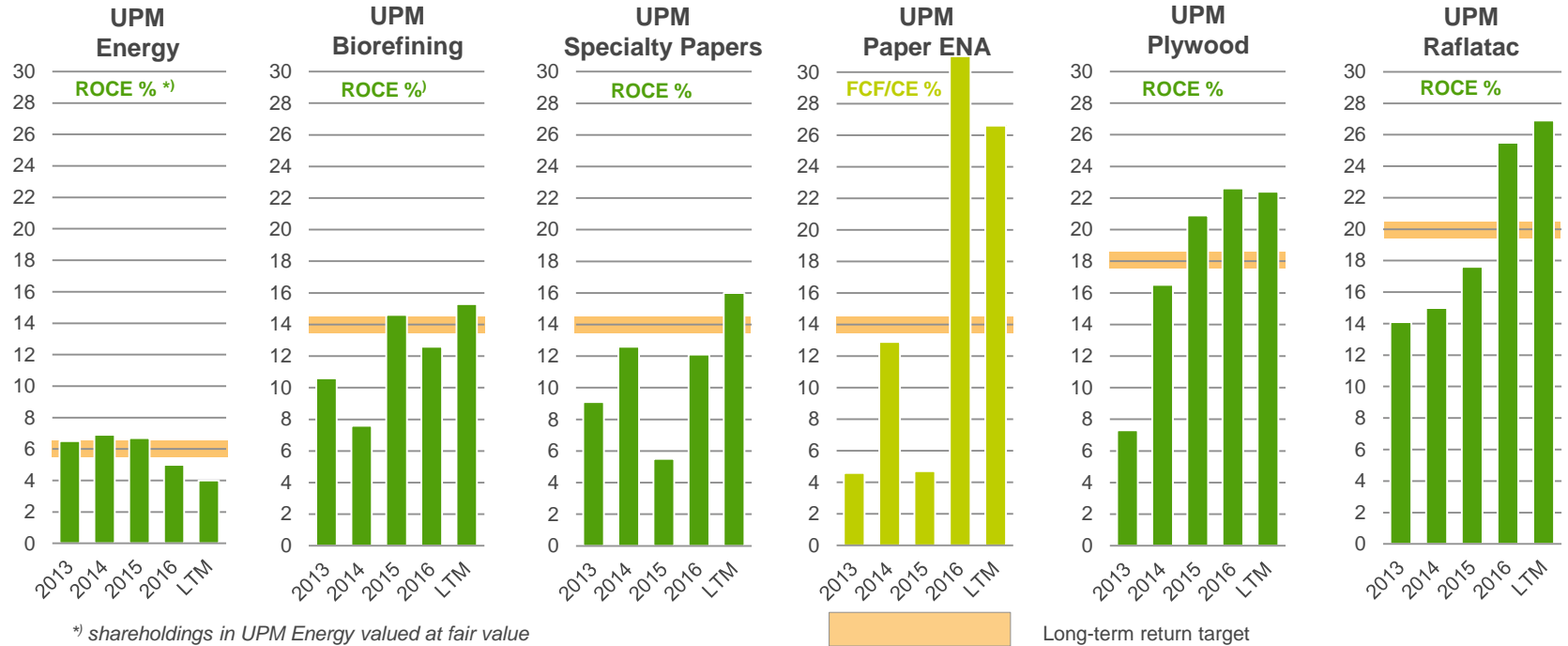
### Growth

→ *Earnings growth and valuation*

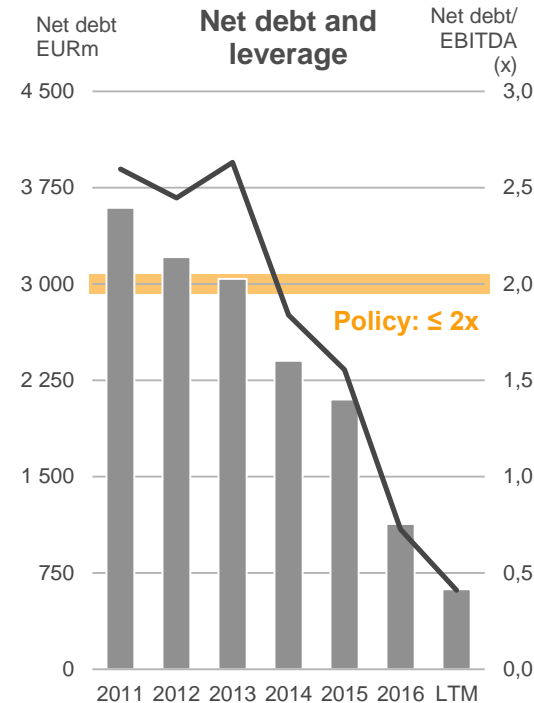
