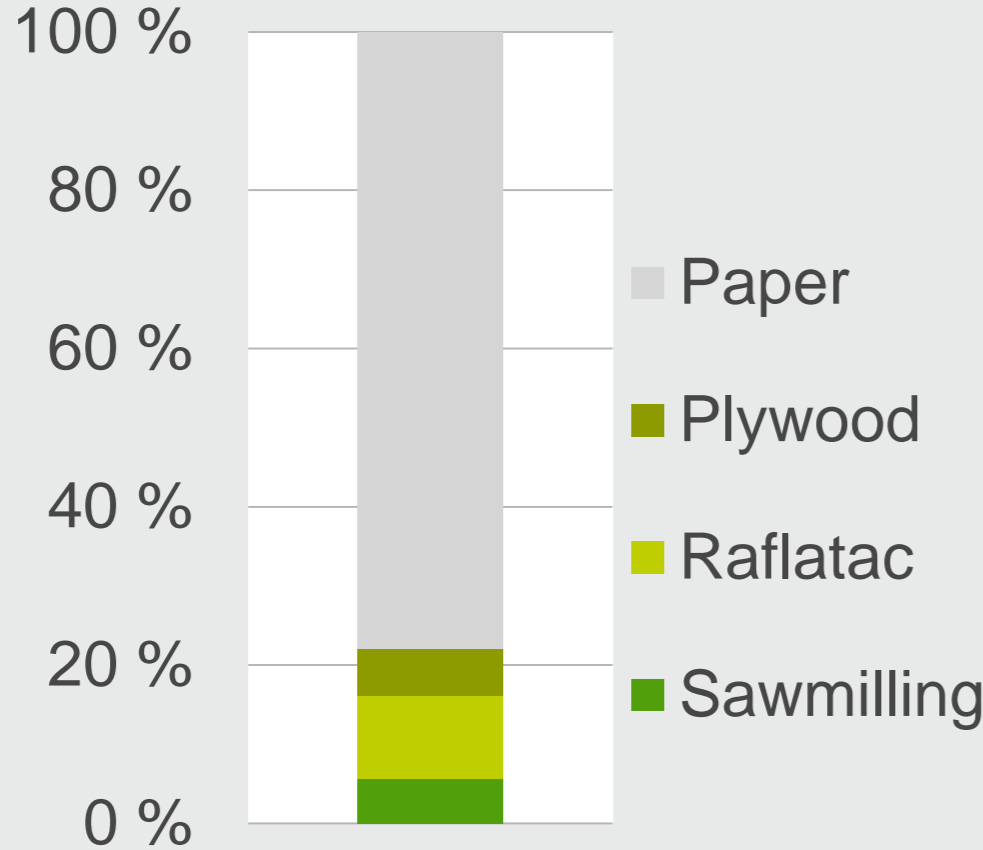
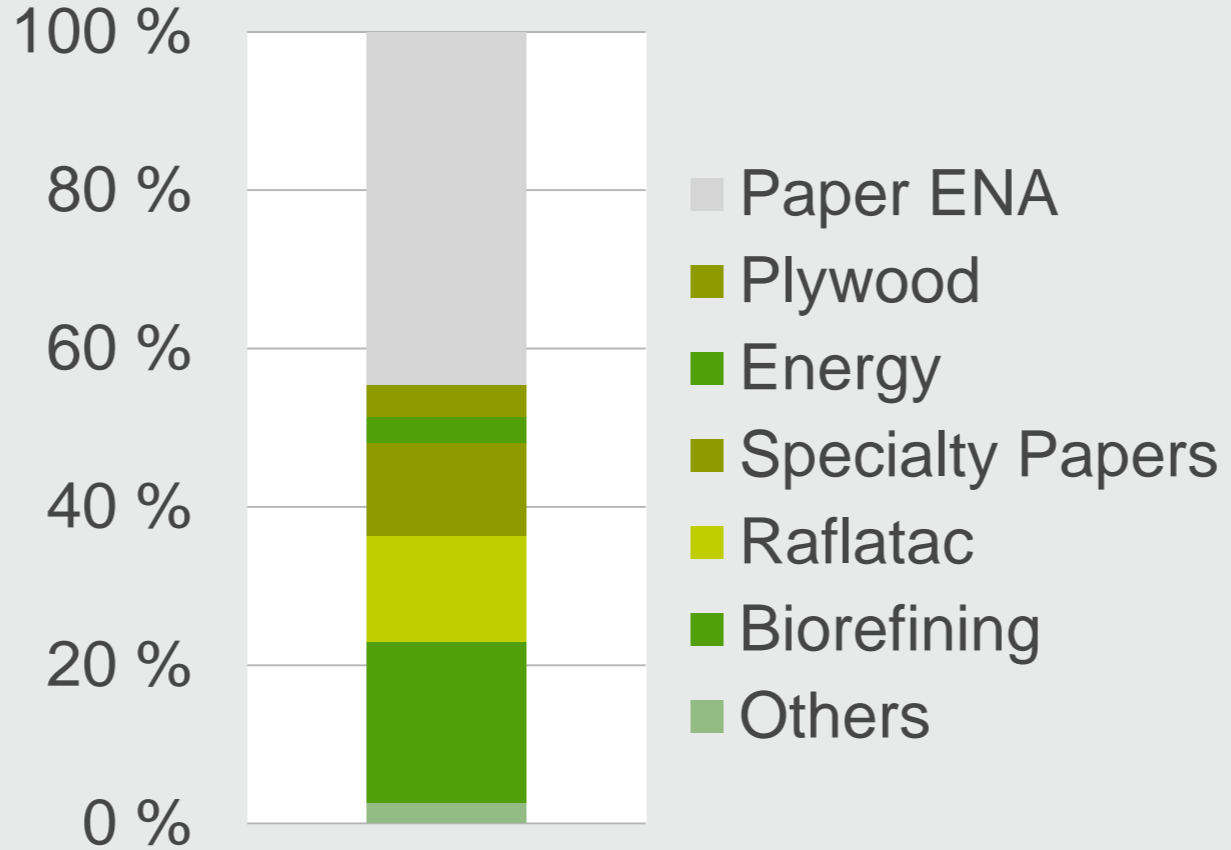


# UPM – THE BIOFORE COMPANY

Investor presentation  
February 2017



# UPM in transformation

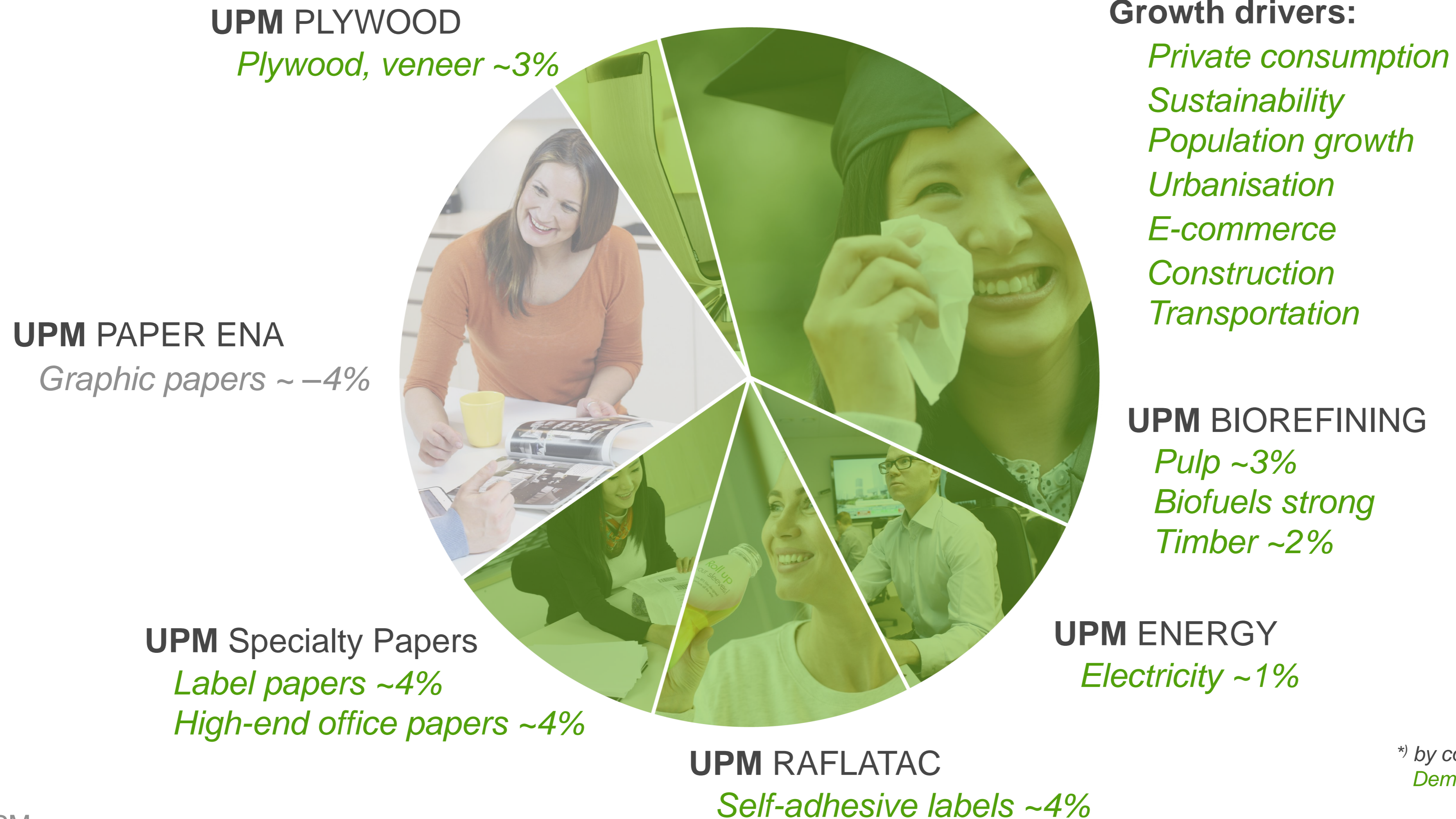
	<b>2008</b> vertically integrated paper company	<b>2016</b> six separate businesses	<b>Business model</b> Promotes value creation
<b>Sales</b>			<b>Business portfolio</b> Increasing share of businesses with strong long-term fundamentals for profitability and growth
<b>Sales</b>	EUR 9.5bn	EUR 9.8bn	<b>Business performance</b>
<b>EBIT<sup>*)</sup></b>	EUR 513m	EUR 1,143m	Continuous improvement in financial, social and environmental performance
<b>ROE<sup>*)</sup></b>	3.5%	10.9%	
<b>Net debt</b>	EUR 4.3bn	EUR 1.1bn	<b>Disciplined capital allocation</b>
<b>Market cap</b>	EUR 4.7bn	EUR 12.5bn	Driving value creation

<sup>\*)</sup> excluding special items for 2008, comparable figures for 2016

# UPM business portfolio today<sup>\*)</sup>

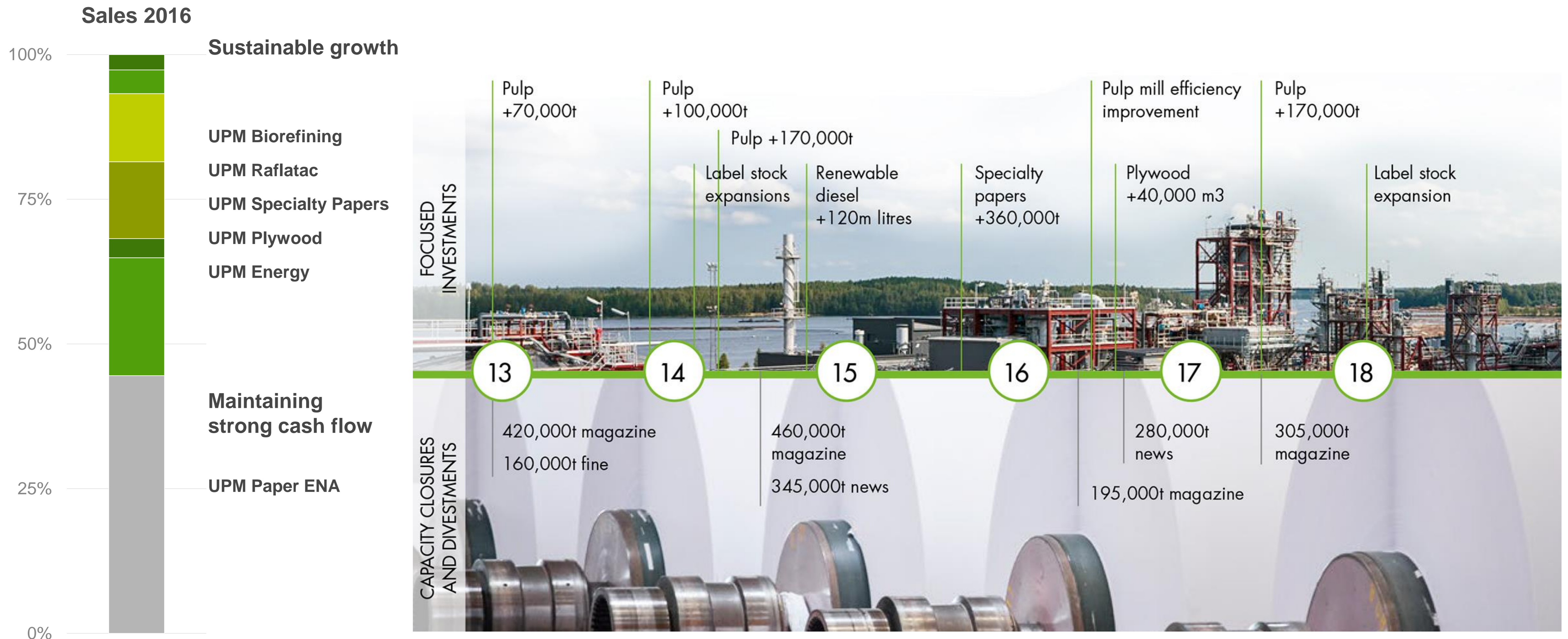
Competitive businesses with strong market positions

Operating on healthily growing markets



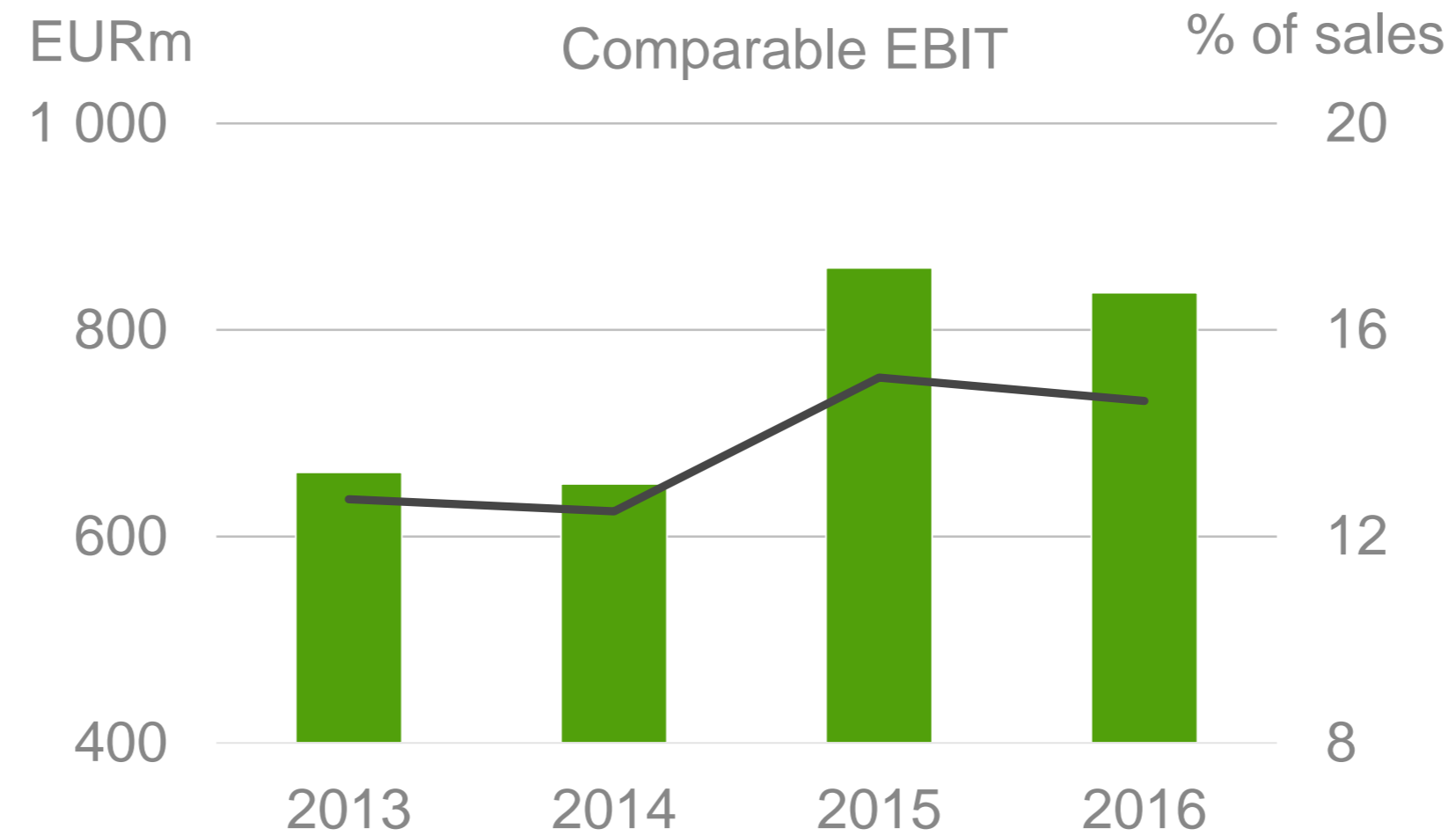
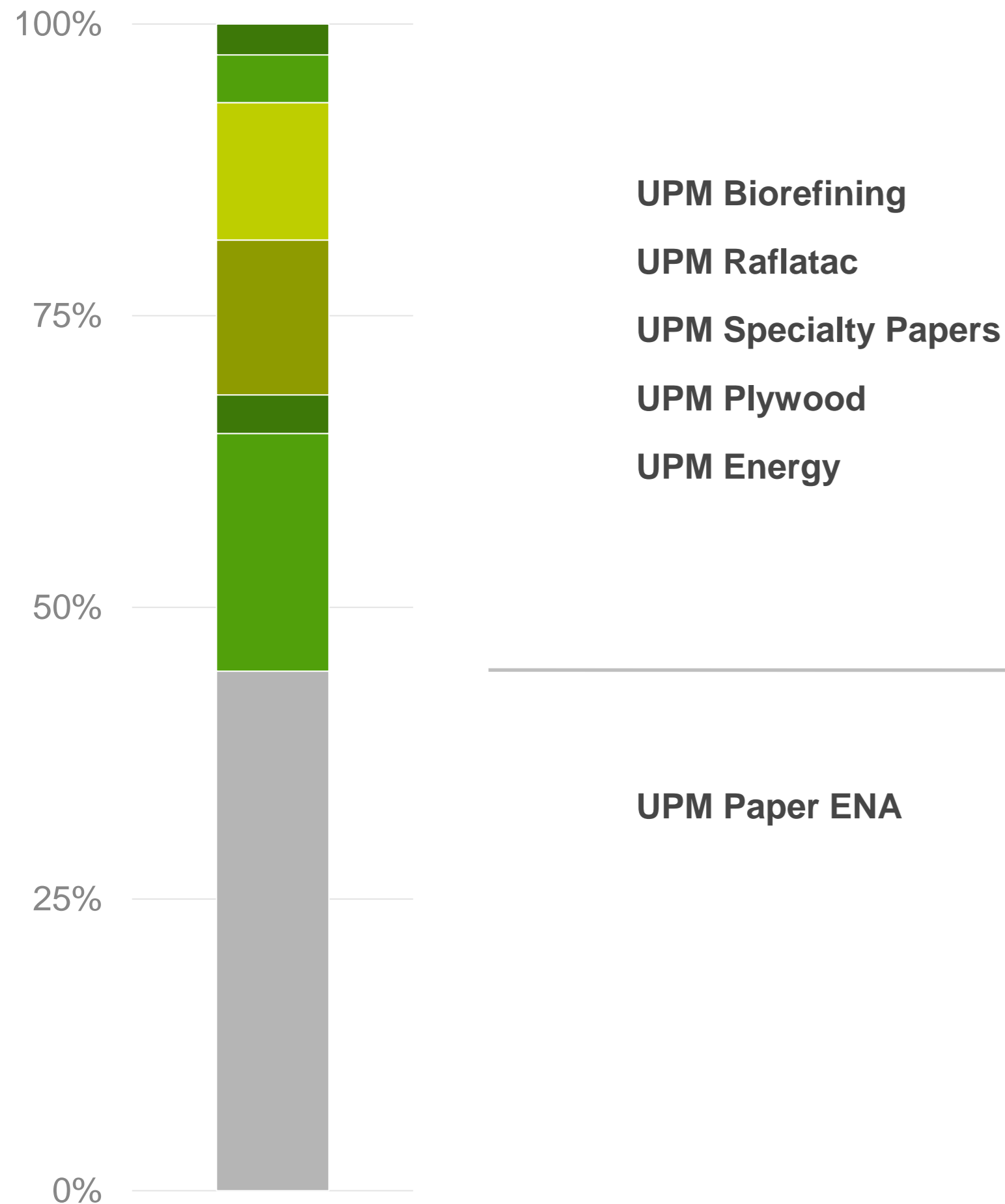
<sup>\*)</sup> by comparable EBIT 2016  
Demand trend growth, % pa

# Increasing share of businesses with strong long-term fundamentals for profitability and growth



# Value creation through sustainable growth and cash generation

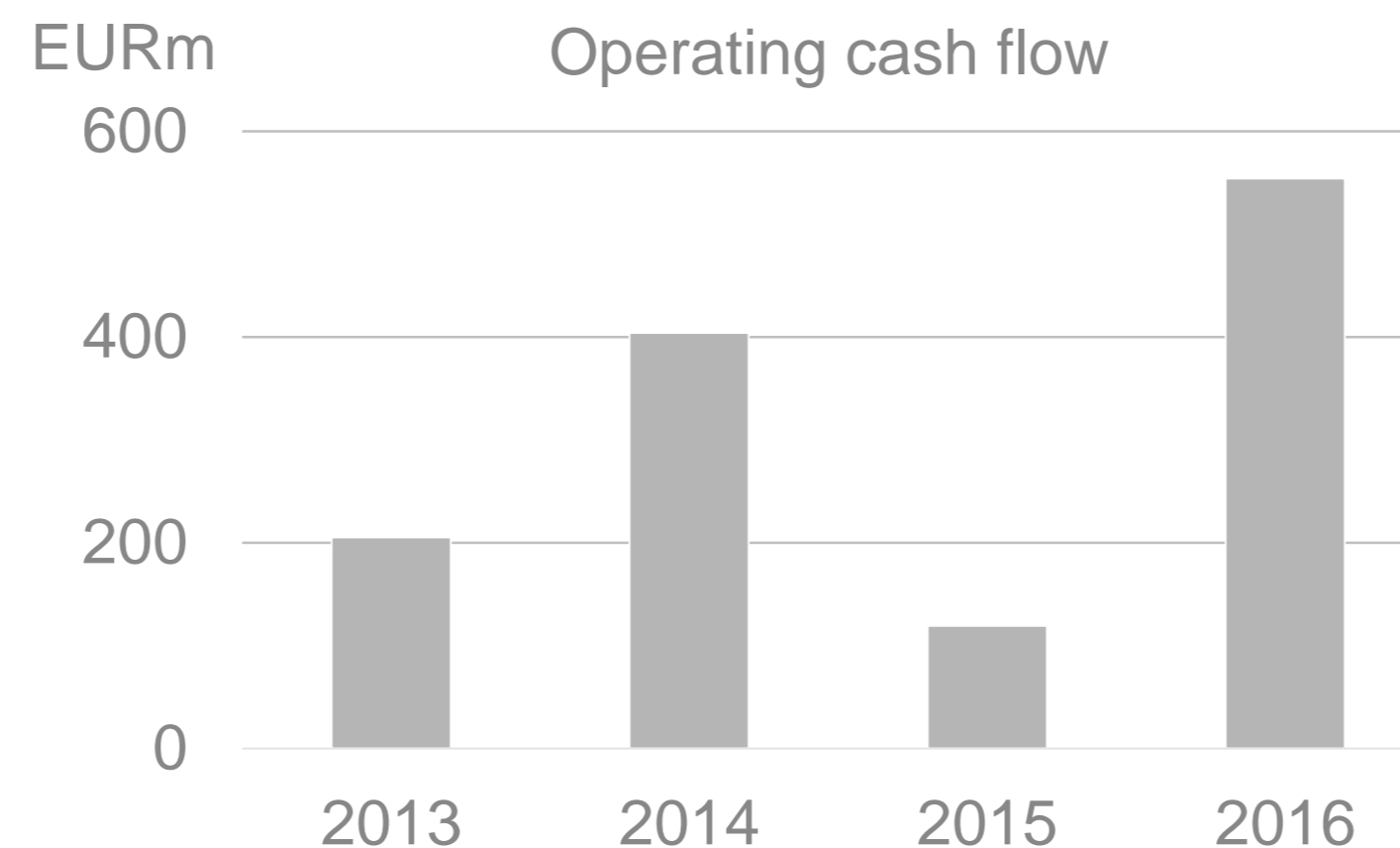
Sales 2016



## Sustainable growth

- Commercial success
- Cost efficiency
- Focused growth investments
- Product mix development