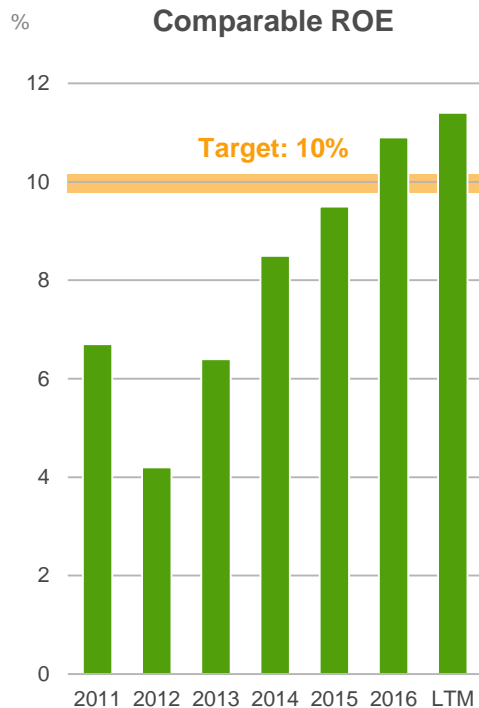
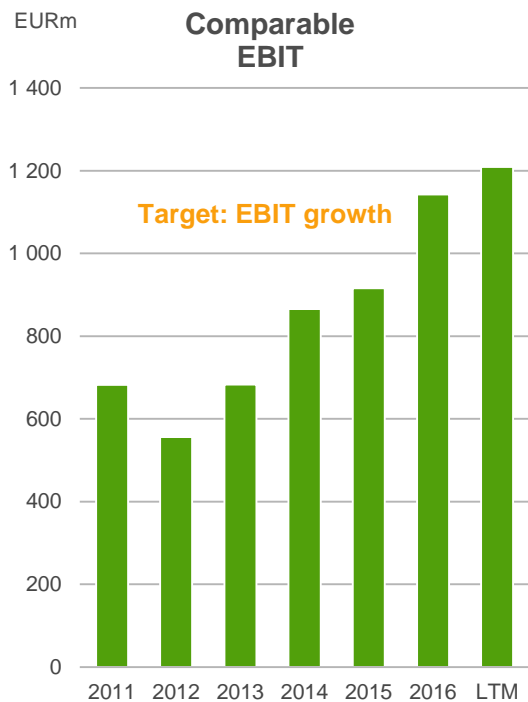
- Current growing businesses
- New bio-based businesses