UPM Paper ENA



## Maintain strong cash flow

- Commercial success
- Cost efficiency
- Efficient use of assets, including restructuring

# Focused growth investments contributed significantly to 2016 results



## Fully contributing in 2016

- Pietarsaari pulp mill expansion
- Fray Bentos pulp mill expansion
- Kymi pulp mill expansion
- Raflatac expansion in APAC, Poland

80% run-rate of the  
EUR 200m EBITDA  
target achieved in 2016



## Further optimisation potential

- Lappeenranta biorefinery
- Changshu speciality papers

## Ramp-up in progress

- Otepää plywood mill expansion
- Kaukas pulp mill efficiency

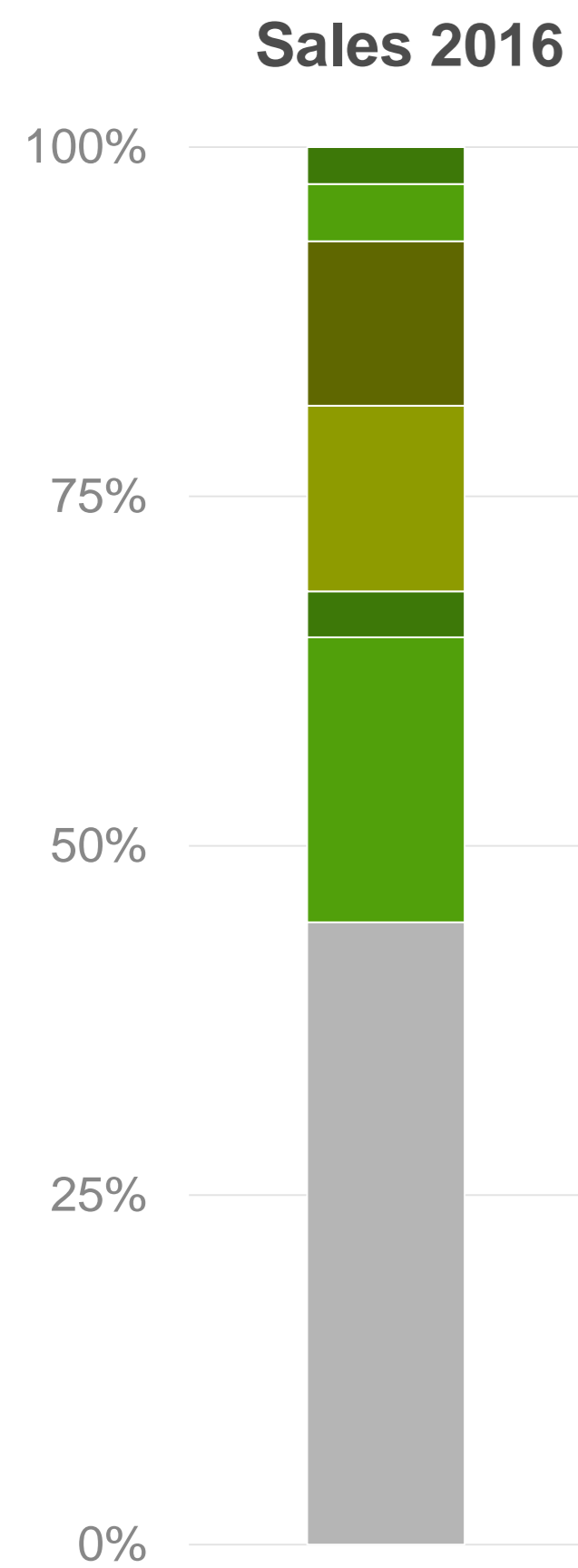


## Under construction

- Kymi pulp mill expansion
- Raflatac expansion in Poland



# Focused investments are delivering growth



## Average delivery growth 2011 –2016

<b>UPM Biorefining</b>	Pulp Biofuels	CAGR <b>+3%</b> <b>New business</b>
<b>UPM Raflatac</b>	Standard products Films and specials	CAGR <b>+4%</b> CAGR <b>+8%</b>
<b>UPM Specialty Papers</b>	Label materials Cut-size	CAGR <b>+4%</b> CAGR <b>+6%</b>
<b>UPM Plywood</b>	Plywood	CAGR <b>+3%</b>



# New long-term financial targets

## Business area returns

Increased return targets for each business area

**ROCE, FCF/CE**

## Group earnings growth

Earnings growth through focused top-line growth and margin expansion

**Comparable EBIT**

## Capital structure and shareholder returns

Efficient capital structure, investment grade rating and attractive shareholder returns

**Net debt / EBITDA**  
**ROE %**  
**Dividend policy**





# New long-term financial targets

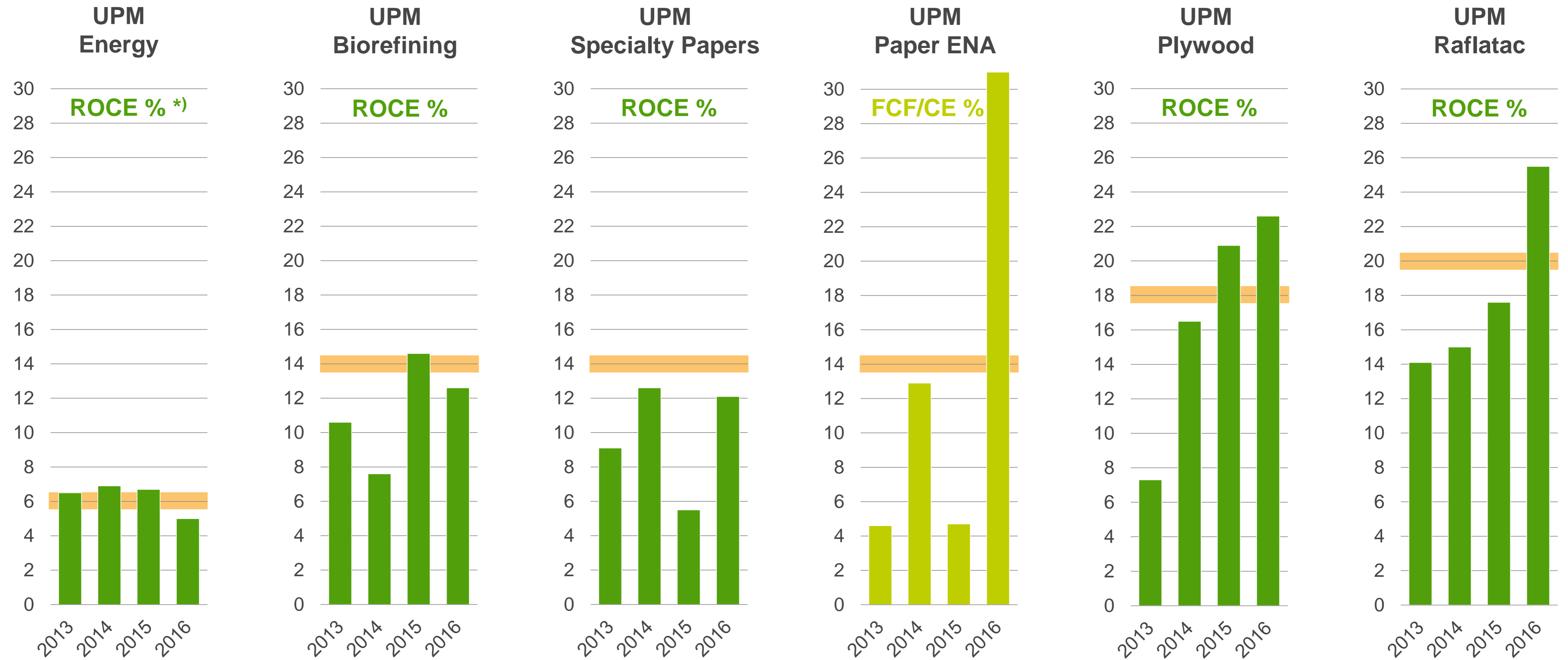
## Business area targets

Business area	Return target
UPM Energy	ROCE 6%
UPM Biorefining	ROCE 14%
UPM Specialty Papers	ROCE 14%
UPM Paper ENA	FCF/CE 14%
UPM Plywood	ROCE 18%
UPM Raflatac	ROCE 20%

## UPM group targets

- **Comparable EBIT growth** through focused top-line growth and margin expansion
- **Comparable ROE: 10%**
- **Net debt / EBITDA:** around 2x or less
- **Dividend policy:** 30-40% of operating cash flow per share

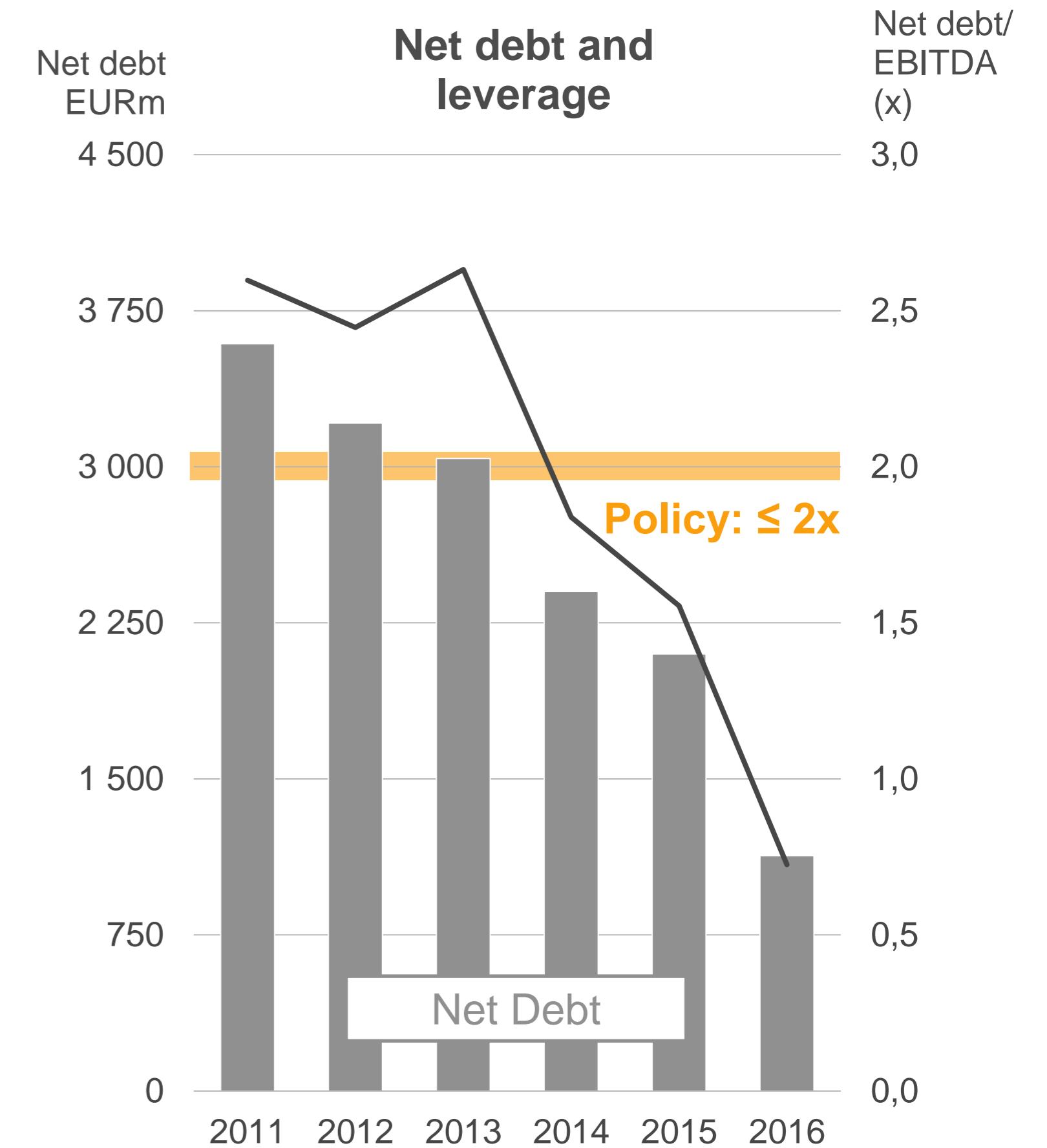
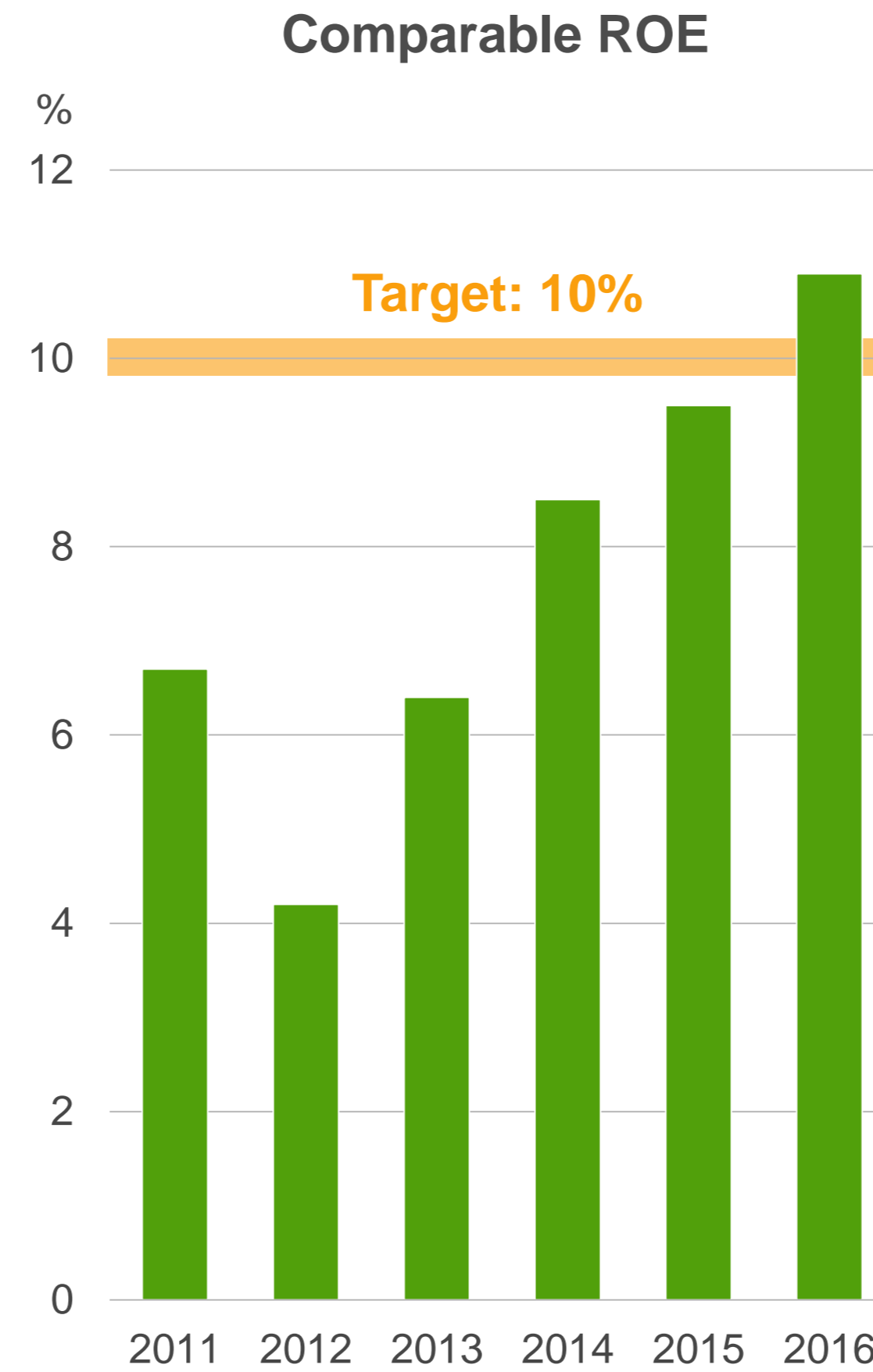
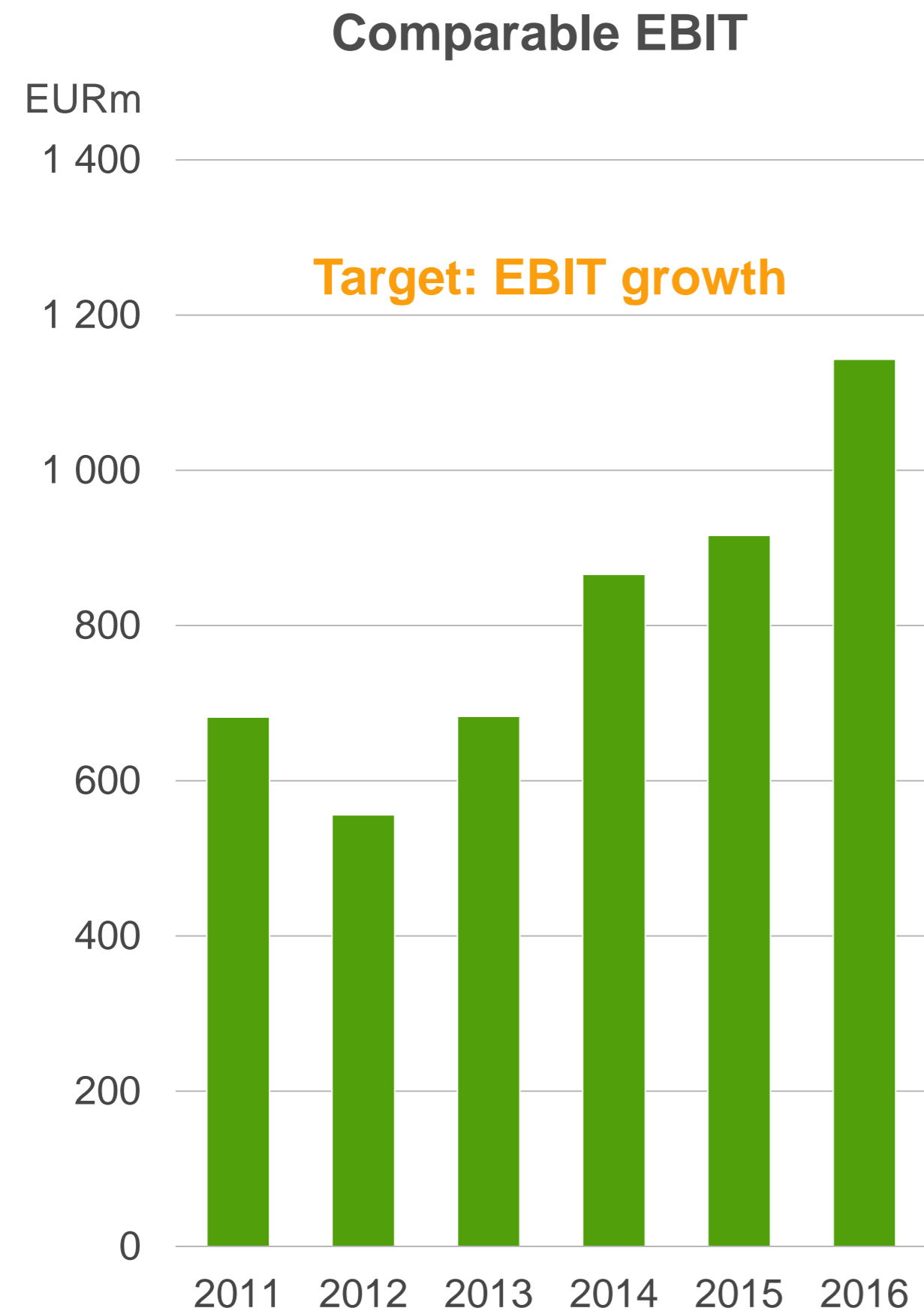
# New business area long-term targets compared with realised returns



\*) shareholdings in UPM Energy valued at fair value

 Long-term return target

# Group financial performance



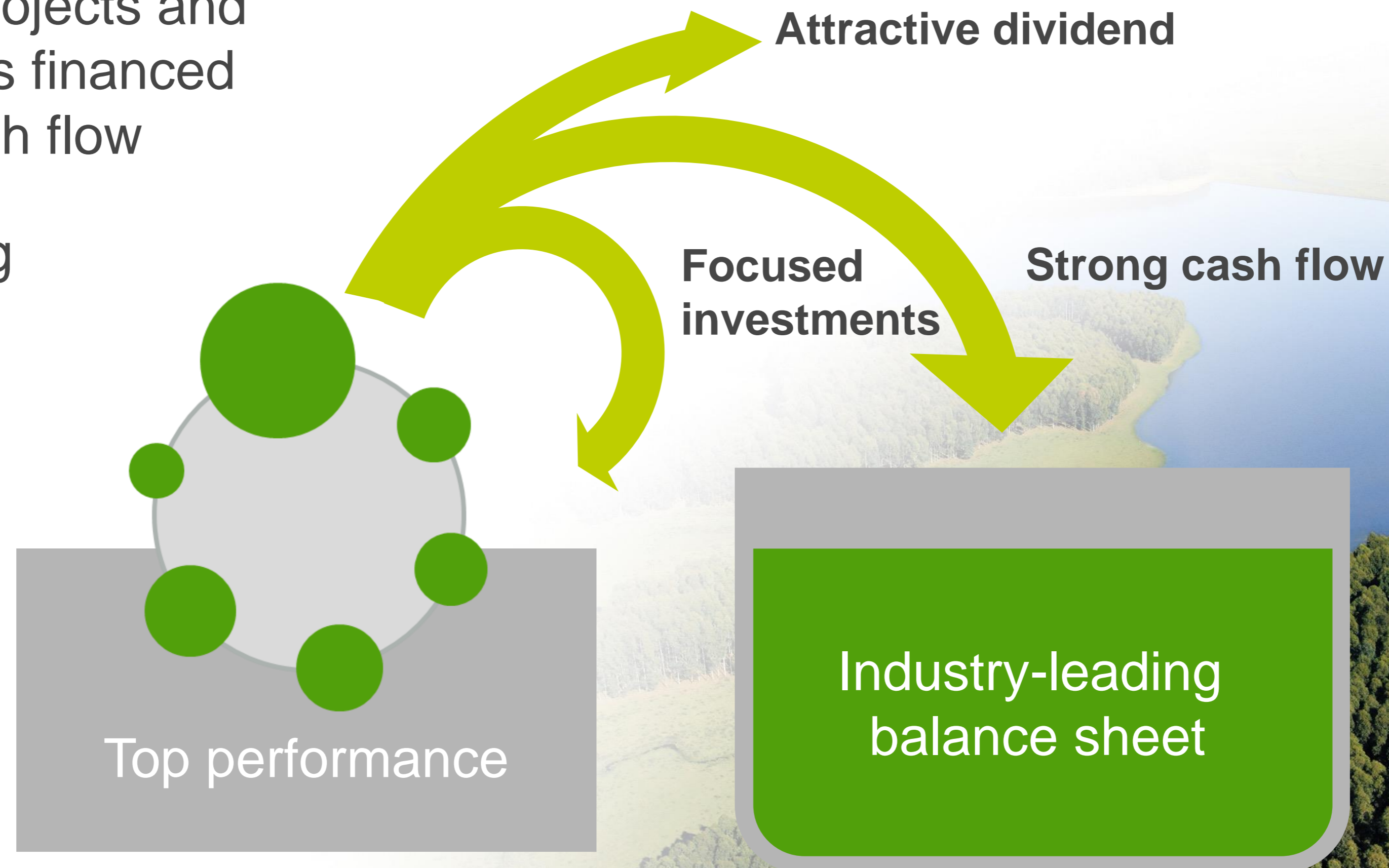
Comparable figures for 2015 and 2014, excluding special items for earlier years



# Disciplined capital allocation

Focused growth projects and attractive dividends financed from operating cash flow