# Business area long-term targets compared with realised returns

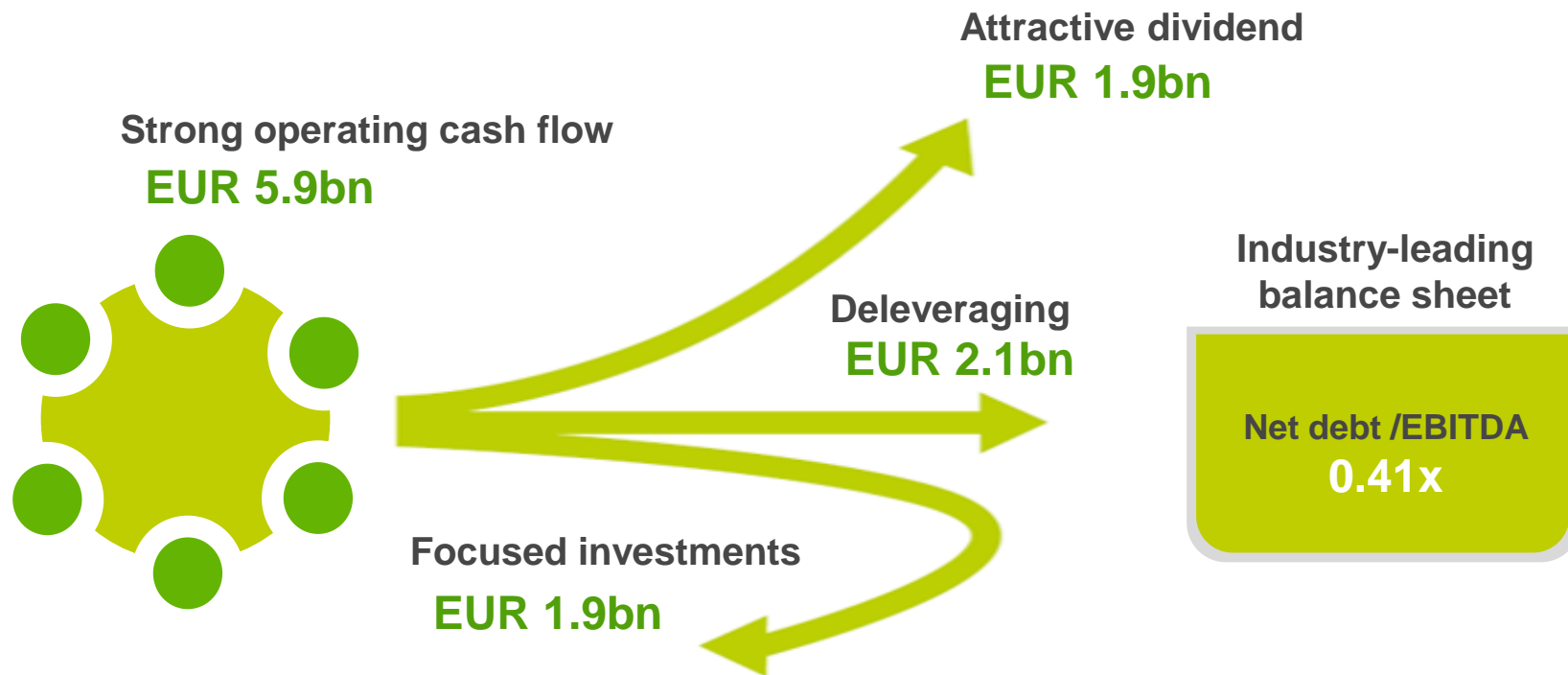


# Group financial performance



Comparable figures for 2014 – 2017,  
excluding special items for earlier years

# 5-year cumulative cash flow – disciplined capital allocation in action



# Capital allocation

## – maintaining capability for future opportunities

1.

Maintain strong  
balance sheet,  
investment grade  
metrics  
*Net debt/EBITDA*  
*2x or less*

2.

Attractive dividend  
*30-40% of operating cash flow per share*  
Capex in attractive focused growth projects  
*IRR exceeds ROCE targets*

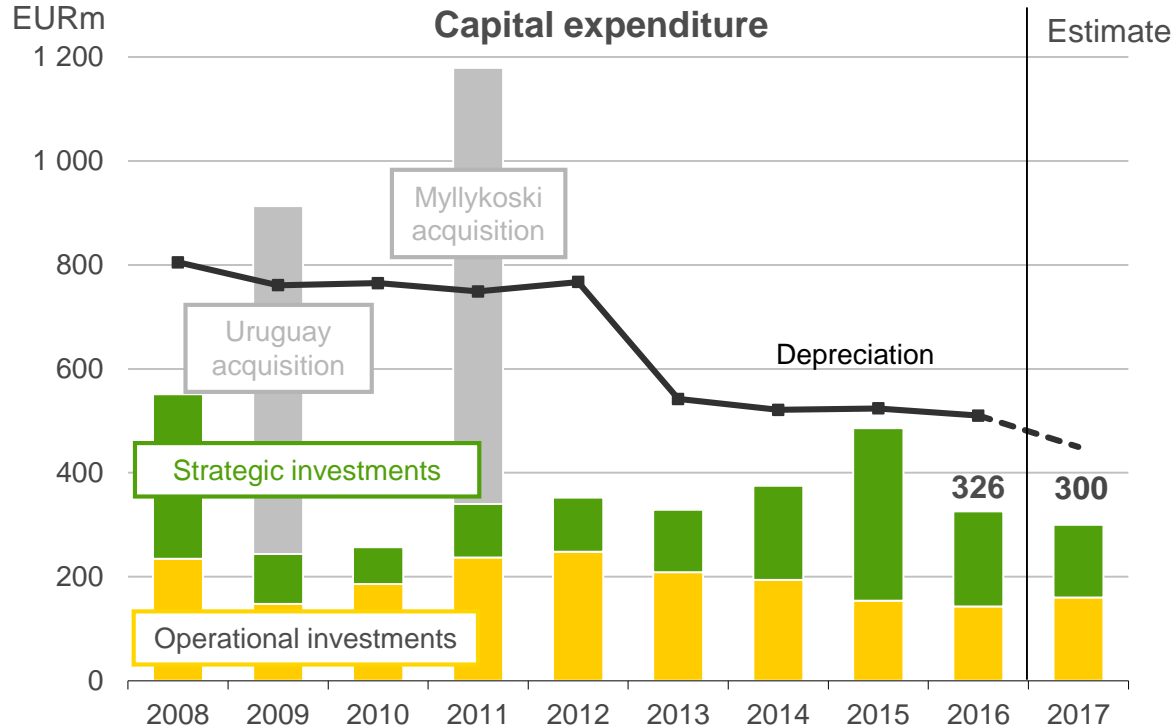
3.