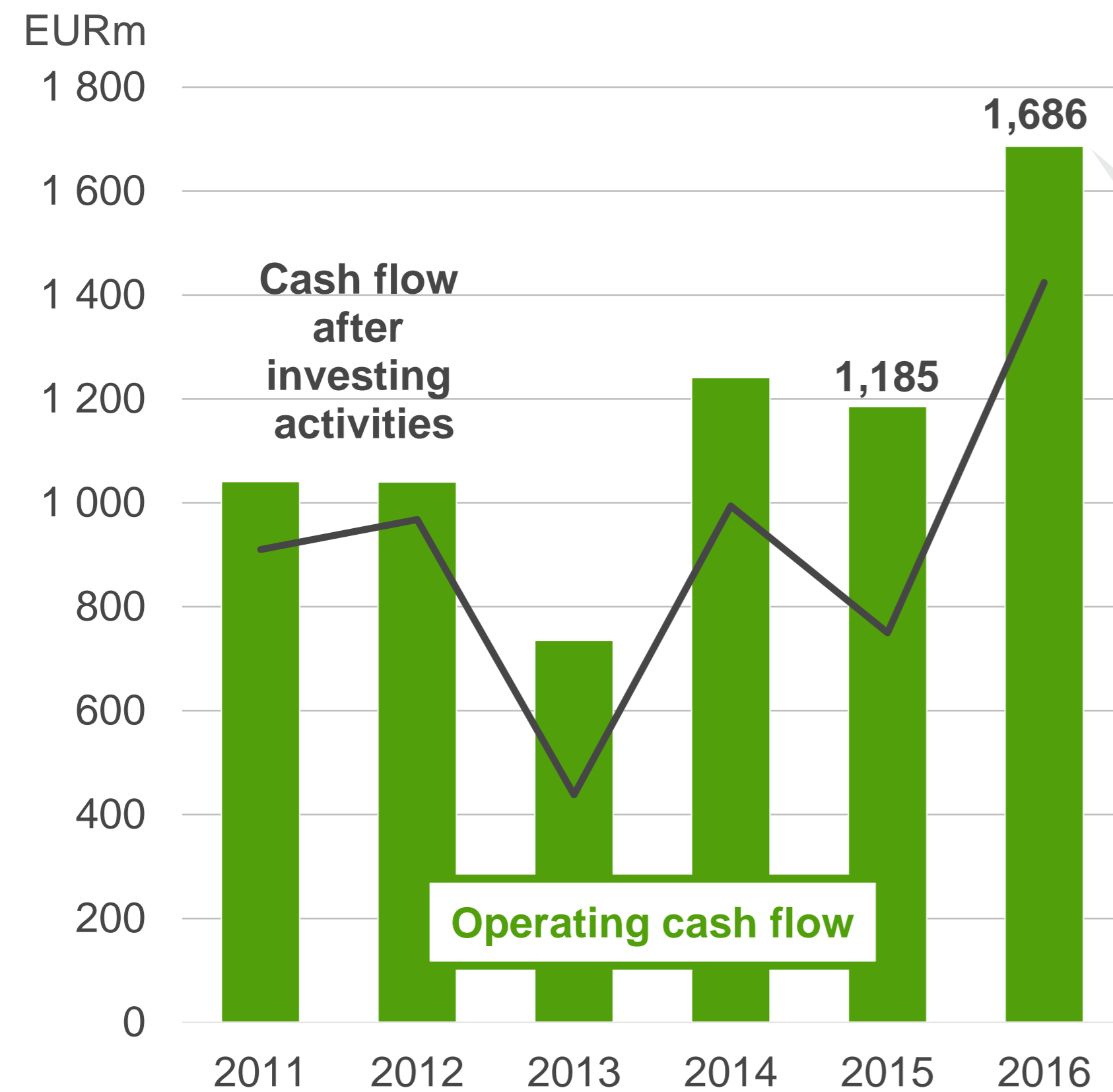
Consistently strong balance sheet





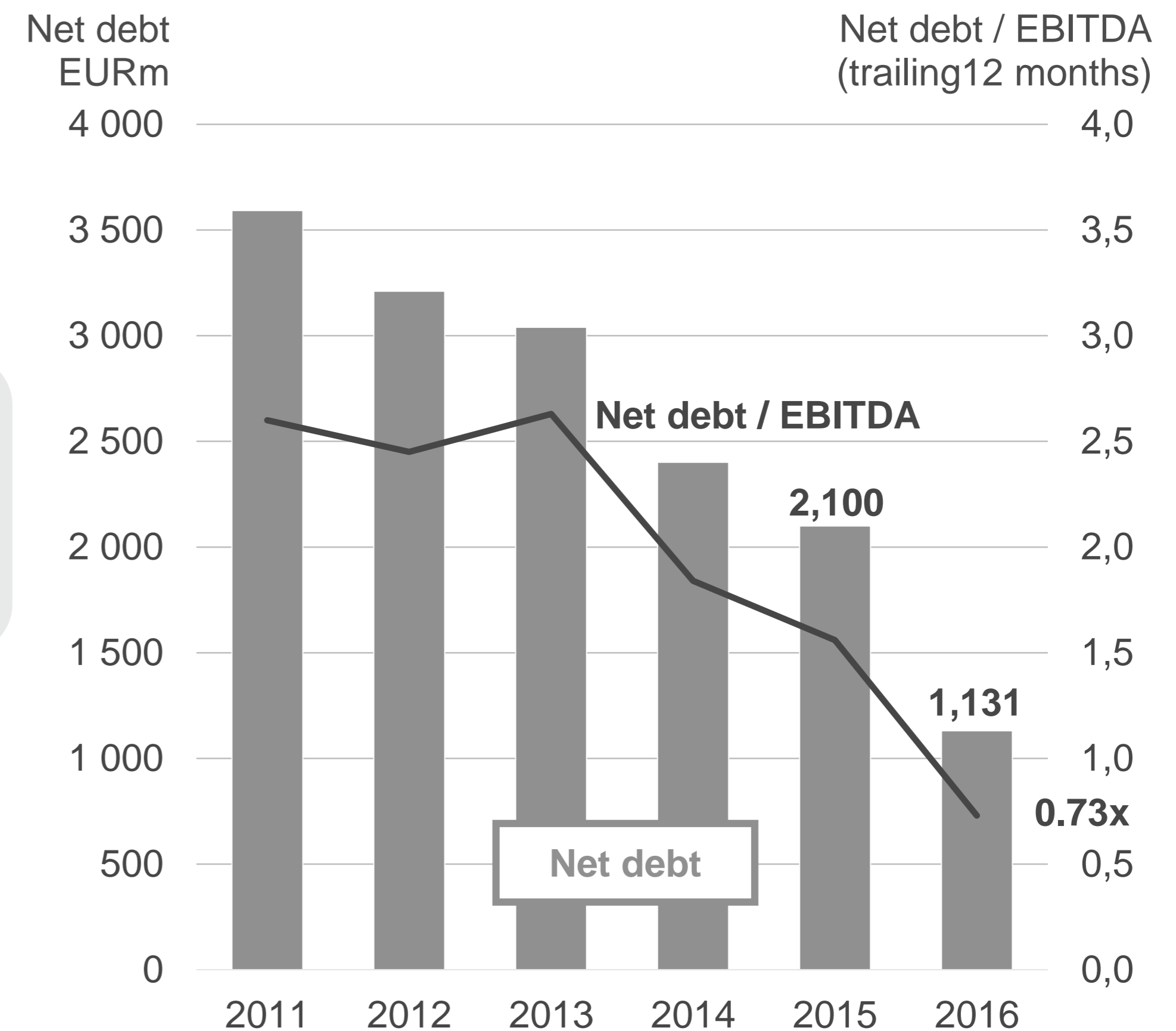
# Record strong cash flow and balance sheet

## Operating cash flow

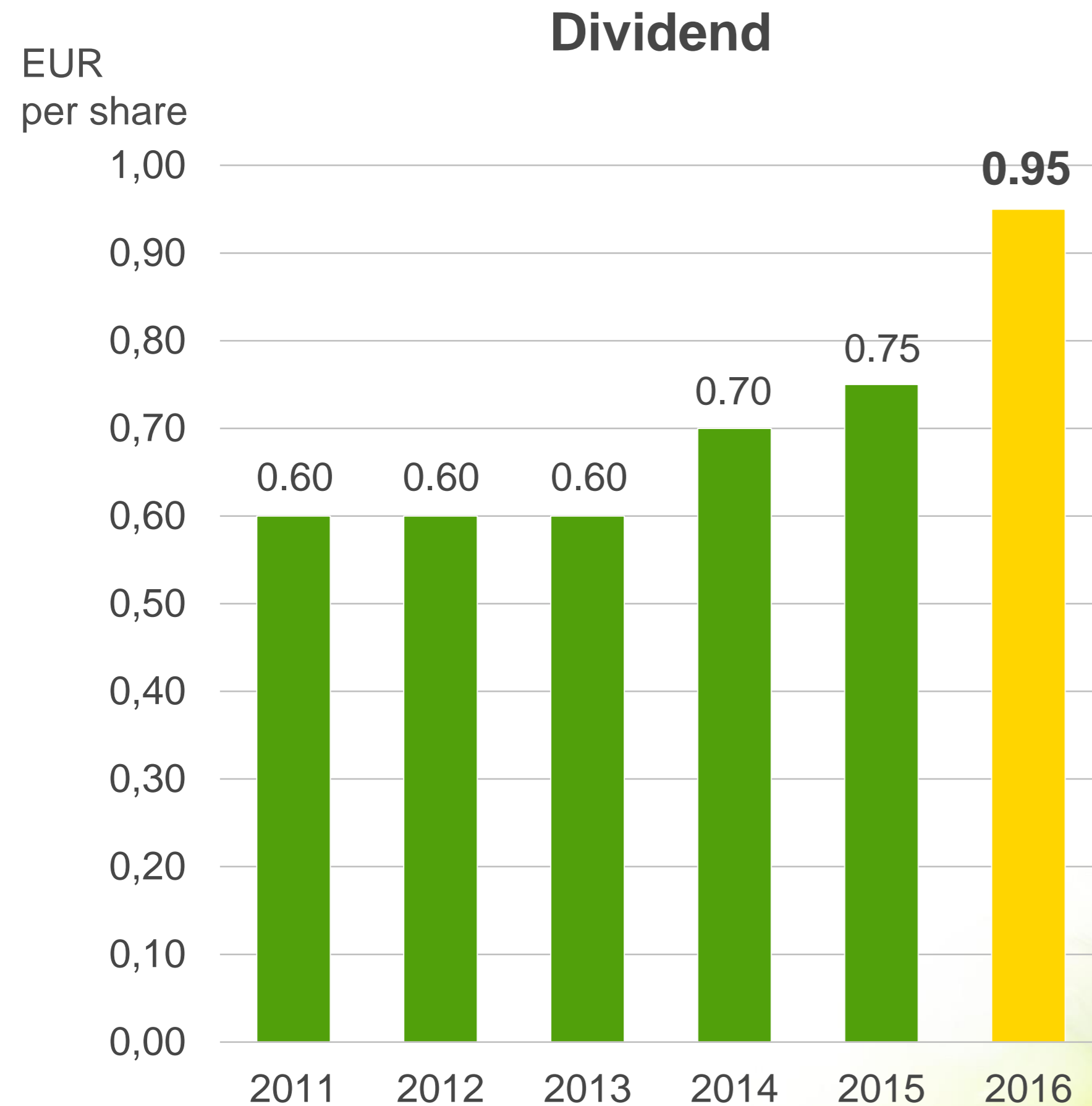


Working capital decreased by EUR 195m in 2016

## Net debt



# Dividend proposal



## Dividend policy

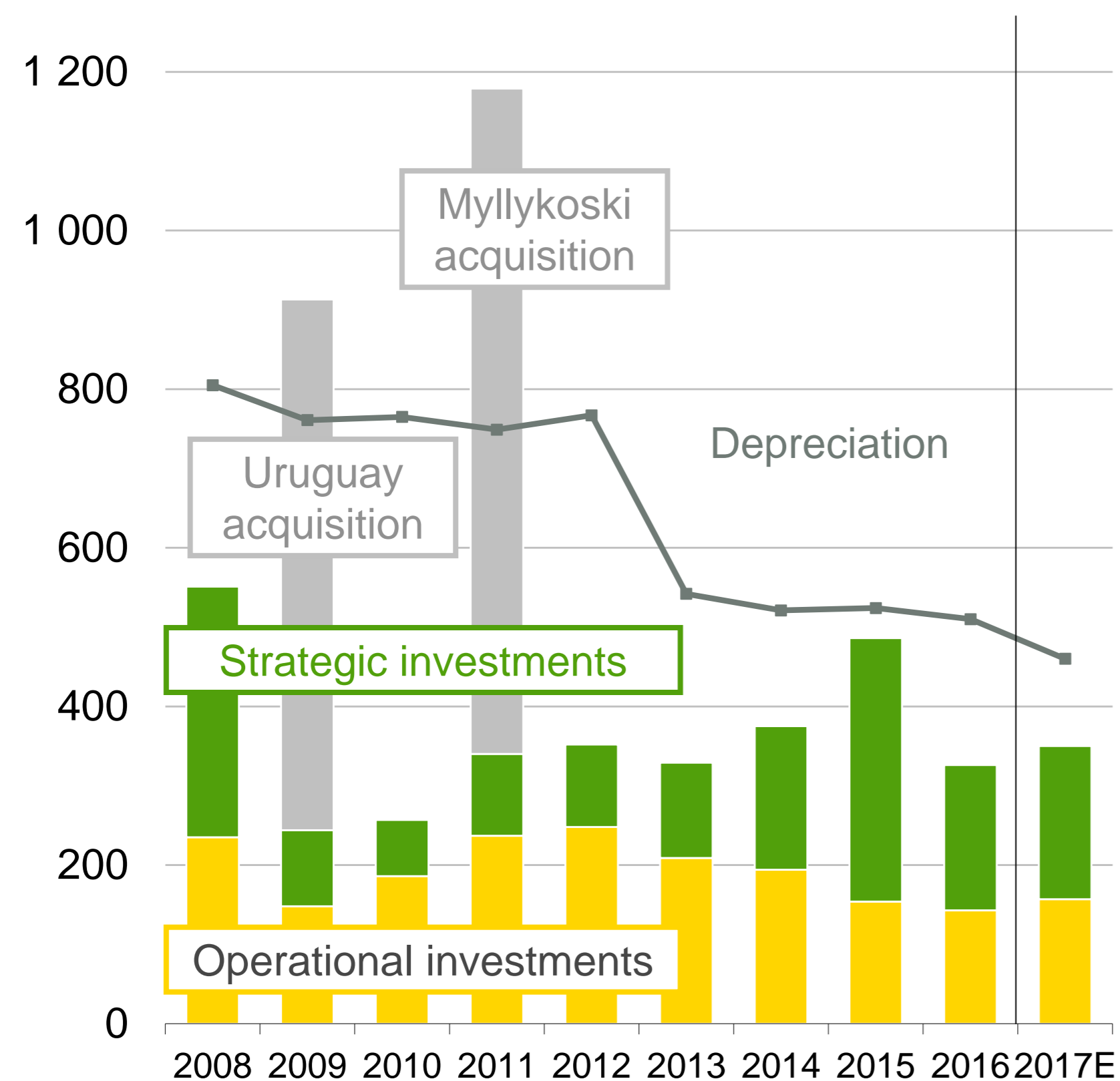
- UPM aims to pay an attractive dividend, 30–40% of operating cash flow per share

## Board's dividend proposal for 2016

- EUR 0.95 (0.75) per share, totalling EUR 507m
- 30% of 2016 operating cash flow of EUR 1,686m

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

## Capital expenditure



## Focused growth investments

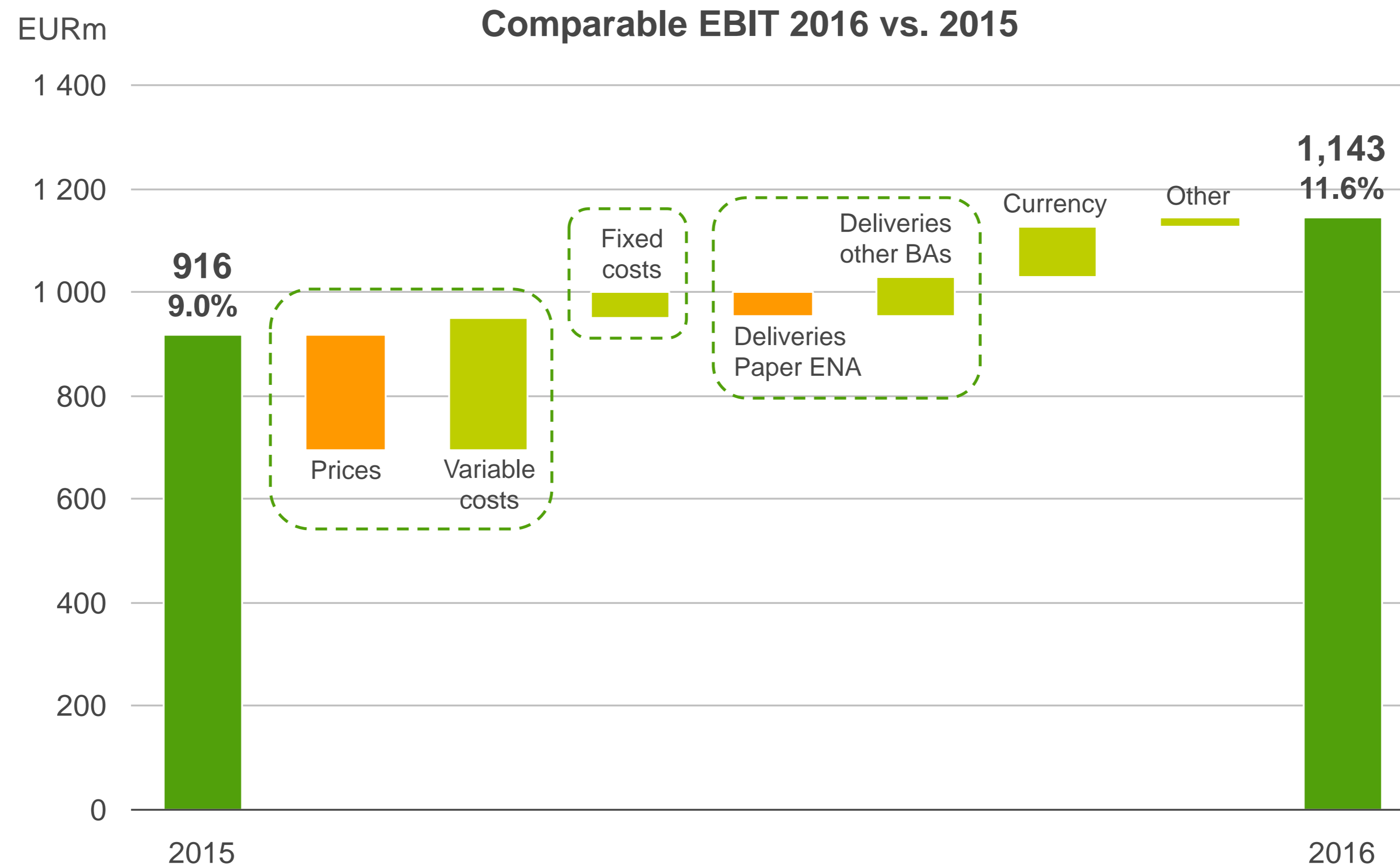
- ✓ Good returns and fast payback
- ✓ Low implementation risk
- ✓ Financed from operating cash flow

## Low replacement investments

- ✓ Asset quality in all businesses, e.g. large competitive pulp mills
- ✓ UPM Paper ENA

▶ Modest total capex, attractive returns and continuously strengthening balance sheet

# Growth projects contributed significantly and cost efficiency measures continued on a strong track

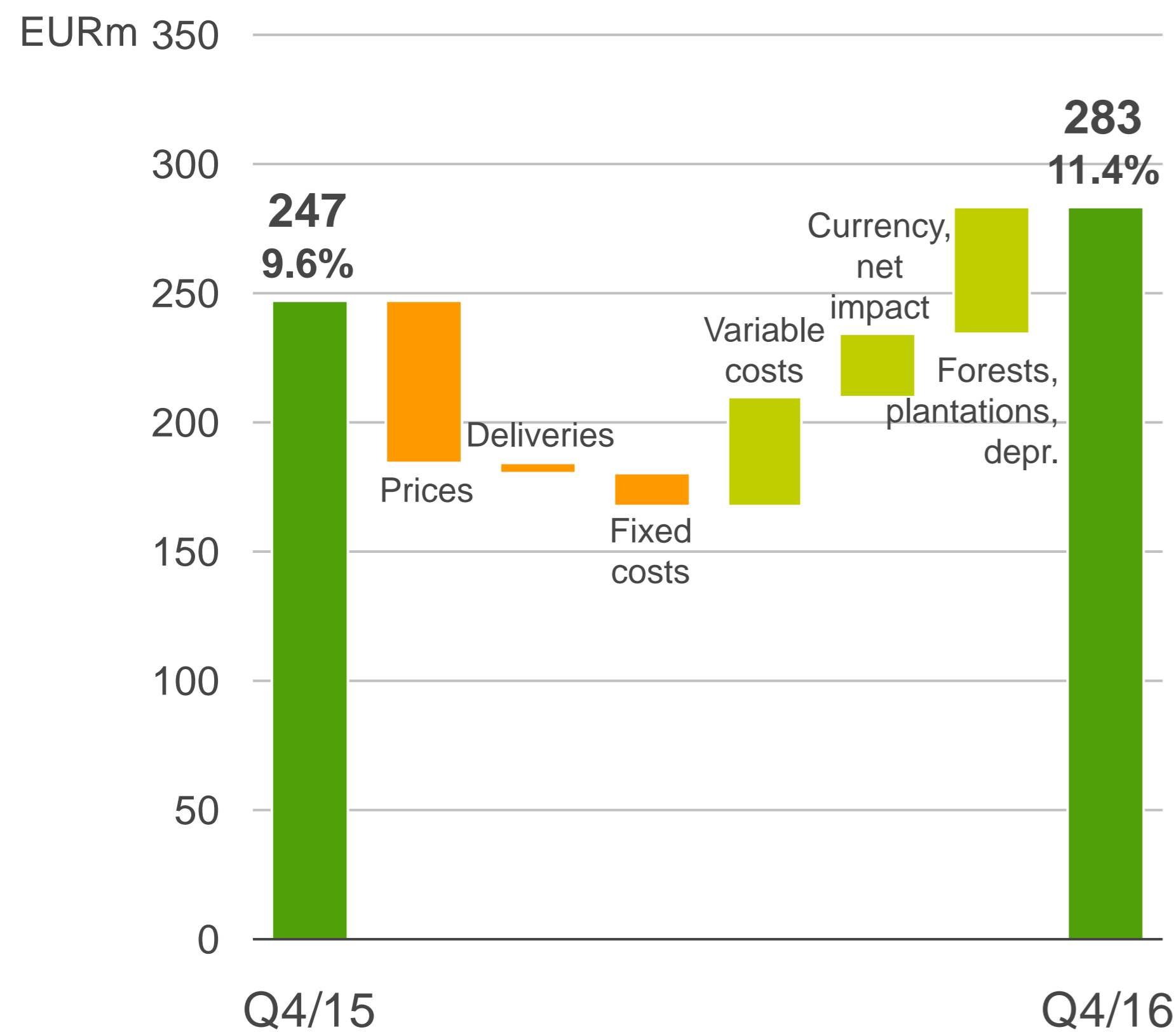




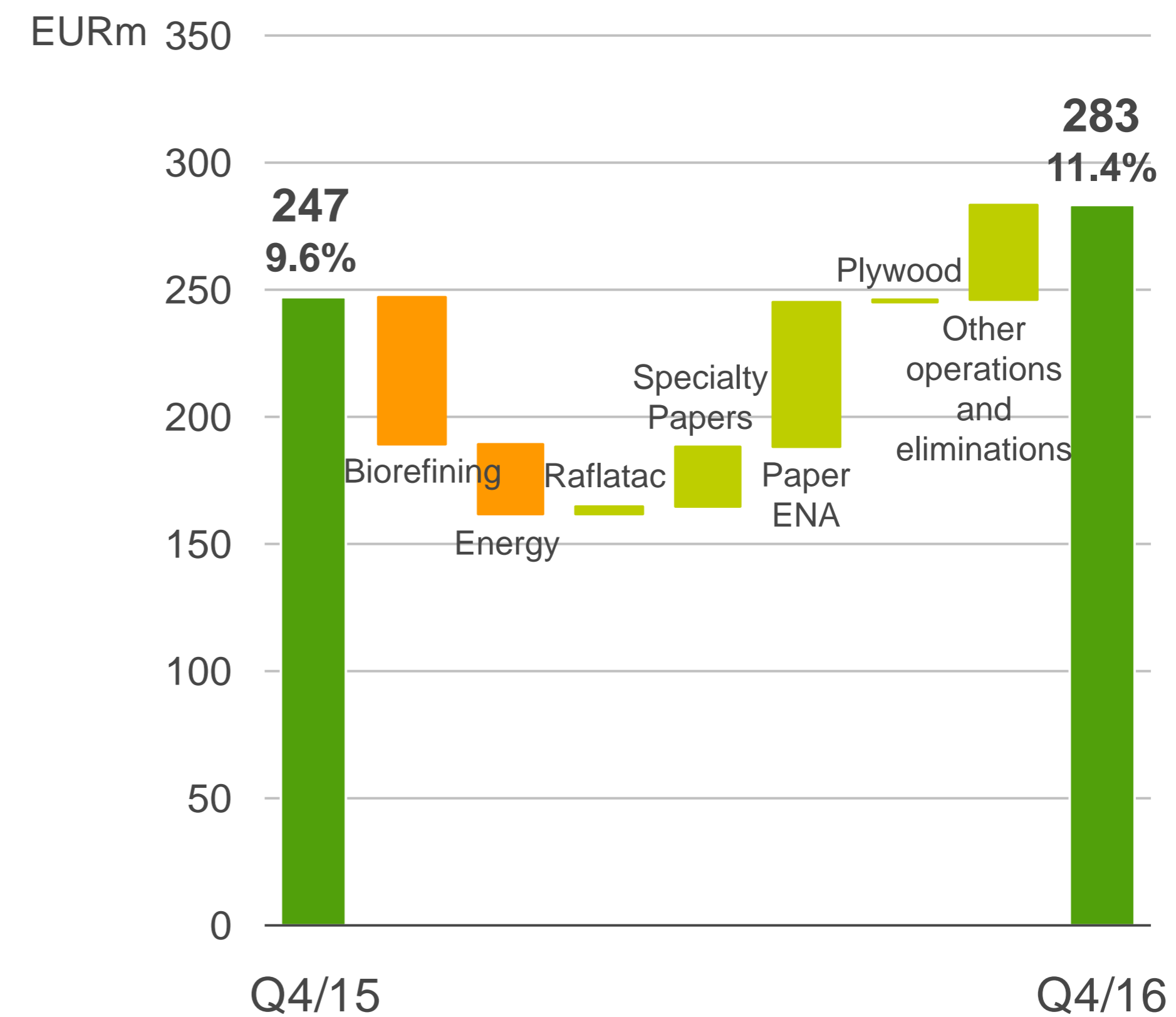


# Comparable EBIT in Q4 2016 vs. Q4 2015

Heavy maintenance activity, normalised hydropower volume and increase in forest and plantation values.

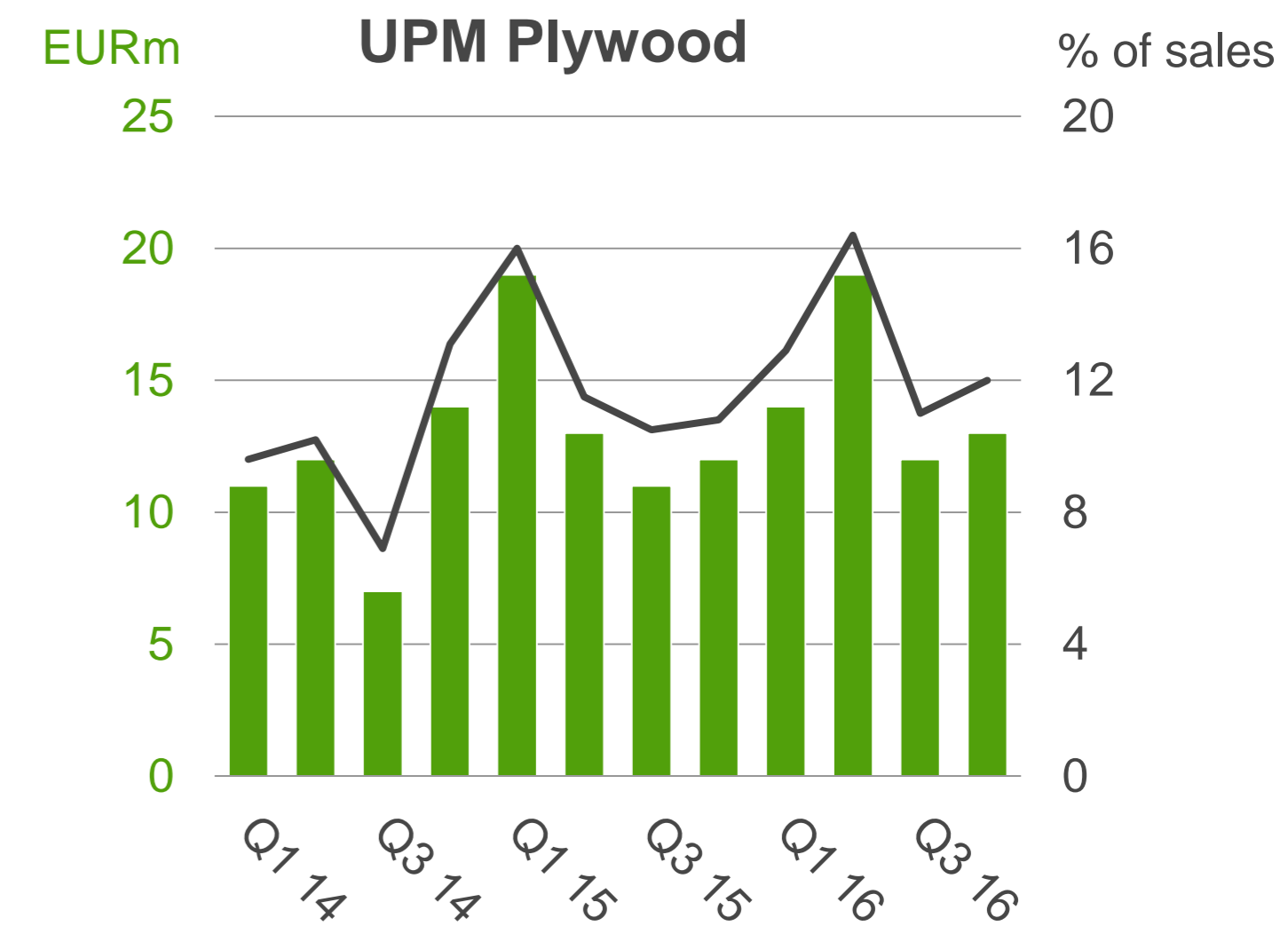
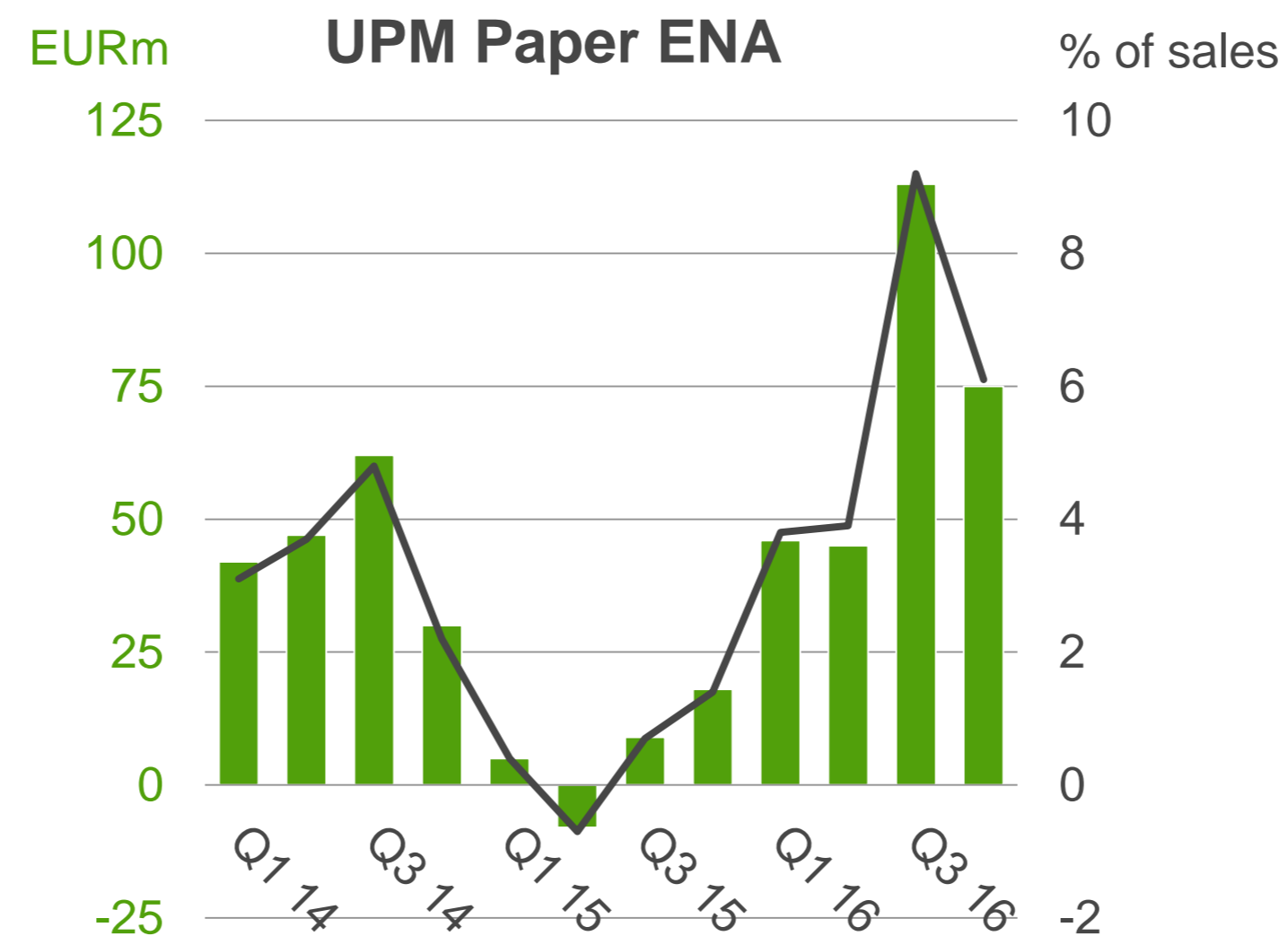
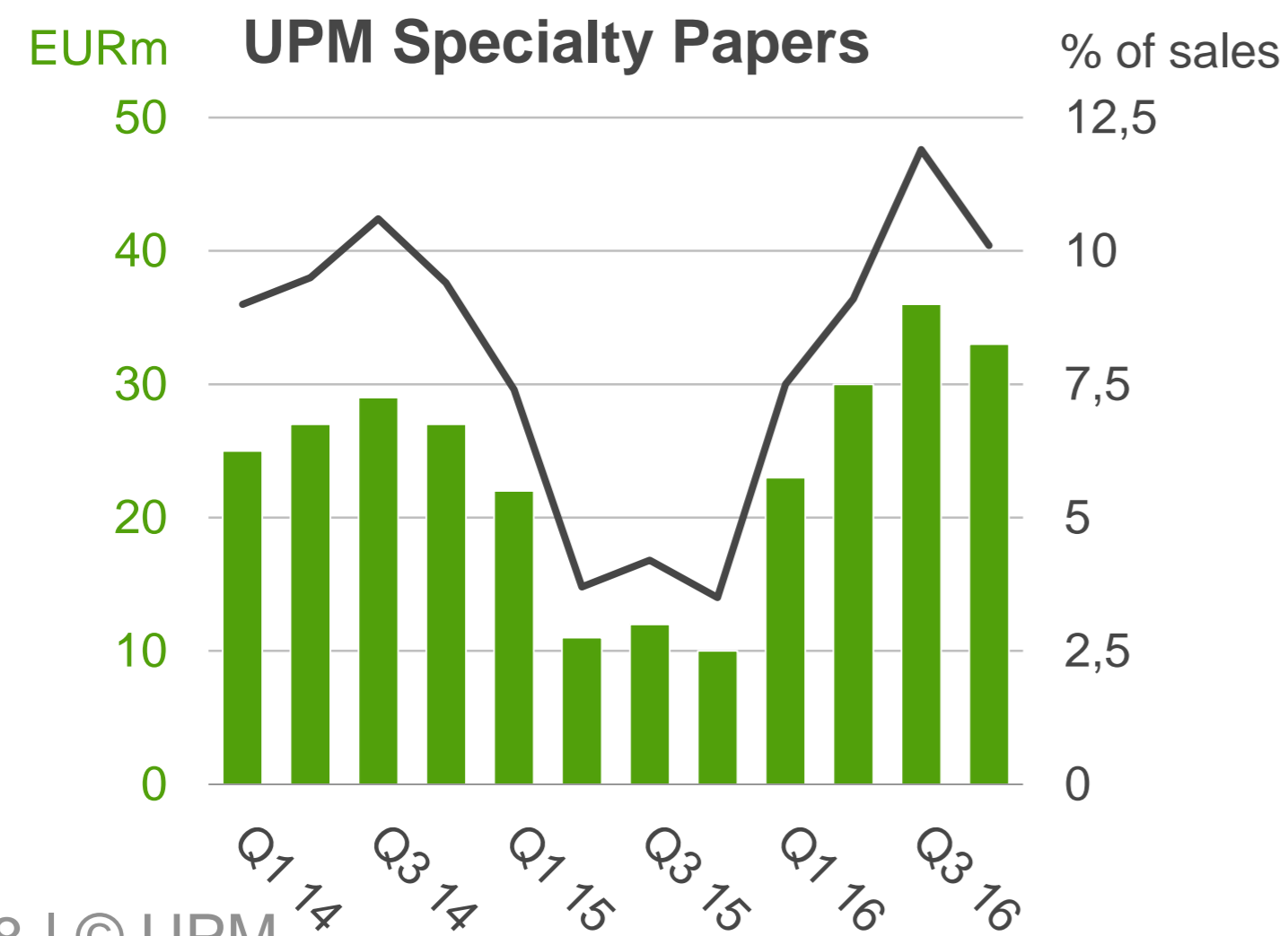
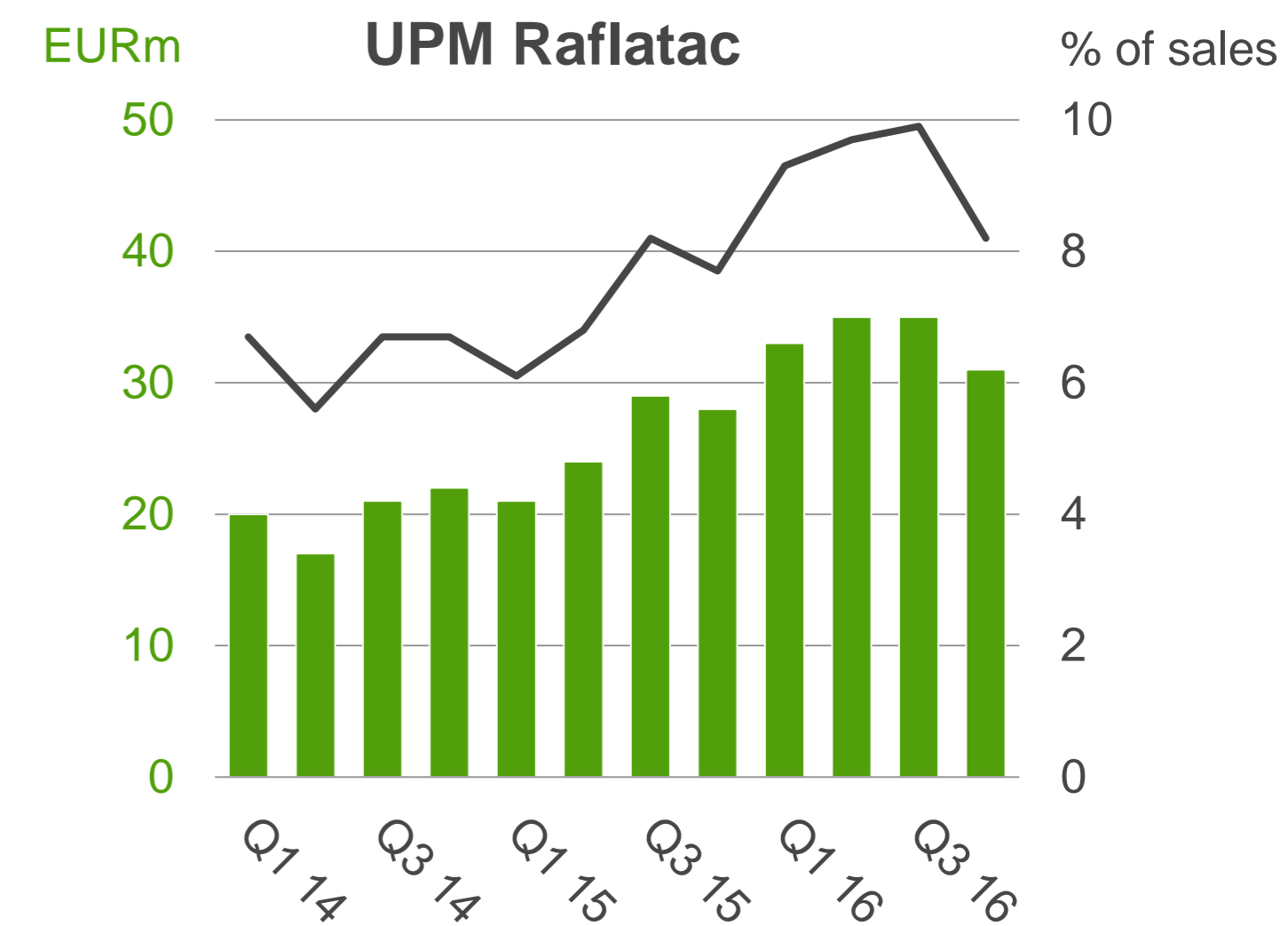
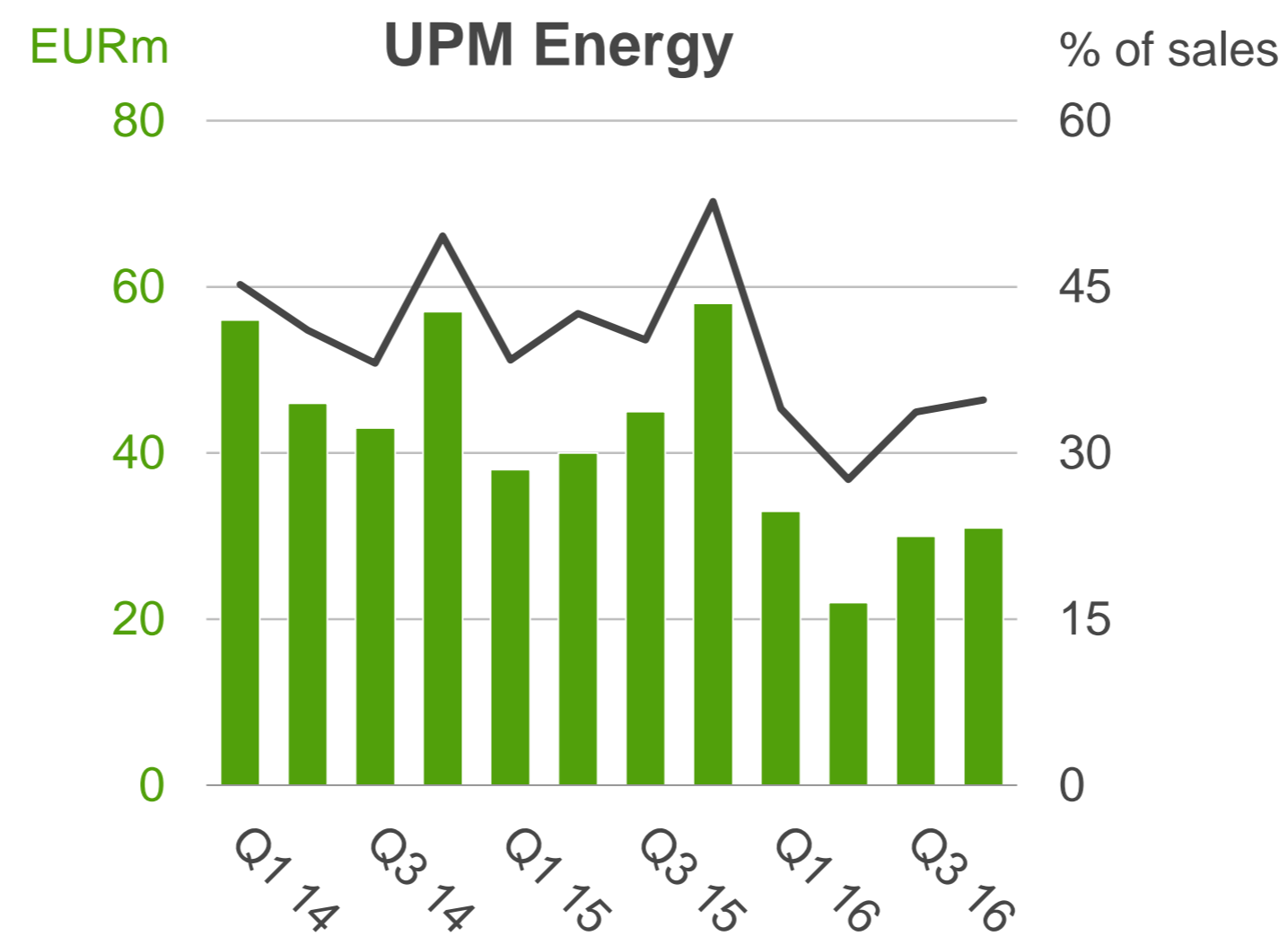
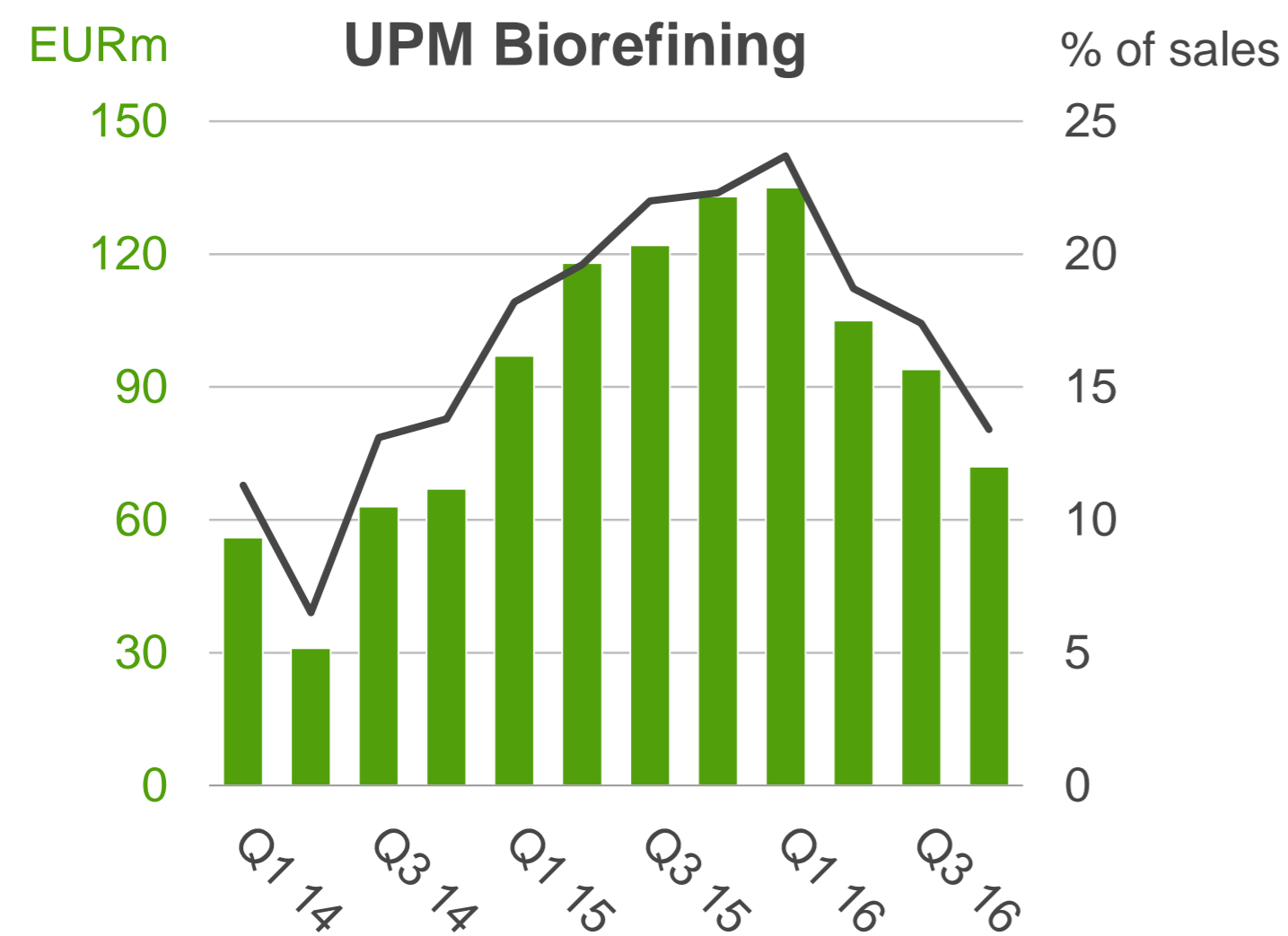


Heavy maintenance and lower prices in Biorefining, lower hydropower and prices in Energy. Solid improvement in other businesses.





# Comparable EBIT by business area



# Outlook for 2017

- UPM's profitability improved significantly in 2016 and is expected to remain on a good level in 2017.
- 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 gradually 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.
- 2017 starts with lower pulp prices and lower availability of hydropower than in the beginning of 2016.