Capex in attractive larger growth opportunities  
*IRR exceeds ROCE targets*  
M&A, if the opportunity and timing are right  
*IRR exceeds ROCE targets*

4.

Additional shareholder distribution selectively  
*balance long term free cash flow cycles*

# Low investment needs in existing assets allow growth projects with modest total capex



# UPM's main currency exposures

- Key currency exposures USD, GBP and JPY
- Policy to hedge an average of 50% of the estimated net currency cash flow for the next 12 months

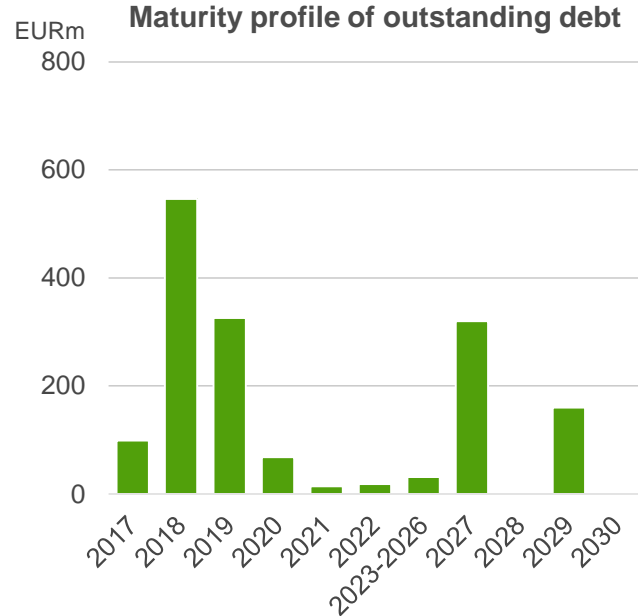
Estimated annual foreign currency net cash flow, before hedging

	USD	GBP	JPY	Others
EURm	1,060	370	210	90

# Maturity profile and liquidity

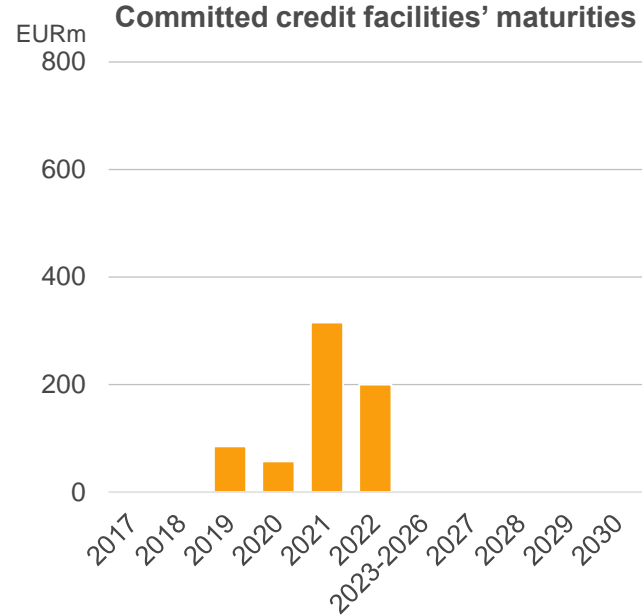
## Liquidity

Liquidity on 30 September 2017 was EUR 1.5bn (cash and unused credit facilities)



## Committed credit facilities

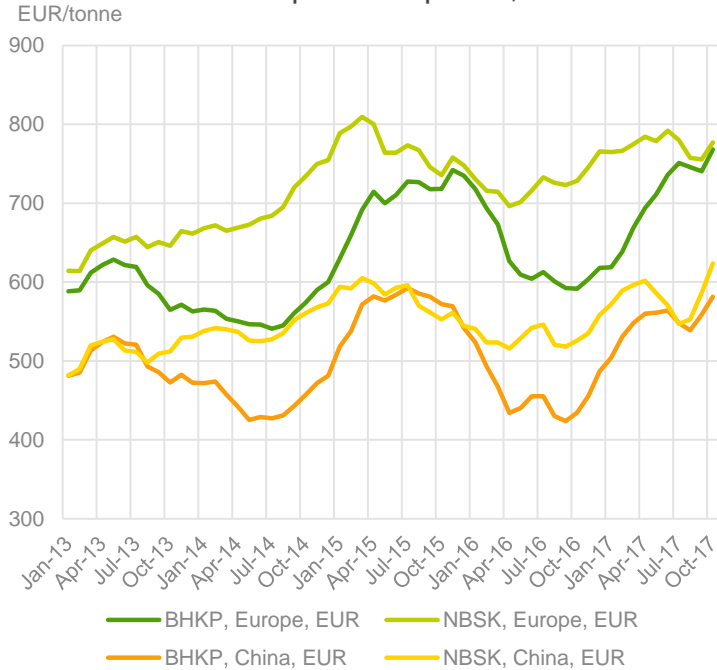
Bilateral committed credit facilities  
EUR 657 million for general financing purposes