# Responsibility is good business

## MORE WITH BIOFORE



Creating value through  
products and innovation



Creating competitive advantage  
and long-term value by efficiency

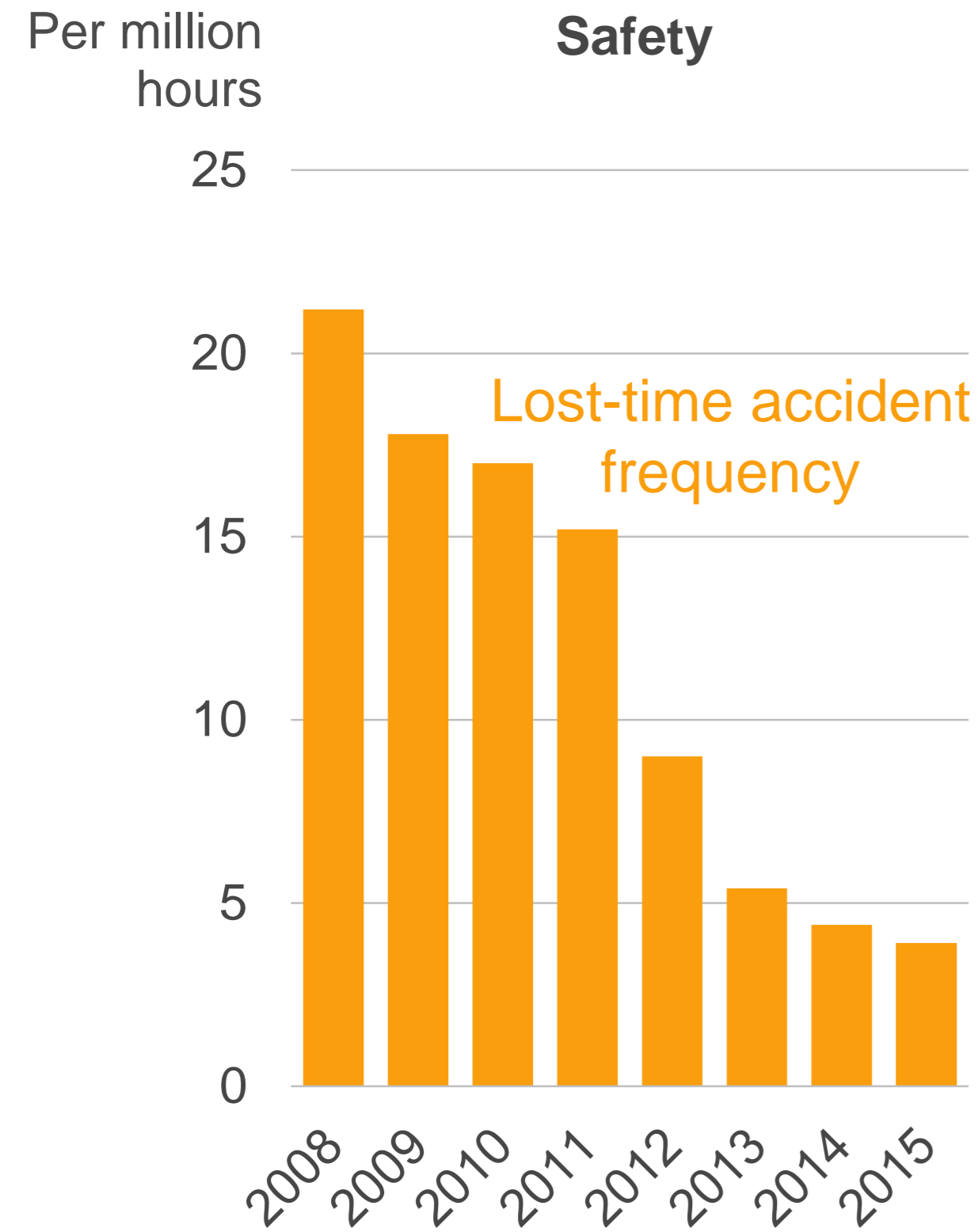


Risk mitigation by responsible  
value chain and production

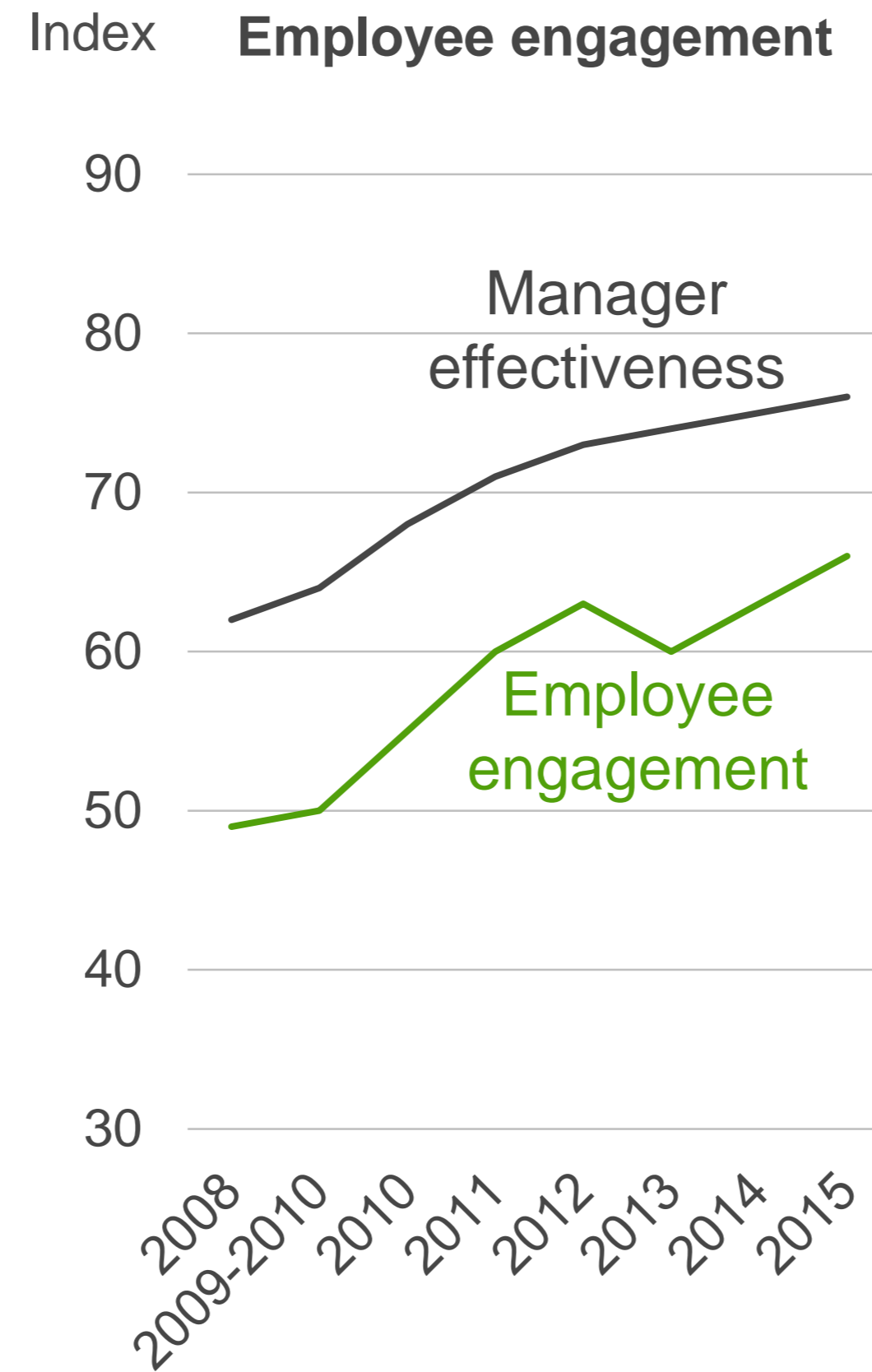
**"We believe that customers, investors and other stakeholders value responsible operations that keep risks under control and add to our business opportunities, thereby increasing the company value."**

UPM Annual Report 2015

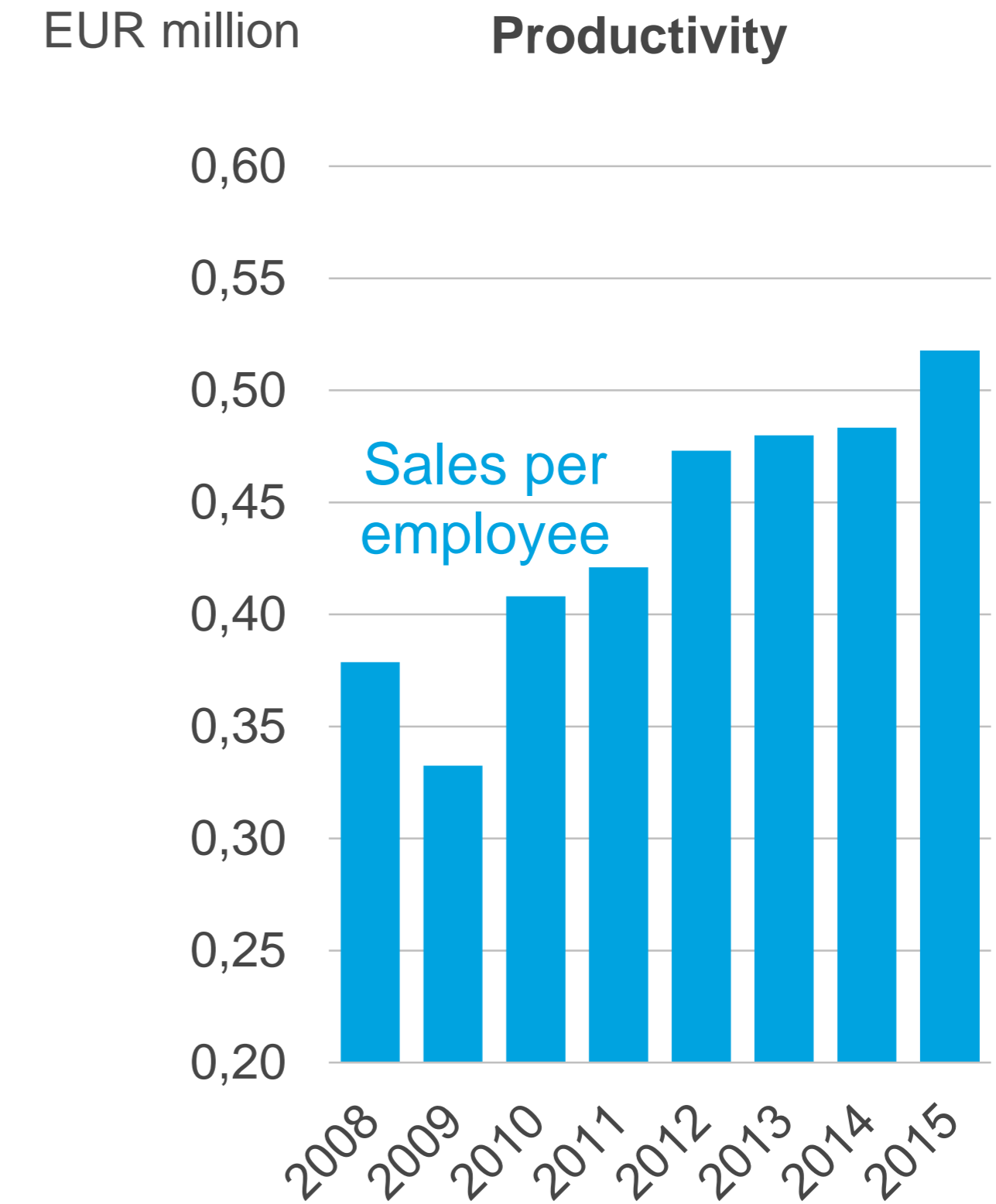
# Creating competitive advantage and long-term value by engagement



5-year change:  
**-77%**



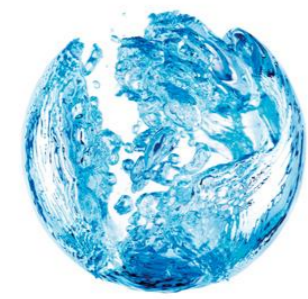
5-year change:  
**+11**



5-year CAGR:  
**+5%**

# Creating competitive advantage and long-term value by efficiency

Case: UPM Changshu mill in China



Water  
**-60%**  
Per tonne of paper



Energy  
**-30%**  
Per tonne of paper



Waste to landfill  
**-60%**  
Per tonne of paper



Certified fibre  
**85%**  
In 2015

2015 compared to 2005



COD in effluent  
**-75%**  
Per tonne of paper



SO<sub>2</sub> emission  
**-90%**  
Per tonne of paper

water intake



water discharge



# Consistent long-term work receives external recognition

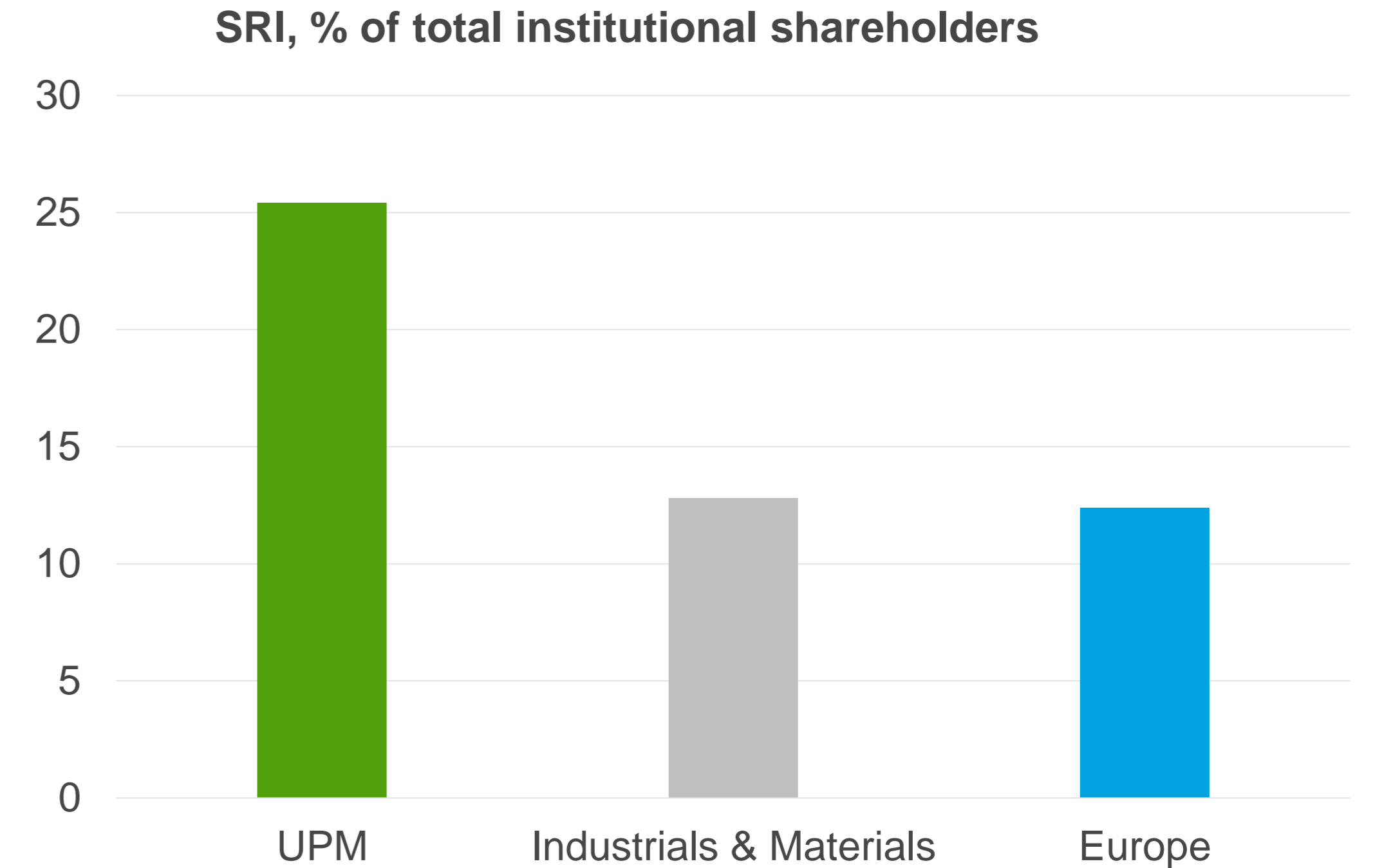
UPM in sustainability indices



MEMBER OF  
**Dow Jones Sustainability Indices**  
In Collaboration with RobecoSAM



Sustainable and Responsible (SRI) investors form a significant part of UPM's shareholders



Source: Nasdaq, October 2015

UPM Biorefining

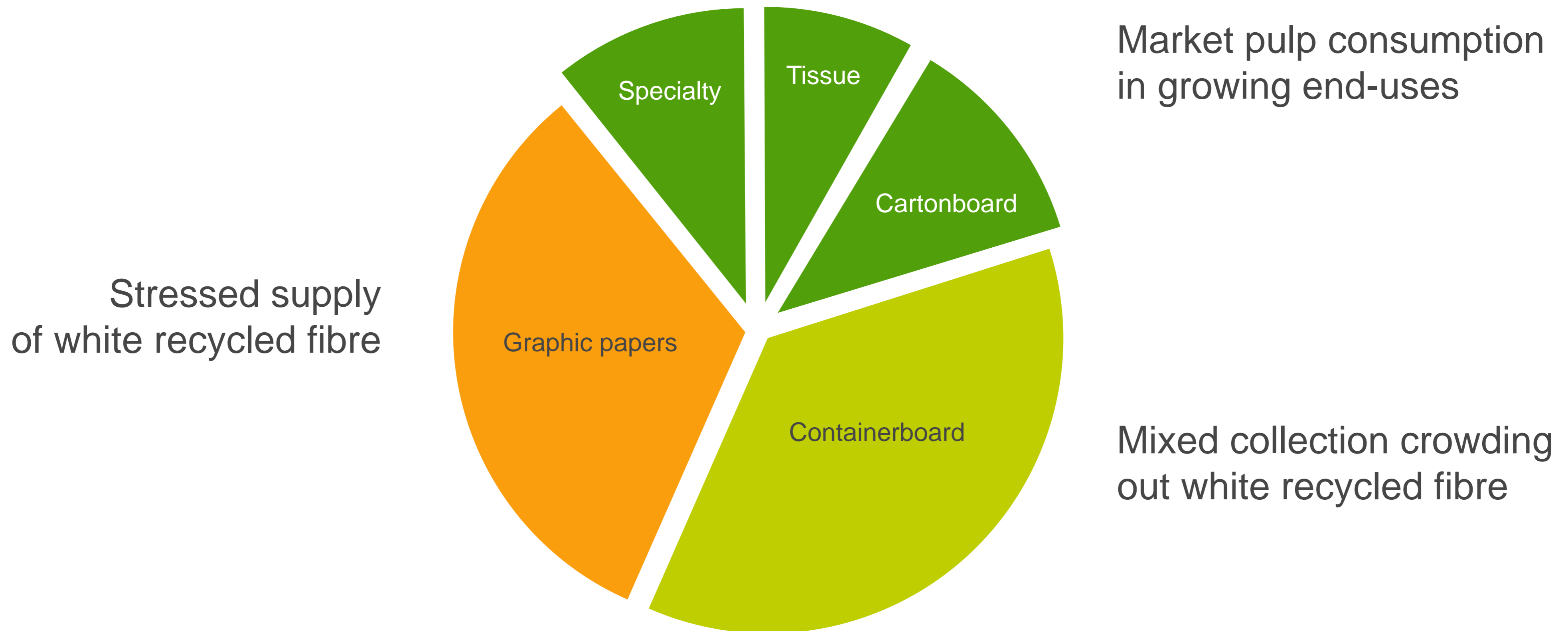
# Pulp is used in products we all use daily



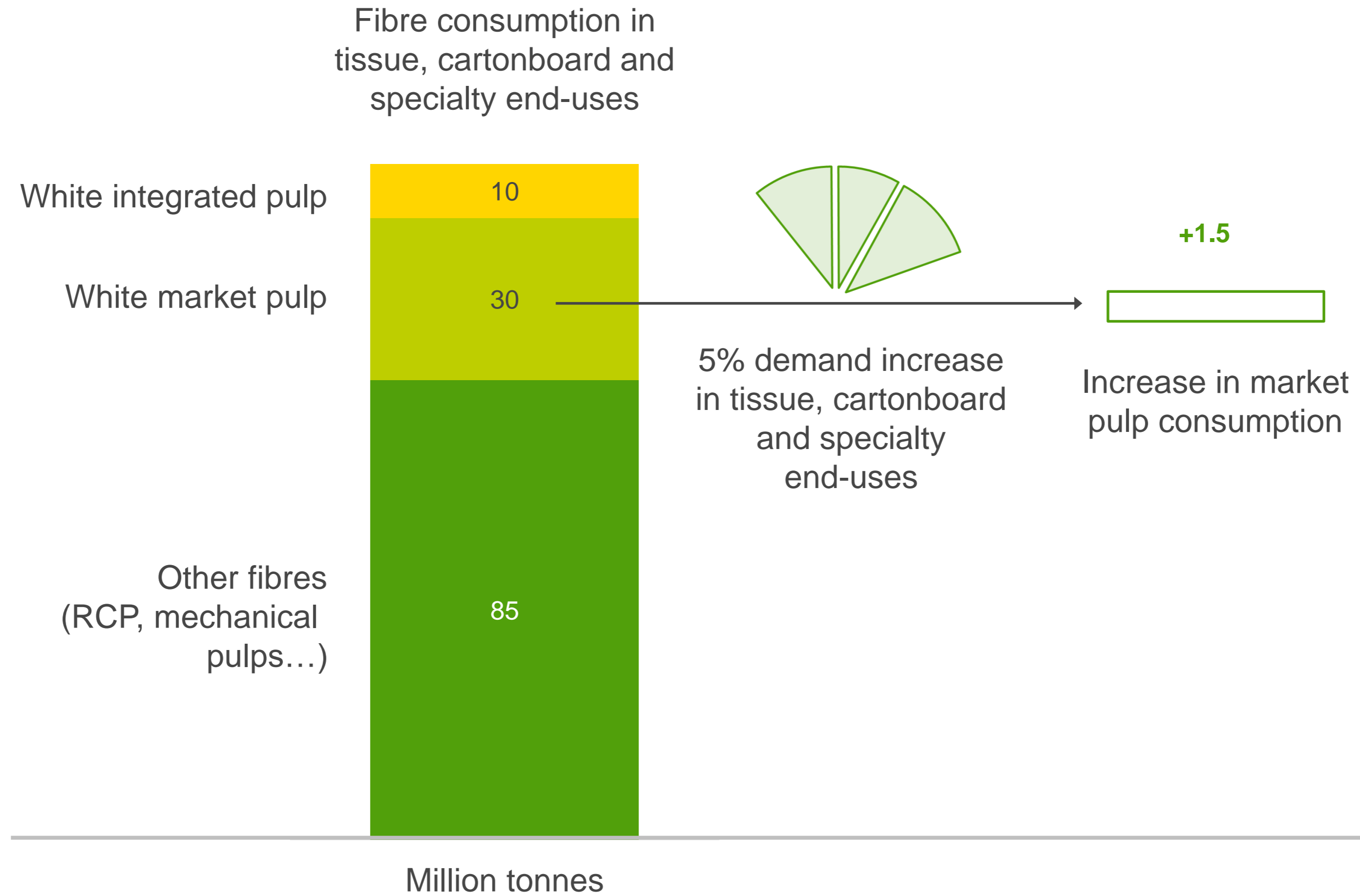


# Market pulp consumed in growing end-uses – supply of alternative white fibres declines

## Global paper and board production

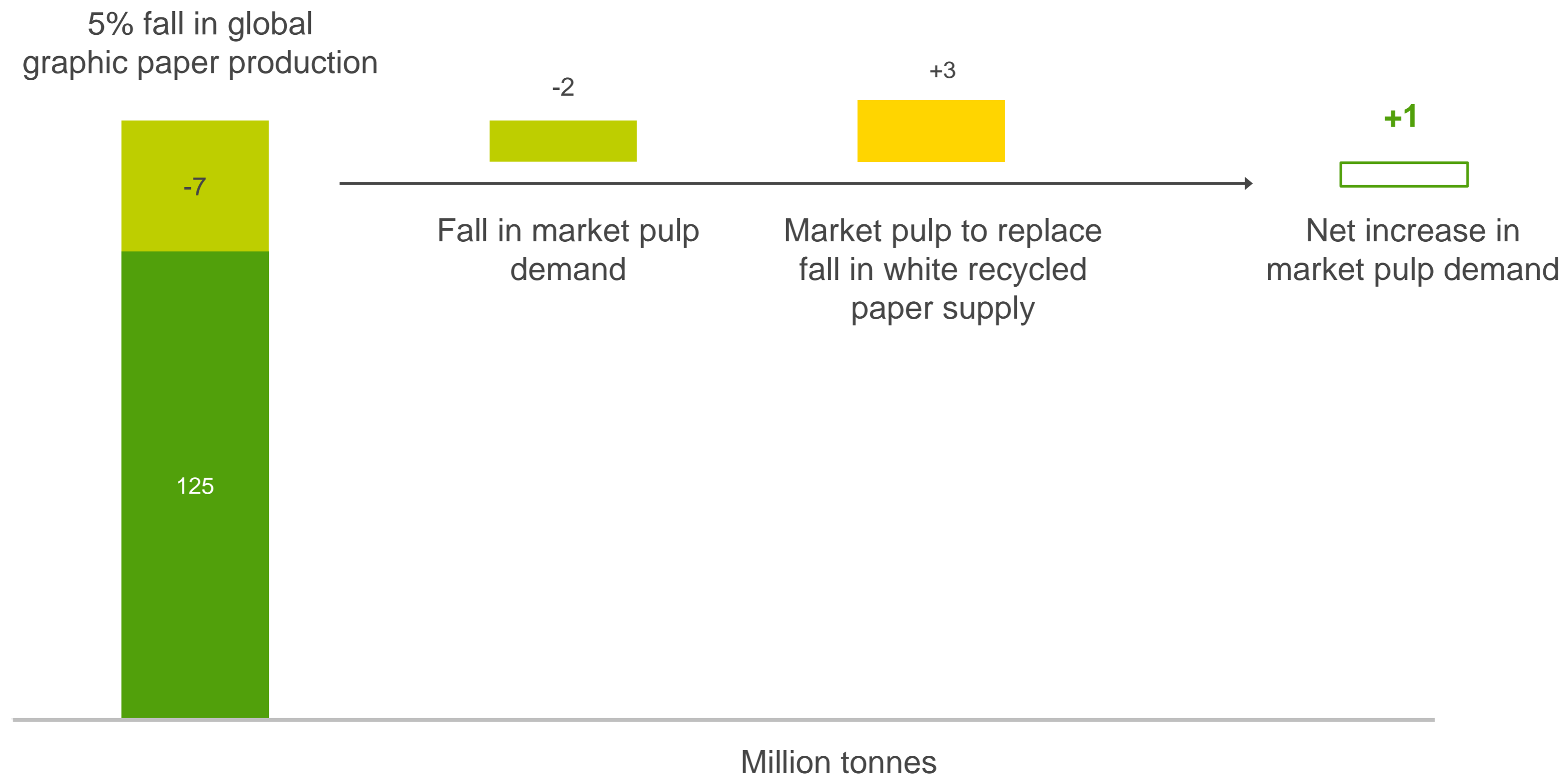


# Case: Market pulp consumption in growing end-uses



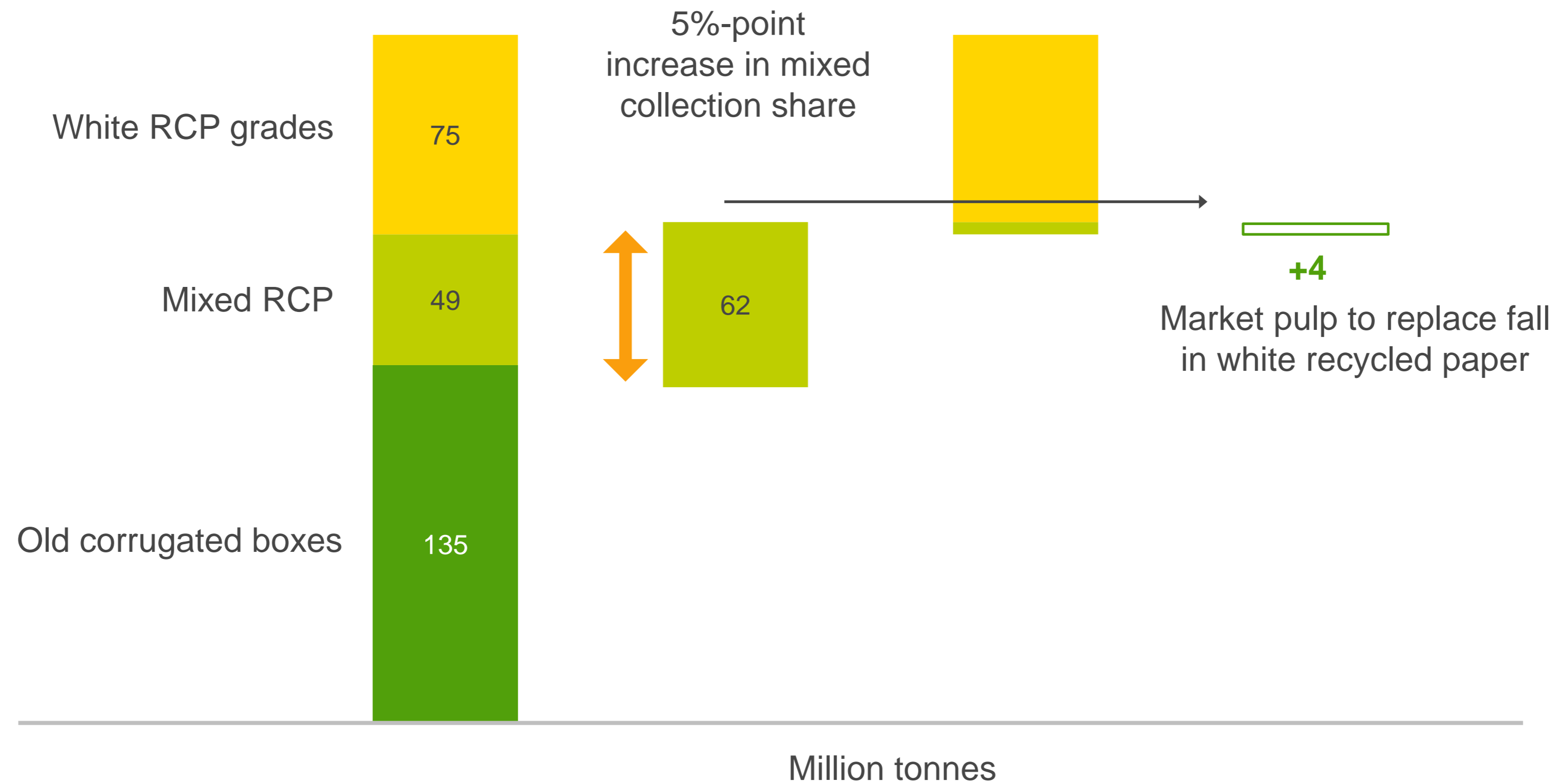
Source: Pöyry, Hawkins Wright, UPM

# Case: Stressed supply of white recycled paper



Source: Pöyry, UPM

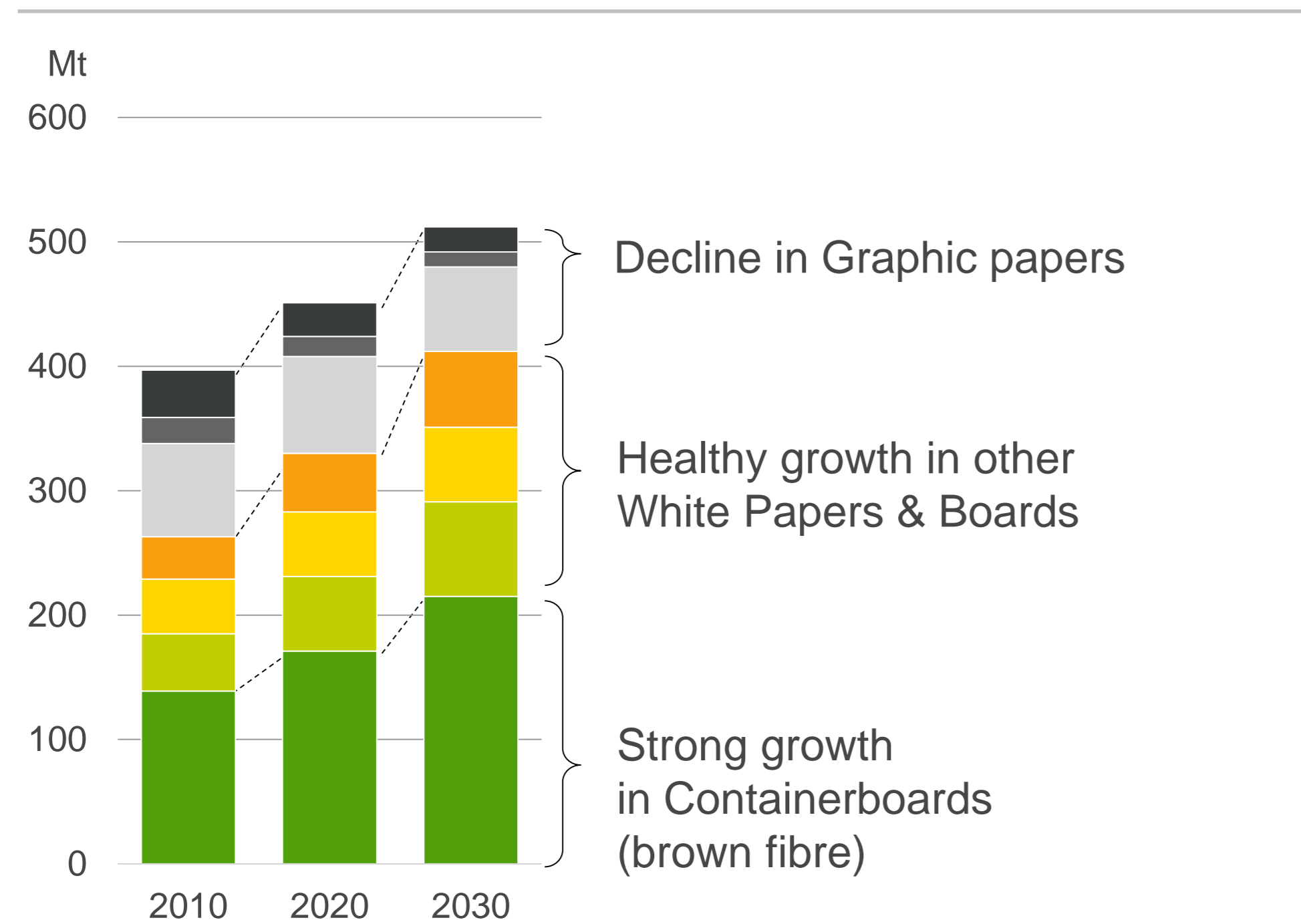
# Case: Mixed collection crowding out white recycled fibre



Source: Pöyry, UPM

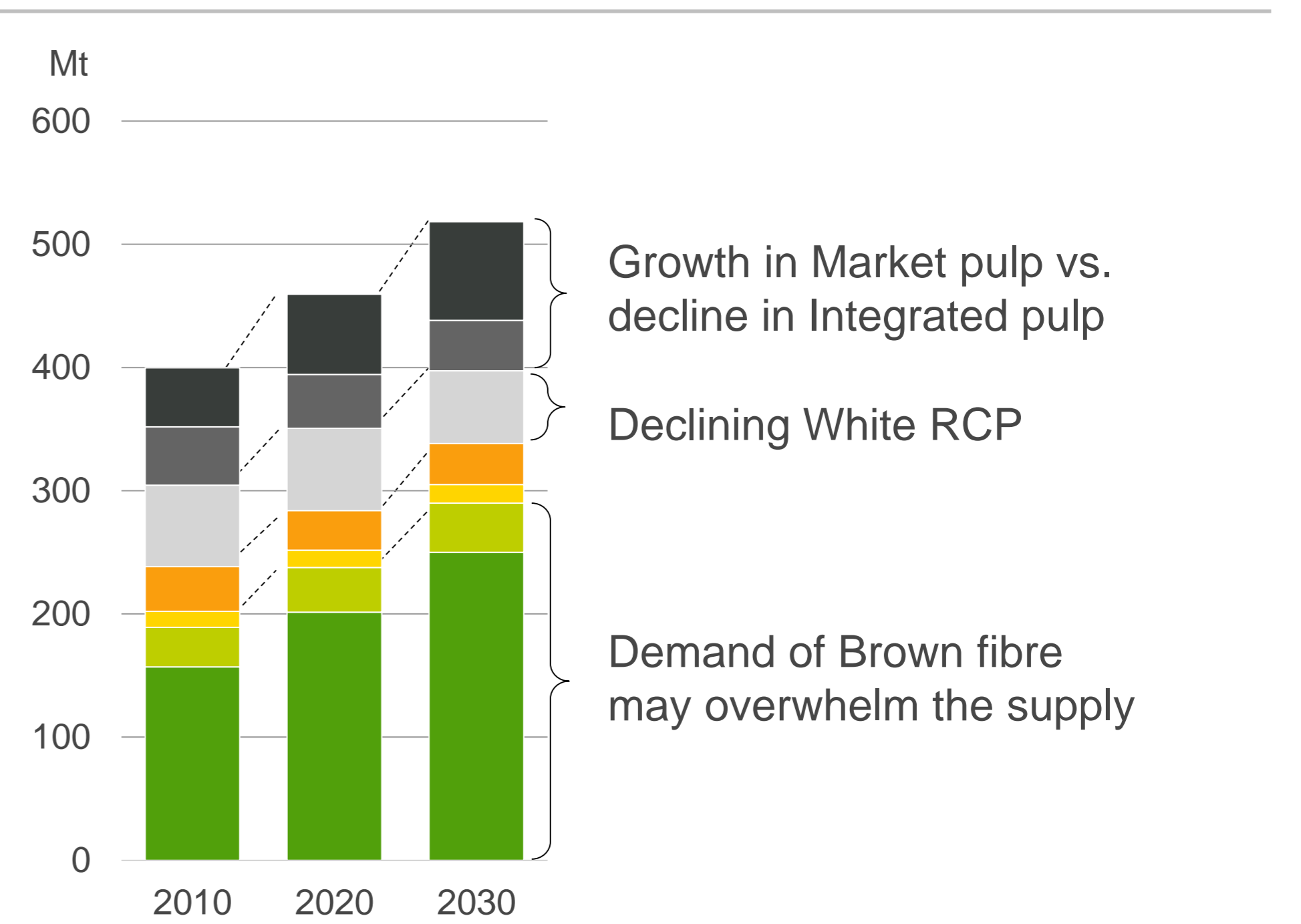
# Summary of pulp demand outlook

## Increase in end use ...



- Newsprint
- WC
- WF
- Tissue & fluff
- Spec. & other
- Carton-boards
- Container-boards
- WF: Wood-free graphical papers
- WC: Wood-containing graphical papers (magazine grades)

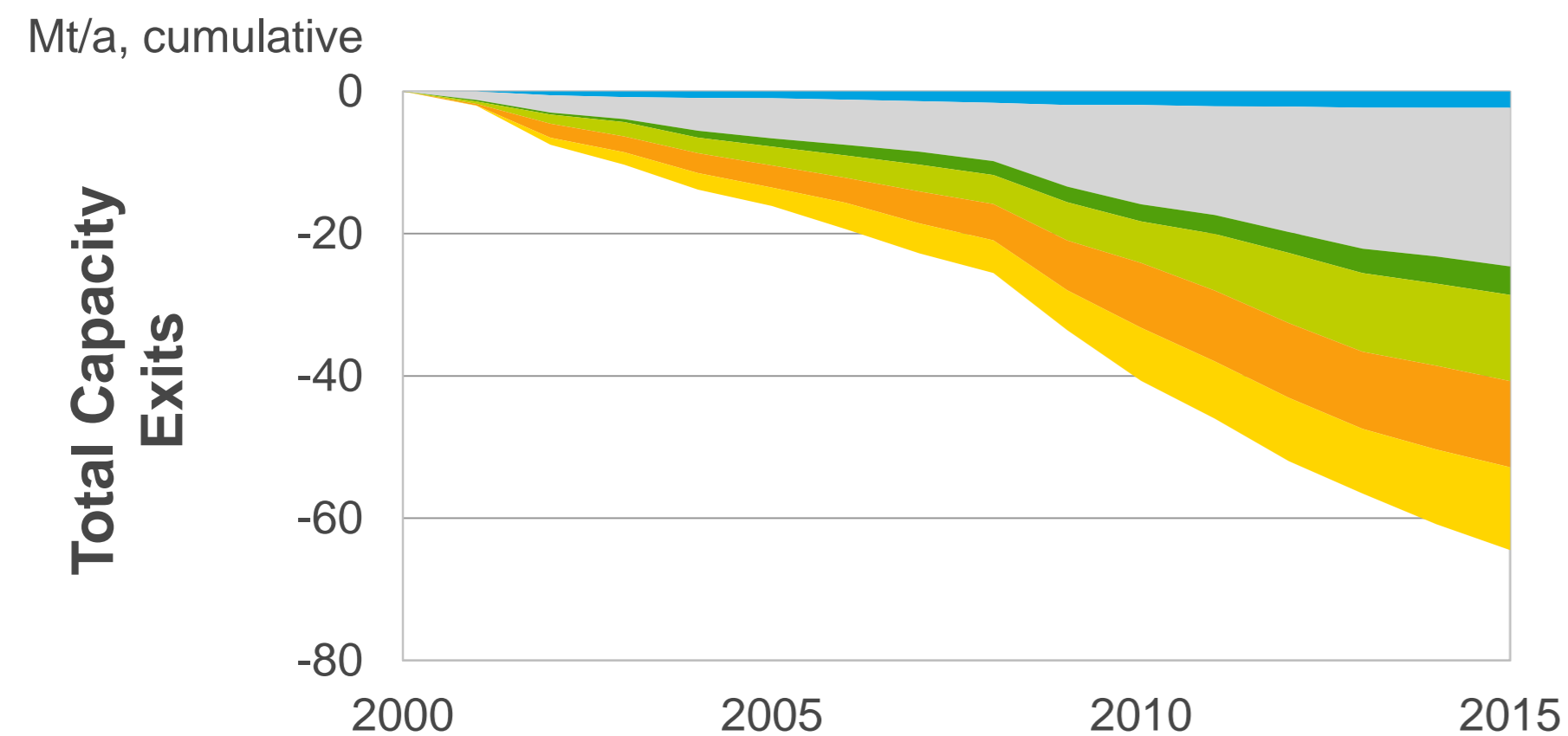
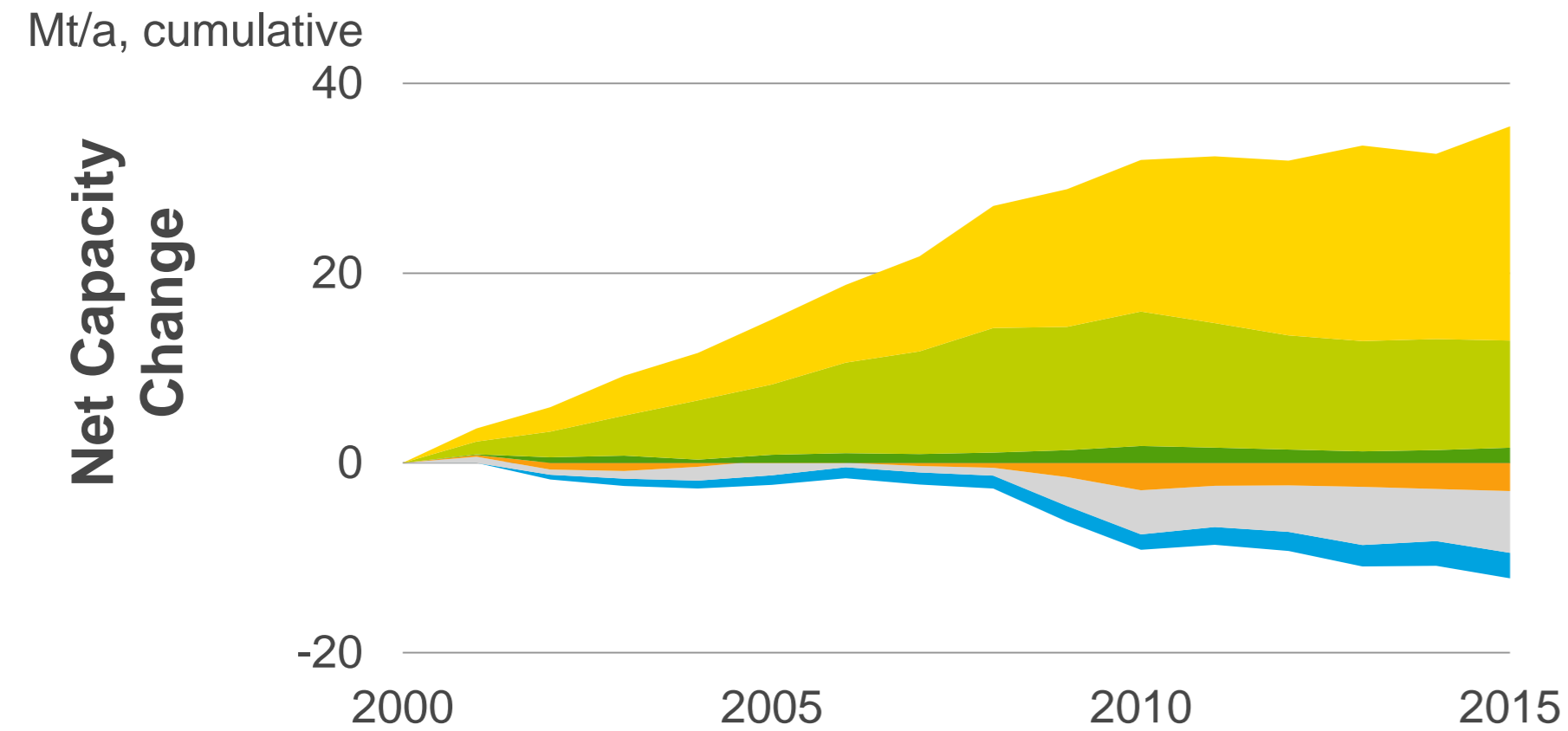
## ... will drive fibre demand in coming decades



- RCP Brown
- Non-wood
- RCP White
- Market pulp
- Unbleached pulp
- Mechanical pulp
- Integrated pulp
- Estimated growth of White RCP + Integrated Pulp + Market Pulp is still conservative (~1 Mt/a)

Source: UPM, Pöyry, RISI

# White fibres in different stages of life-cycle; 64 Mt capacity closed within 2000–2015



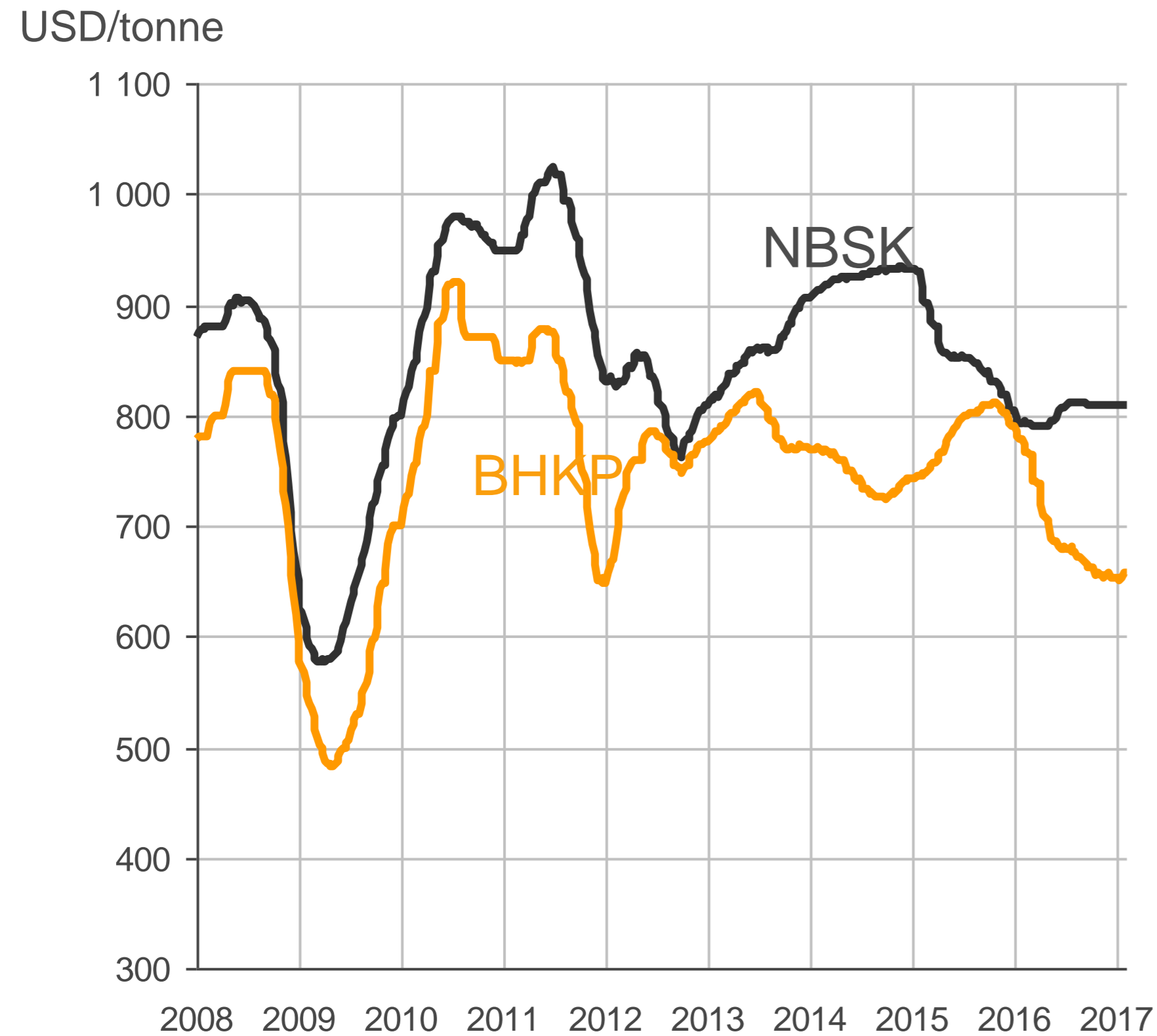
- **Hardwood pulp** capacity has experienced strong net growth after 2000 and is expected to continue growing.
- **Softwood** has faced closures as much as hardwood. New demand in China is turning decline into a slow growth.
- **White RCP** was the fastest-growing fibre in Europe and NA in early 1990's. After recession capacity has been in decline due to very high collection rates and diminishing supply of graphic paper.
- **Mechanical** pulp continues to decline along with graphic papers.
- **Non-wood** pulps consumed mostly in China are under pressure due to environmental reasons.
- **Sulphite** has been in decline for decades.