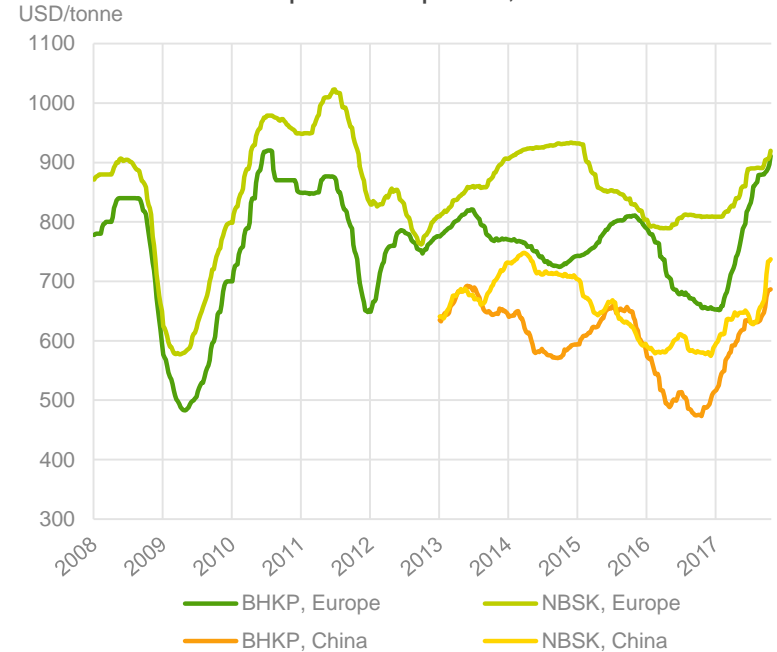
# UPM Biorefining

## Chemical pulp market

### Pulp market prices, EUR



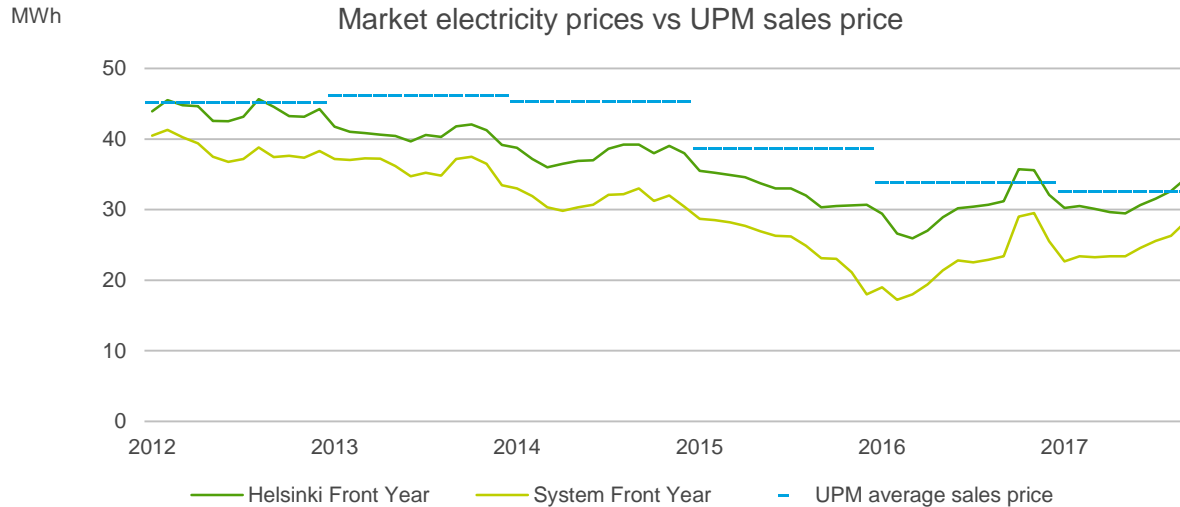
### Pulp market prices, USD



Sources: FOEX Indexes Ltd, ECB



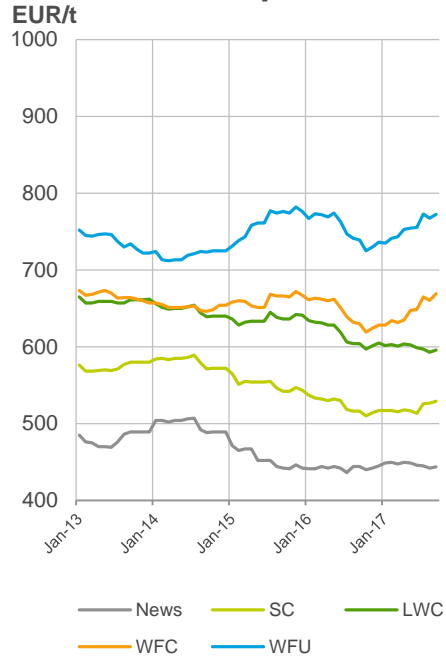
# Cost efficient generation enables robust profitability also in challenging market environment



UPM Energy profitability	2012	2013	2014	2015	2016	Q117	Q217	Q317
Comparable EBIT, EURm	217	186	202	181	116	22	12	26
% of sales	45.0	39.9	43.5	43.6	32.7	27.5	18.3	30.5