Note: Including both market and integrated pulp

Source: Pöyry

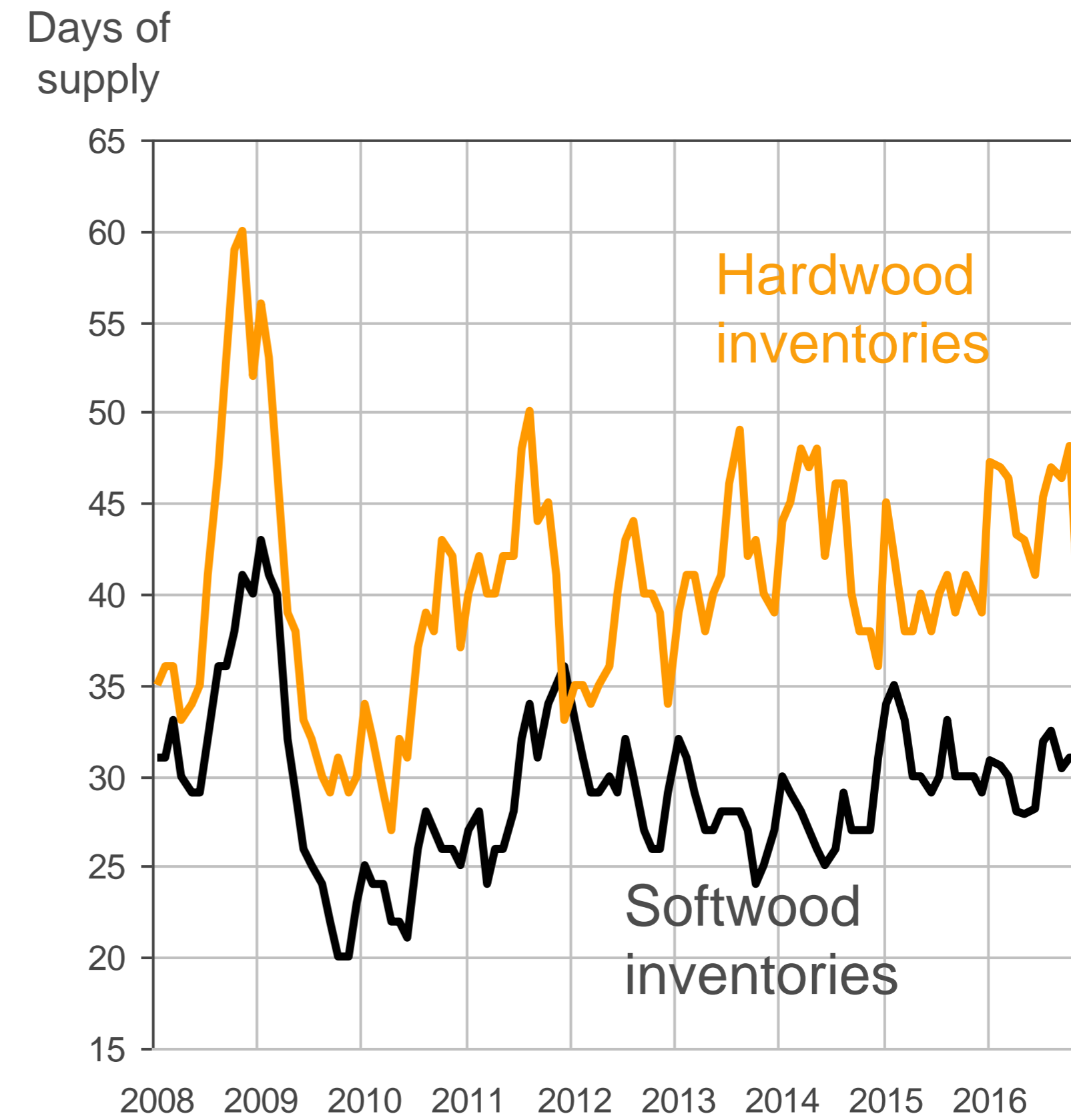
# Chemical pulp market

Q4 NBSK pulp price remained stable from Q3  
 Q4 BHKP pulp price decreased 2% from Q3



Source: FOEX Indexes Ltd.

## Pulp inventories



Source: PPPC World-20 statistics

## UPM Biorefining

# Large modern assets allow growth through debottlenecking with high pay-off at low risk

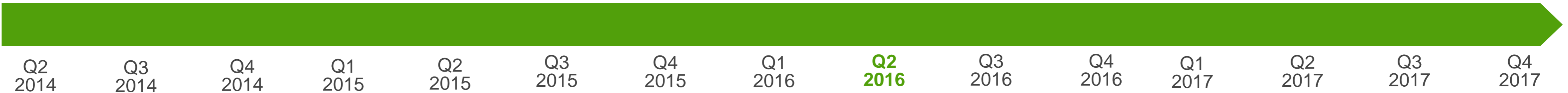
**Pietarsaari**  
pulp mill expansion  
70,000t



**Kymi**  
pulp mill expansion  
170,000t



**Kaukas**  
pulp mill efficiency improvement, paper and  
pulp decoupling completed



**Fray Bentos**  
pulp mill expansion  
100,000t



Capacity increase since 2013 more than  
500,000 tonnes  
with investments of ~ EUR 350m

**Kymi**  
pulp mill expansion  
170,000t





# Uruguay could be a competitive alternative – time schedule is several years



 Fuel retail



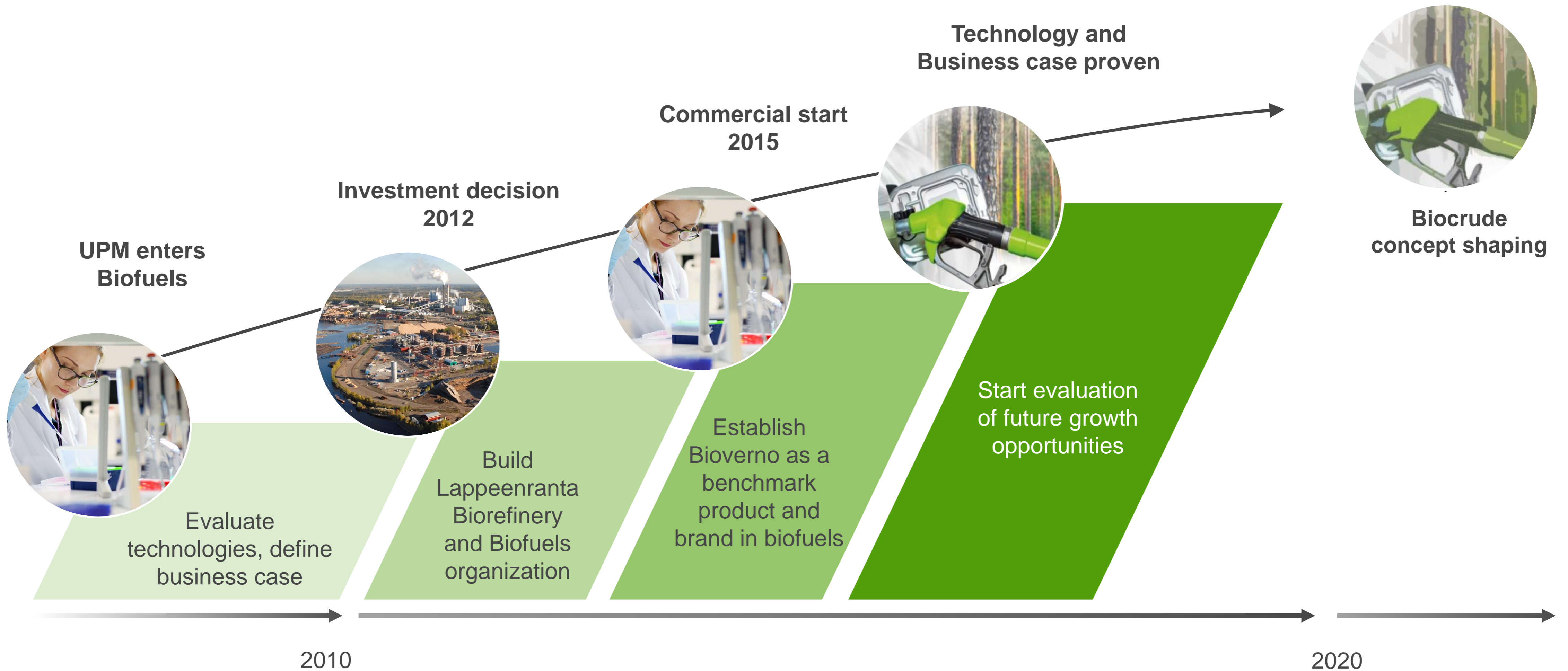
 Dedicated green fleets



  Marine/Aviation

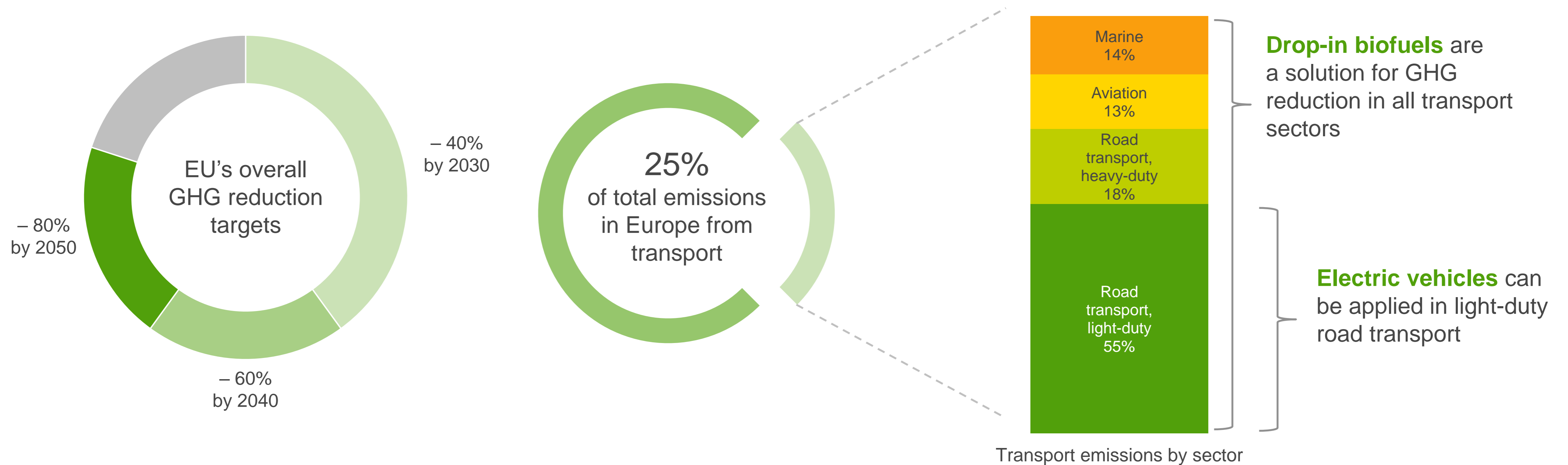


# UPM Biofuels business evolving



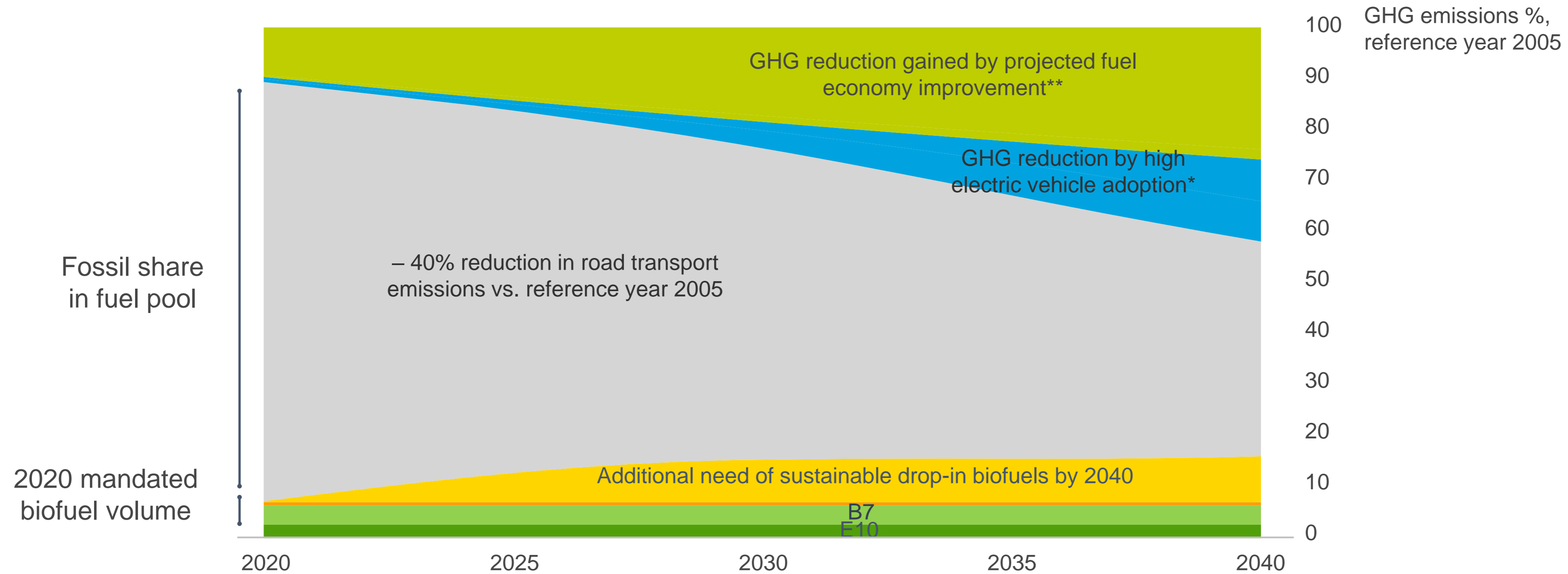
# Significant emission cuts needed in transportation sector

EU's greenhouse gas reduction targets cannot be met without significant emission cuts in transport – actions needed in all sectors



# All energy and technology options needed

Decarbonizing European transport requires effective use of all energy and technology options – renewable drop-in fuels a fast-lane solution



\* Calculated based on "Global EV sales outlook to 2040" by Bloomberg New Energy Finance  
 \* Assuming EV's represent 38% of new car sales in Europe by 2040 + EV's are fully emission free  
 \*\* Assuming annual energy efficiency improvement of 2% in light-duty, 0,5% in heavy-duty

# Cost competitive and flexible asset base

## Power generation breakdown

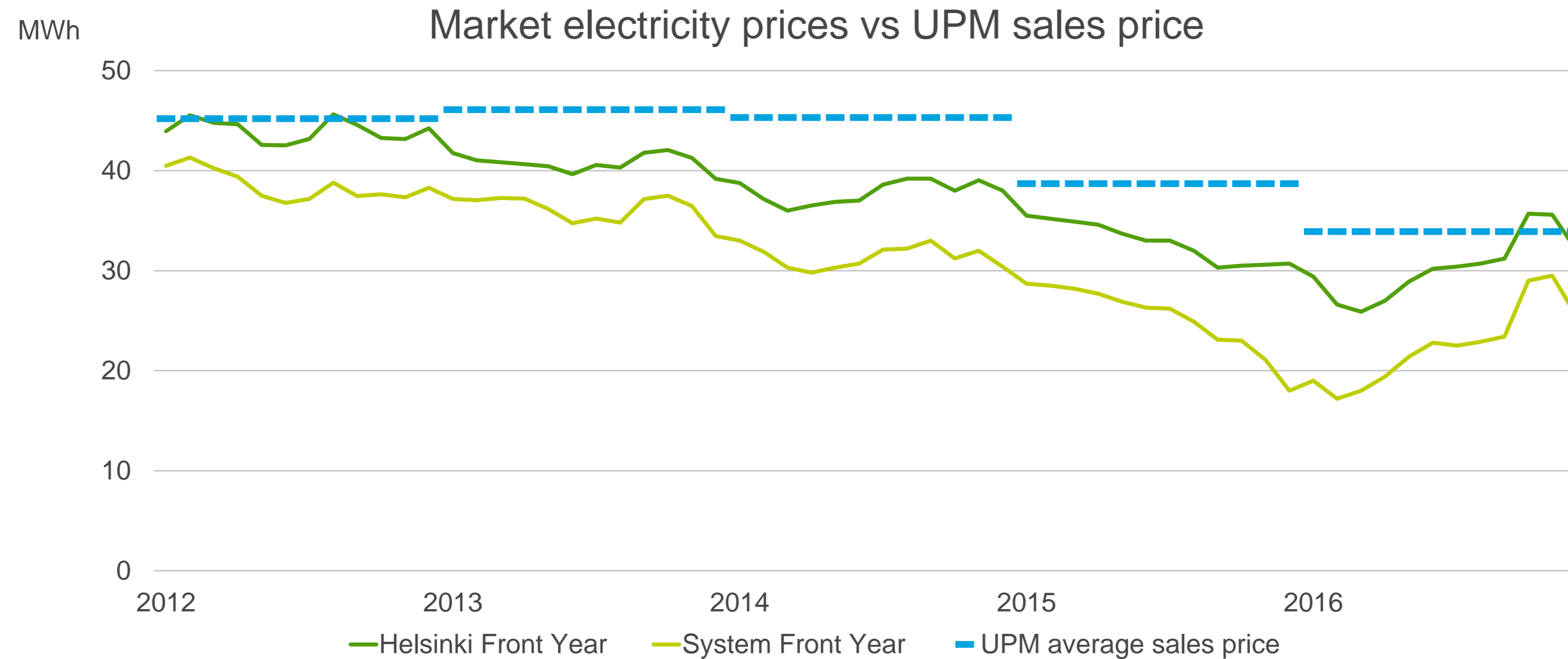
Condensing power



Flexible hydro production with optimisation opportunities

Nuclear as reliable base load with world-class availability performance

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



UPM Energy profitability	2012	2013	2014	2015	2016
Comparable EBIT, EURm	217	186	202	181	116
% of sales	45.0	39.9	43.5	43.6	32.7

UPM Raflatac

# Self-adhesive labels in end-use





# Leading position in a growing market

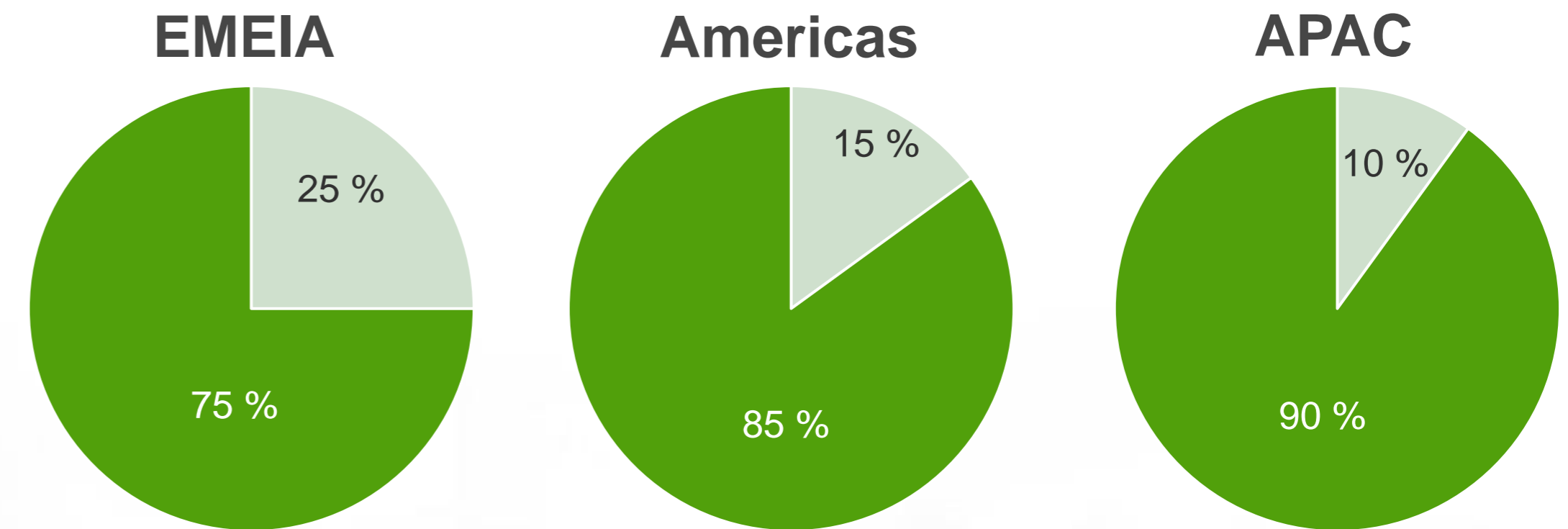
## The self adhesive labelstock market

- > EUR 8bn global market
- ~ 4% p.a. growth
- Private consumption driven

## UPM Raflatac

- #2 globally
- Business in 120 countries
- > 8,000 customers
- 3,000 people in six continents

## UPM Raflatac market shares



# Continuing growth

1. Capturing the market growth in the current markets and product areas
2. Increased distribution coverage and customer reach
3. Wider product portfolio
4. M&A when opportunities emerge

Enabled by scalable operating platform & efficient investments

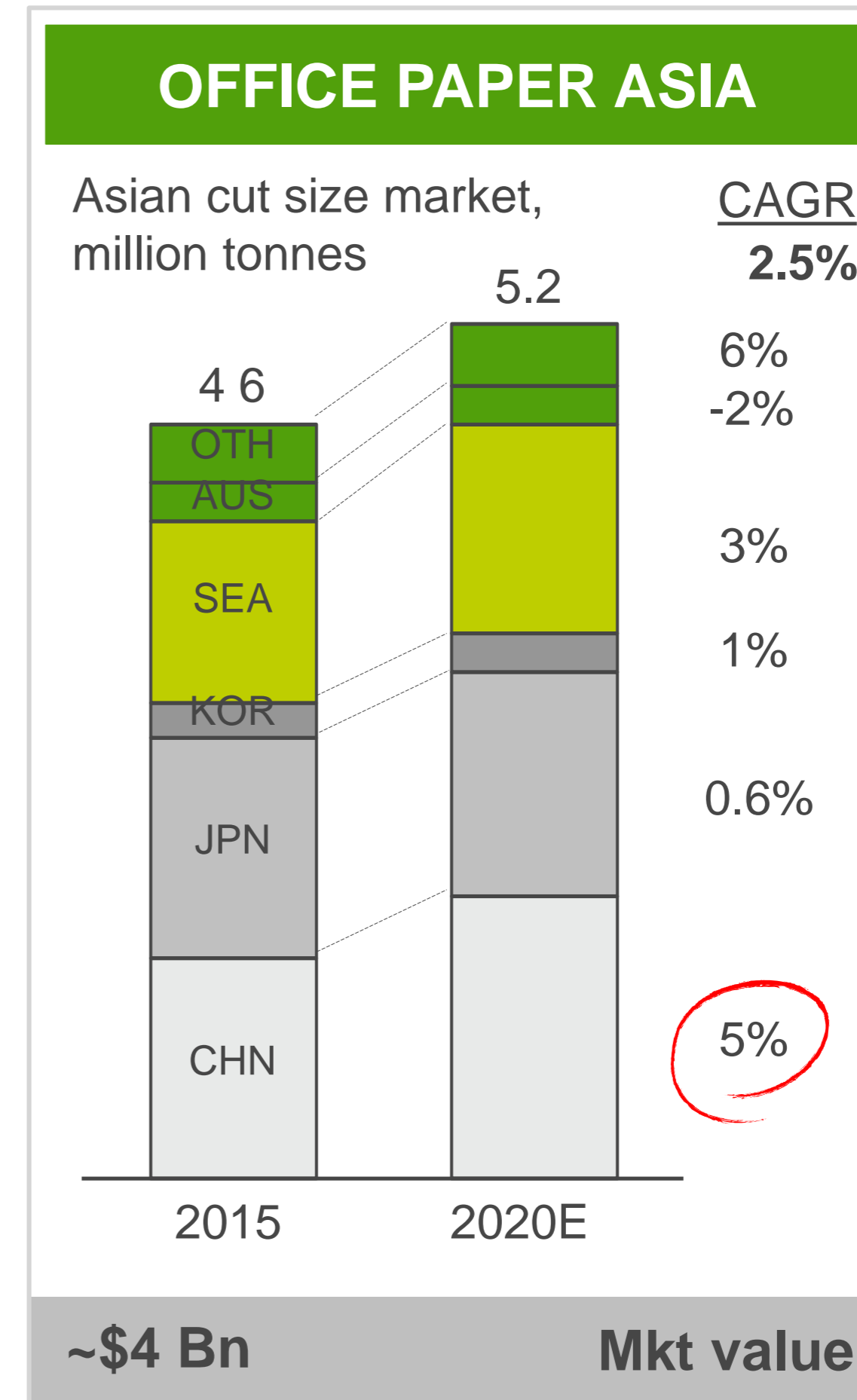
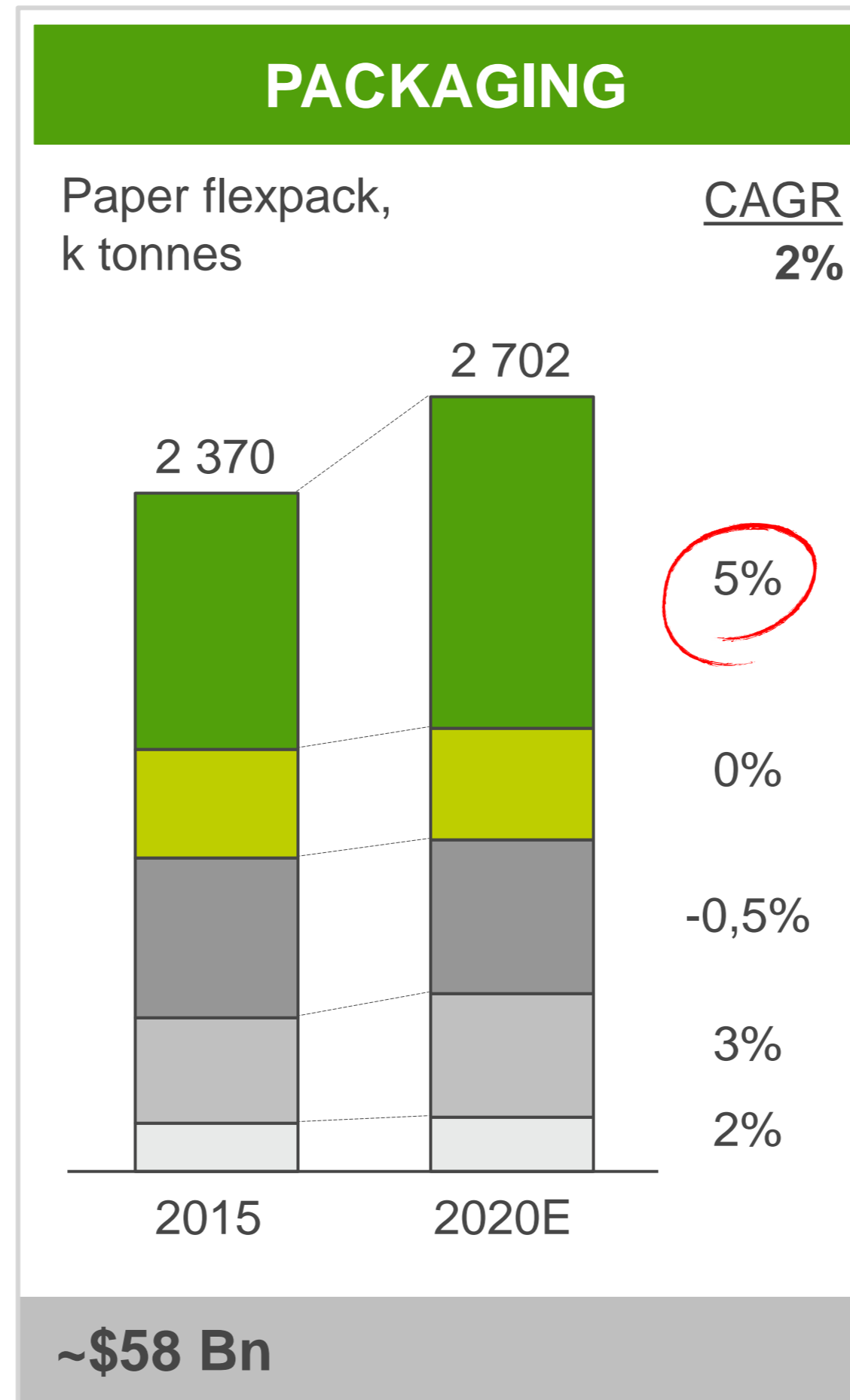
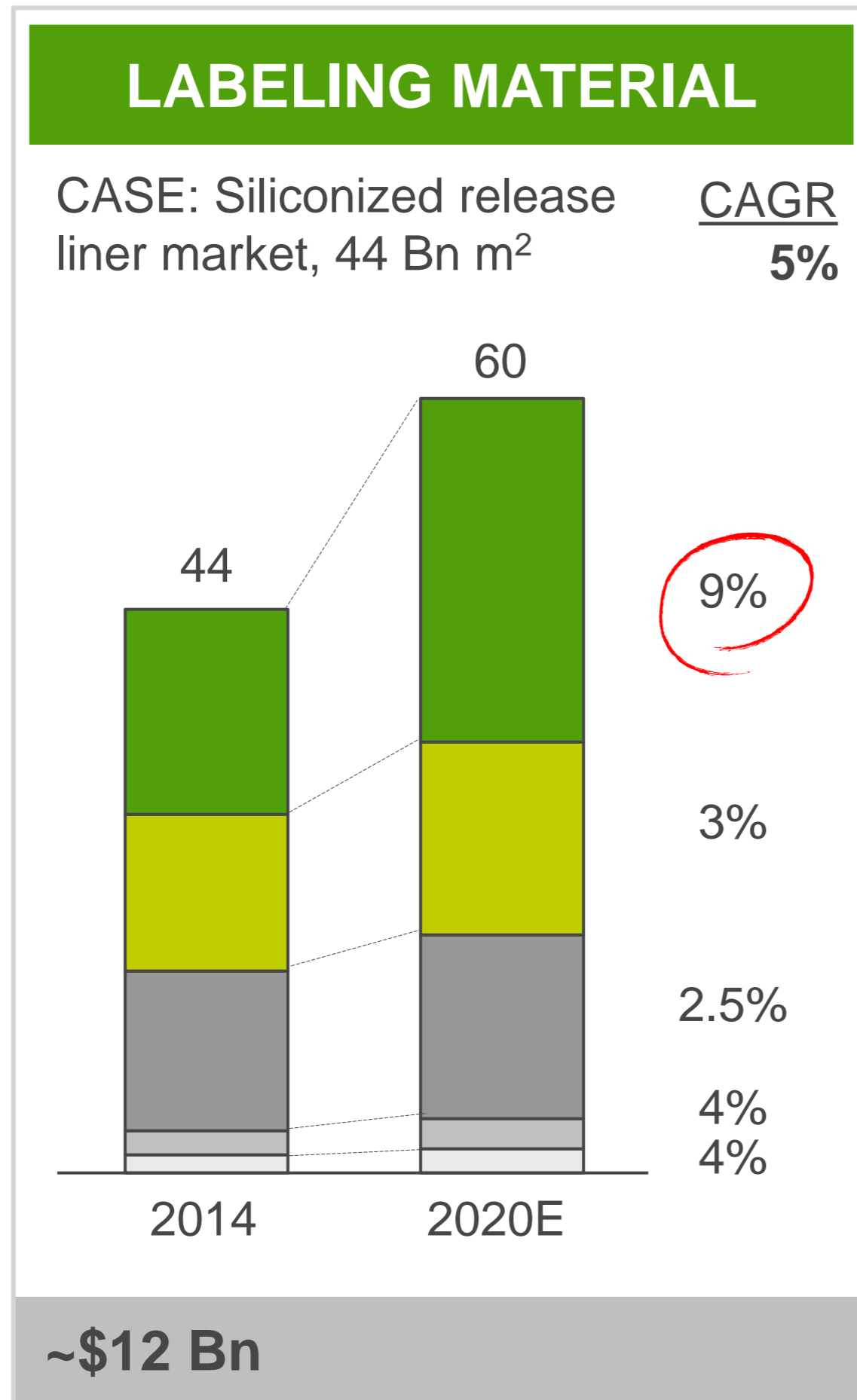
Tailored marketing  
Productivity Population growth  
Single households Consumerism  
Reliability Packaged food Ease of use  
Private consumption  
**Label demand**  
Urbanisation E-commerce  
Sustainability Differentiation  
Retailing changes Regulation  
Higher standard of living Shelf-appeal  
Product safety