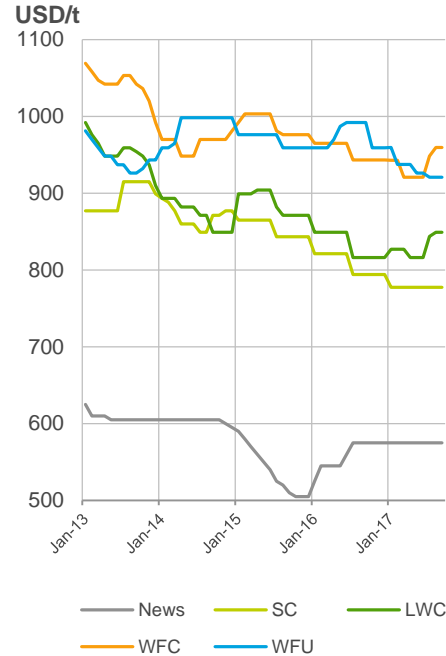
# Graphic paper prices

## Europe

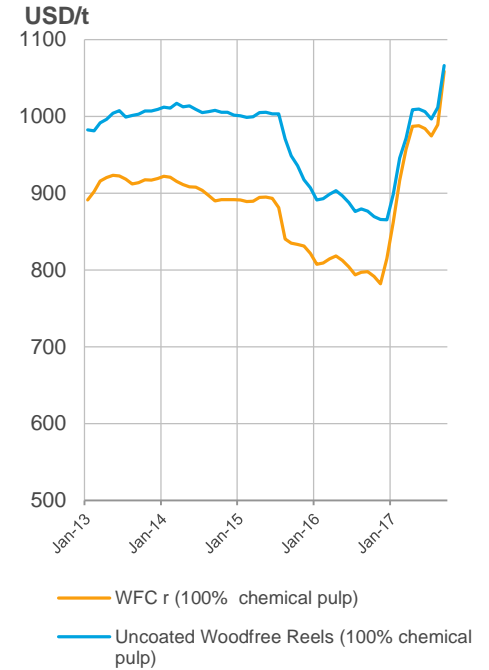


Sources: PPI, RISI

## North America

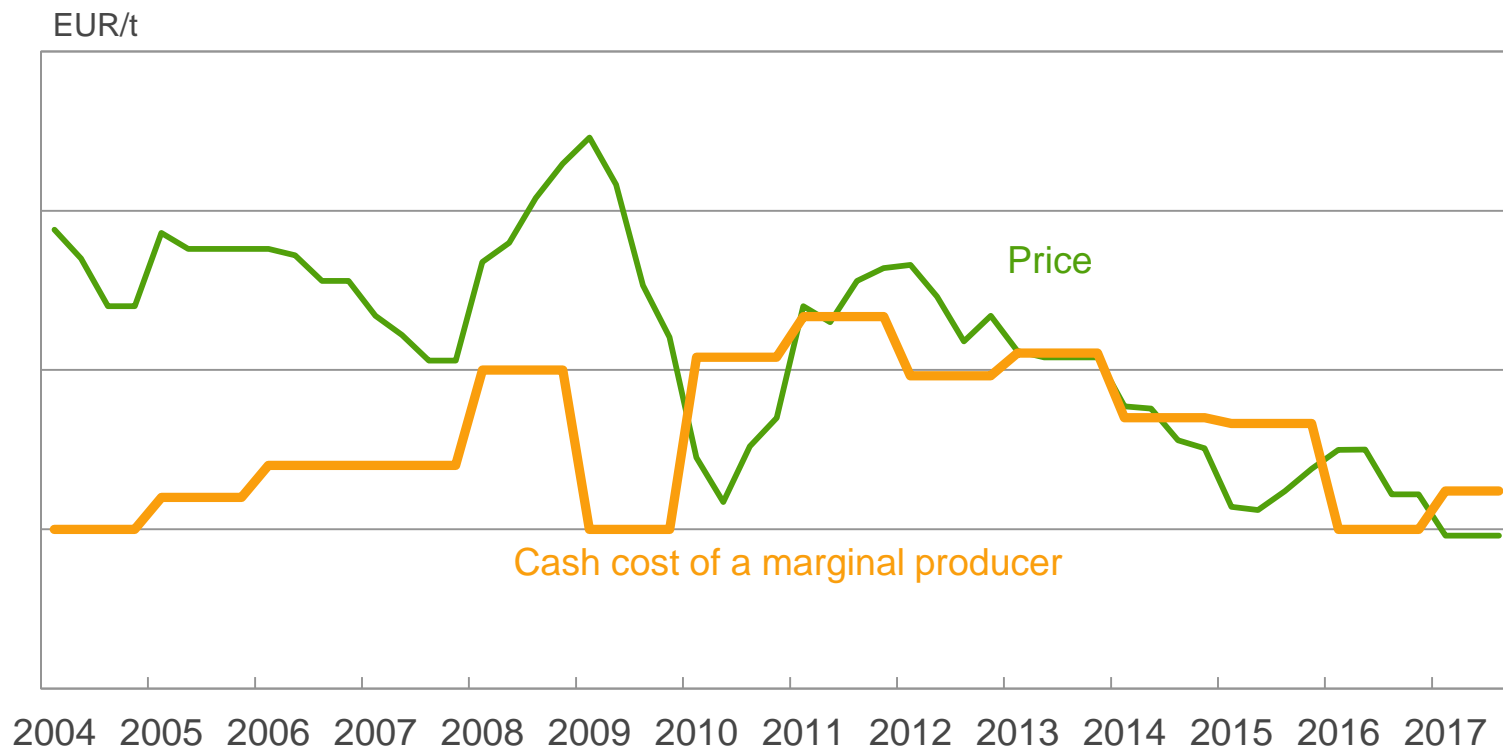


## China





# Paper price vs. cash cost of marginal cost producer





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