# Focus on Labeling materials, Packaging and Office paper in Asia

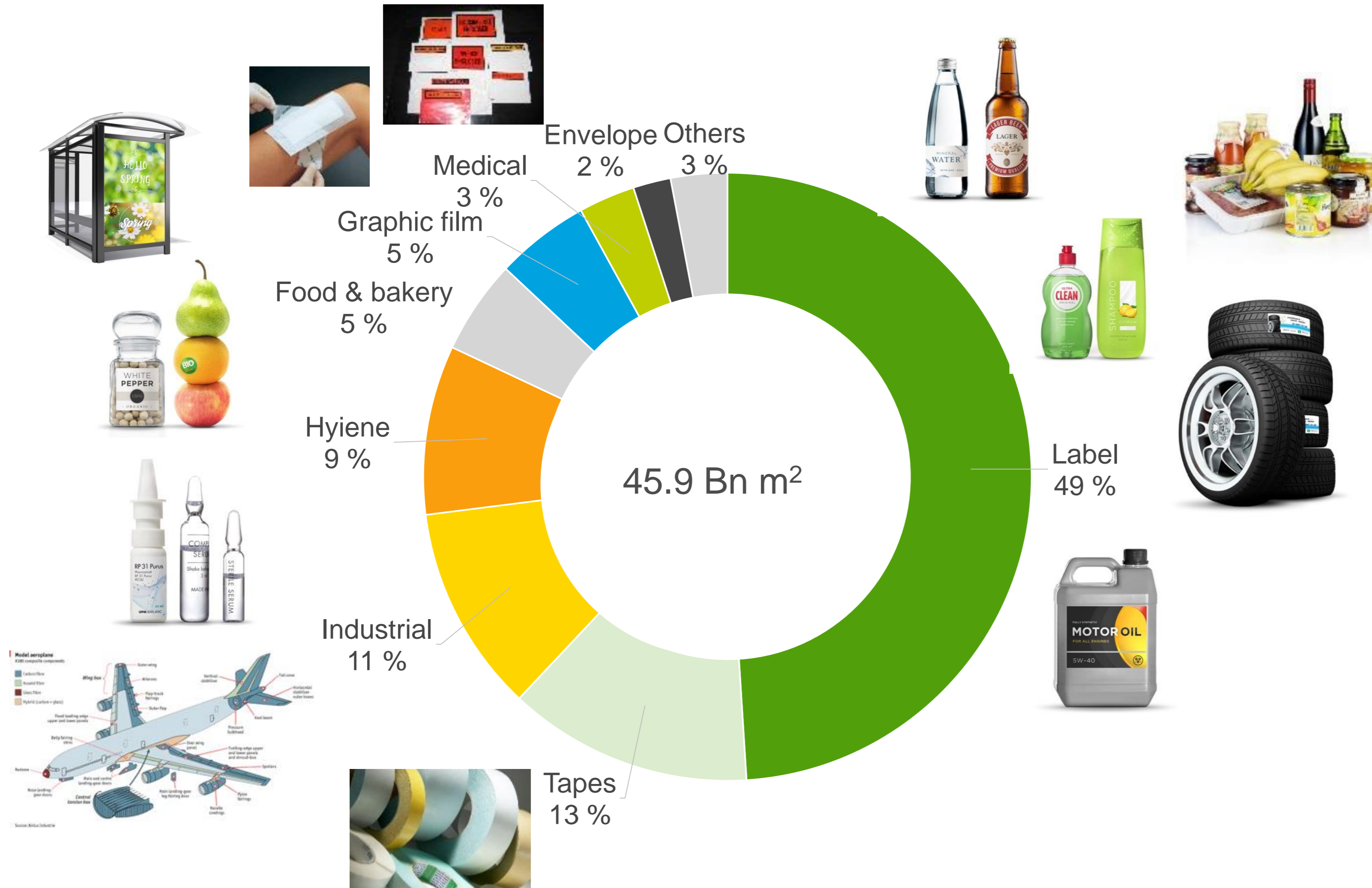


# Our end use markets are growing



■ Asia 
 ■ North America 
 ■ Europe 
 ■ South America 
 ■ MEA

# Global release liner market: Applications



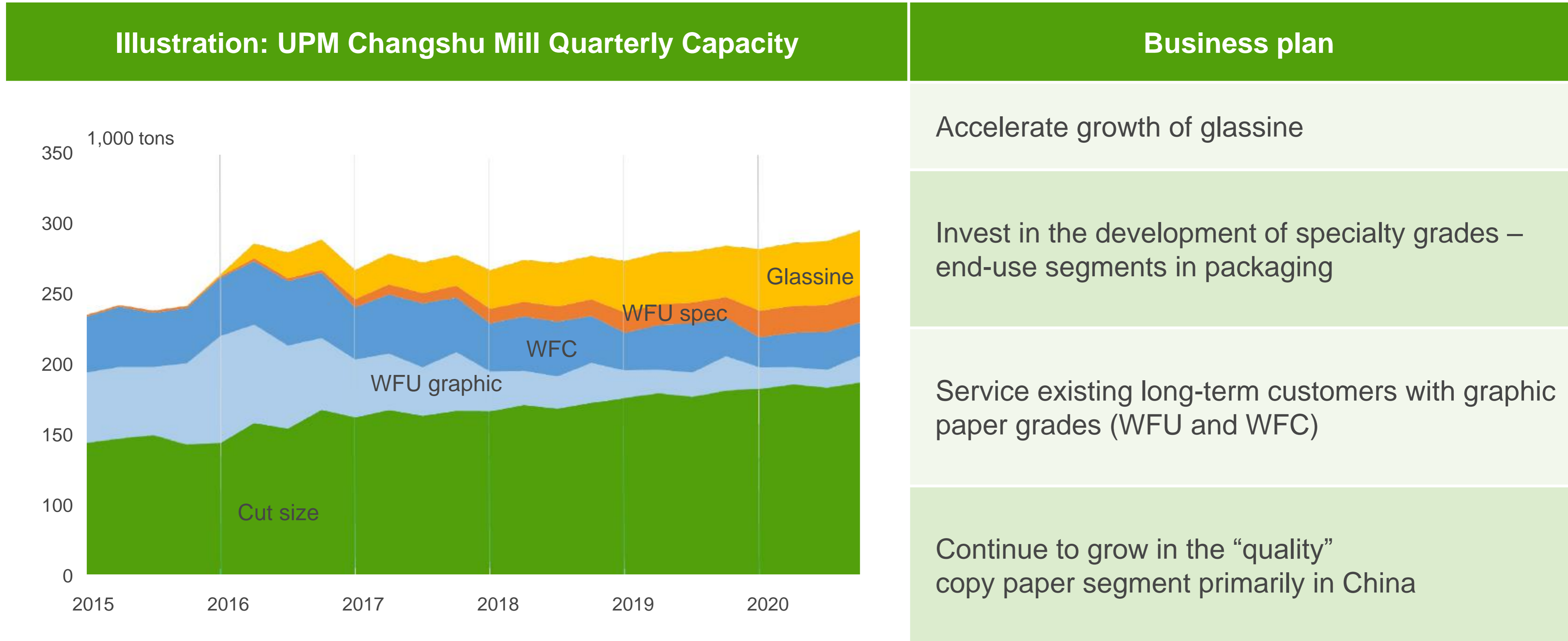
### Product functions:

- Release liner carries the adhesive and face material
- Prevents the adhesive from sticking permanently
  - Important and often critical feature of a layered construction



Source: AWA

# Changshu mill: focus on growing end uses with a flexible swing production line



WFU: wood free uncoated  
 WFC: wood free coated  
 Source: UPM

# Paper demand by end use – different trends



Source: Euro-Graph

- Historically Home & Office end-use has been the **most resilient** to structural changes
- Despite the digital alternatives personal preferences (way of working and learning), regulation (archiving) and lack of common standards have mitigated the change
- **A moderate decline** has taken place in Direct marketing end-use
- Paper based marketing is still recognized to be the **most effective medium** for retailers and cataloguers
- **Steady decline** in Magazine Publishing circulation and pagination, however number of titles increasing
- Publishers still **rely heavily on the revenues** from print
- Newspaper publishing being historically the **most vulnerable** to structural changes but remarkable differences between countries
- **Monetizing digital circulation for Magazines and Newspapers continue to be challenging**

# What does it take to perform in challenging markets?



1

Assets

“stringent capacity management”



2

Sales

“profound customer- and market understanding”



3

Cost base

“smart initiatives in push mode”



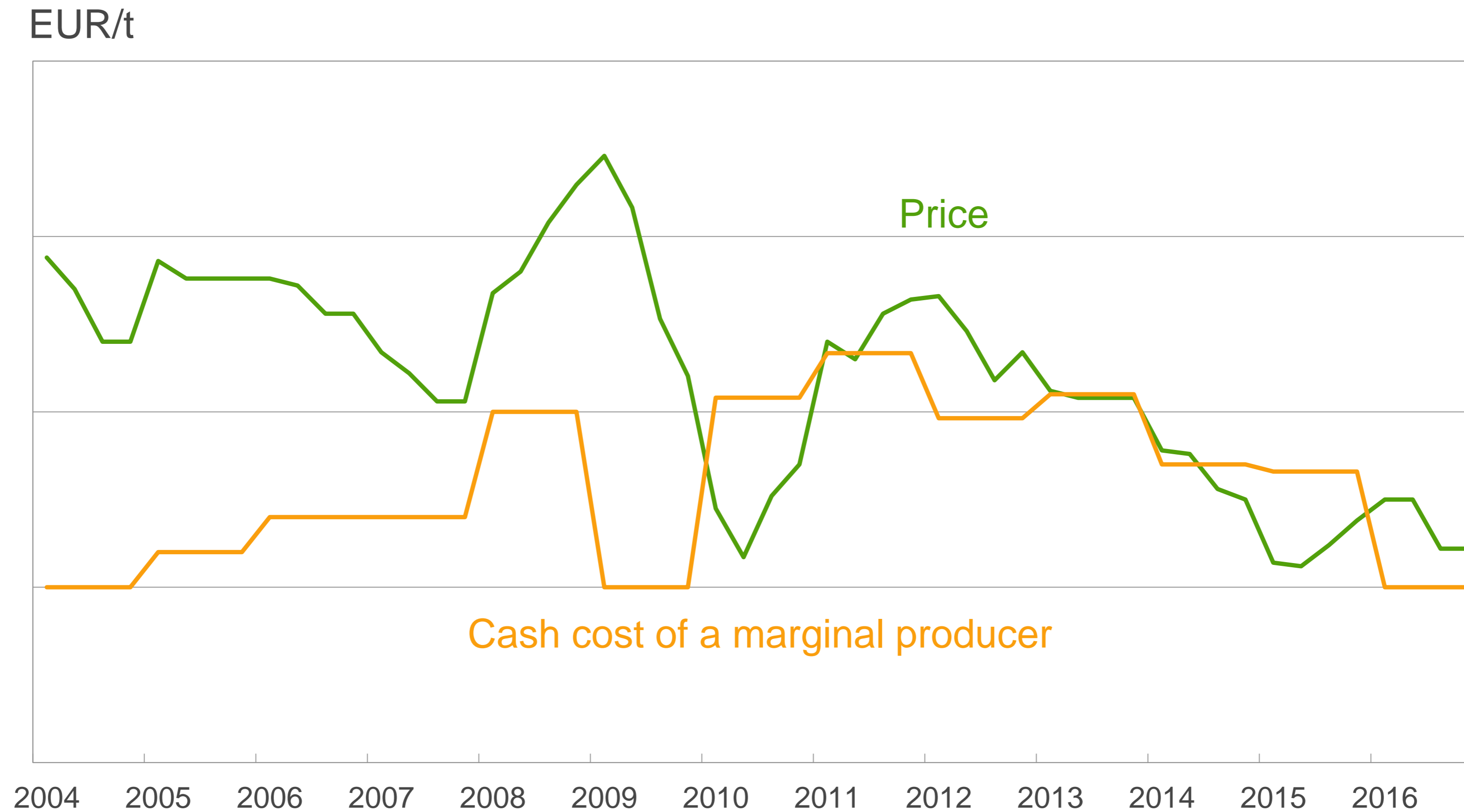
4

Cash flow

“performance management and discipline”



# Demand-supply balance in European graphic paper is visible in margins



Sources: PPI, RISI, Pöyry

UPM Plywood

# UPM Plywood in end-use

Construction



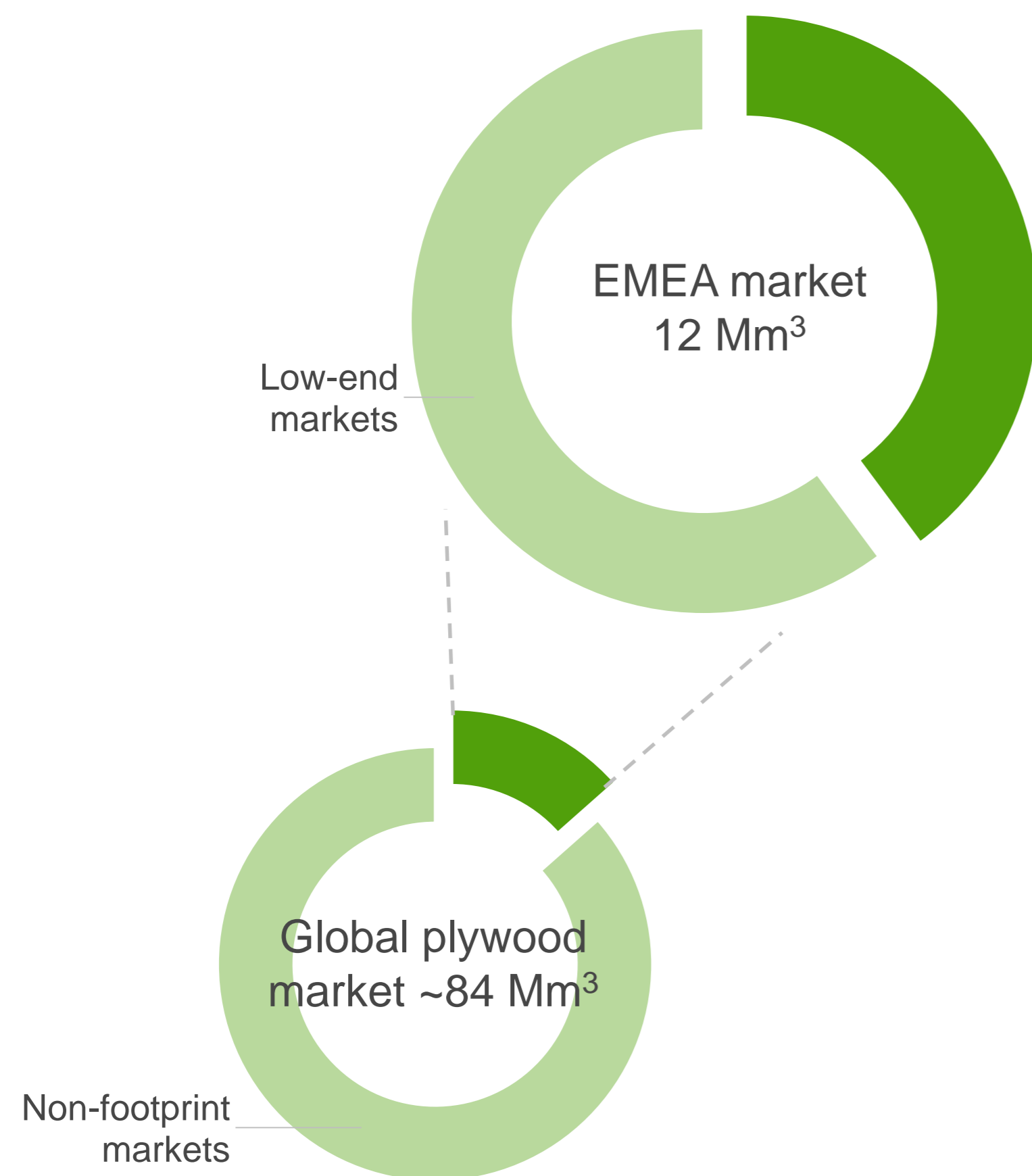
Vehicle flooring



LNG shipbuilding



# Relevant high-end market offers meaningful growth potential

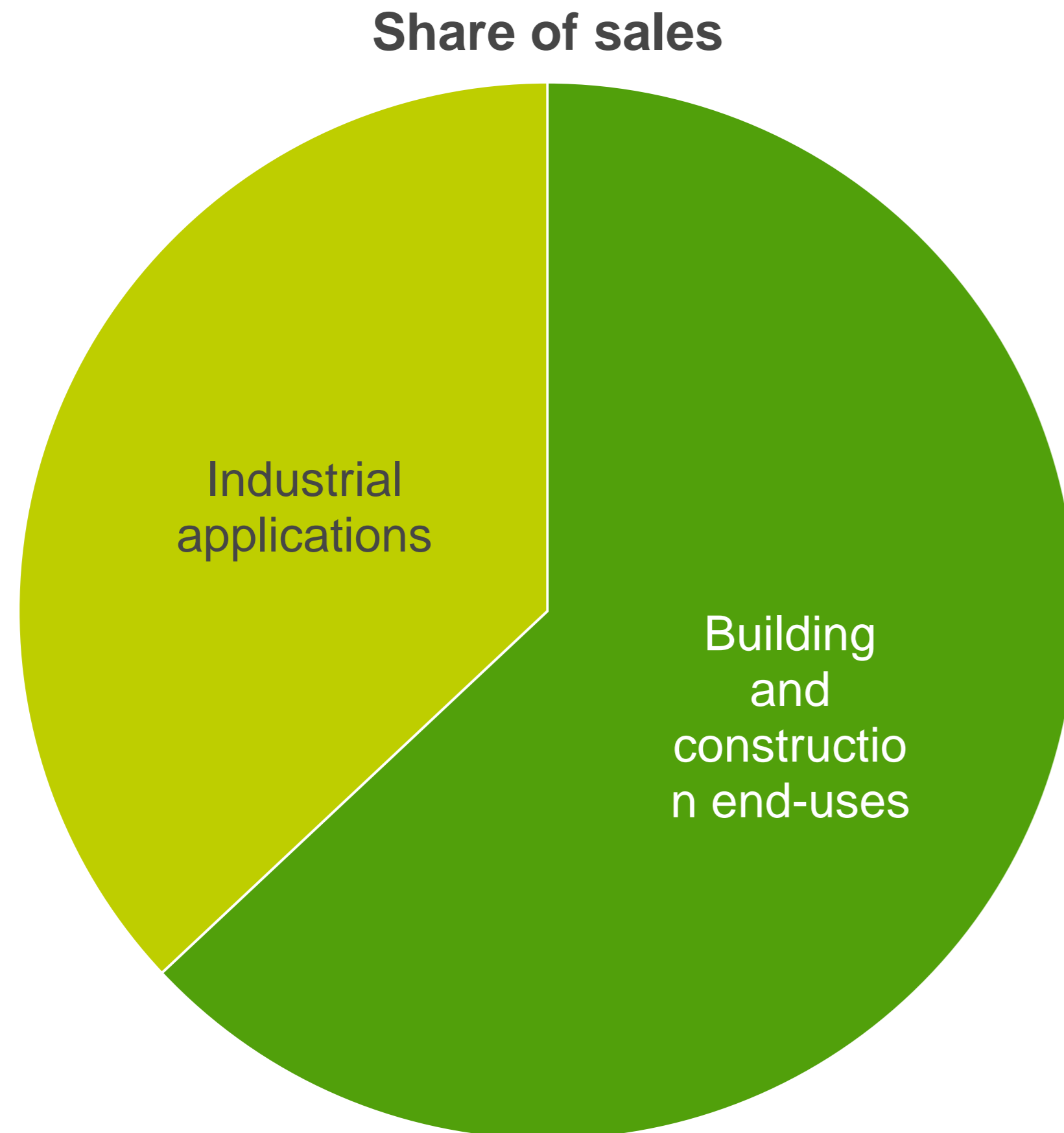


## Relevant market ~5 million m<sup>3</sup>

- High-end demanding applications & customers
  - Medium range standard products
  - EMEA region
  - Global LNG business
- 
- Europe is net importer of plywood
  - Imports focus mainly on standard products in mid-low ranges

Source: FEIC; FAOSTAT; UPM

# Selected focus end-uses provide further growth potential

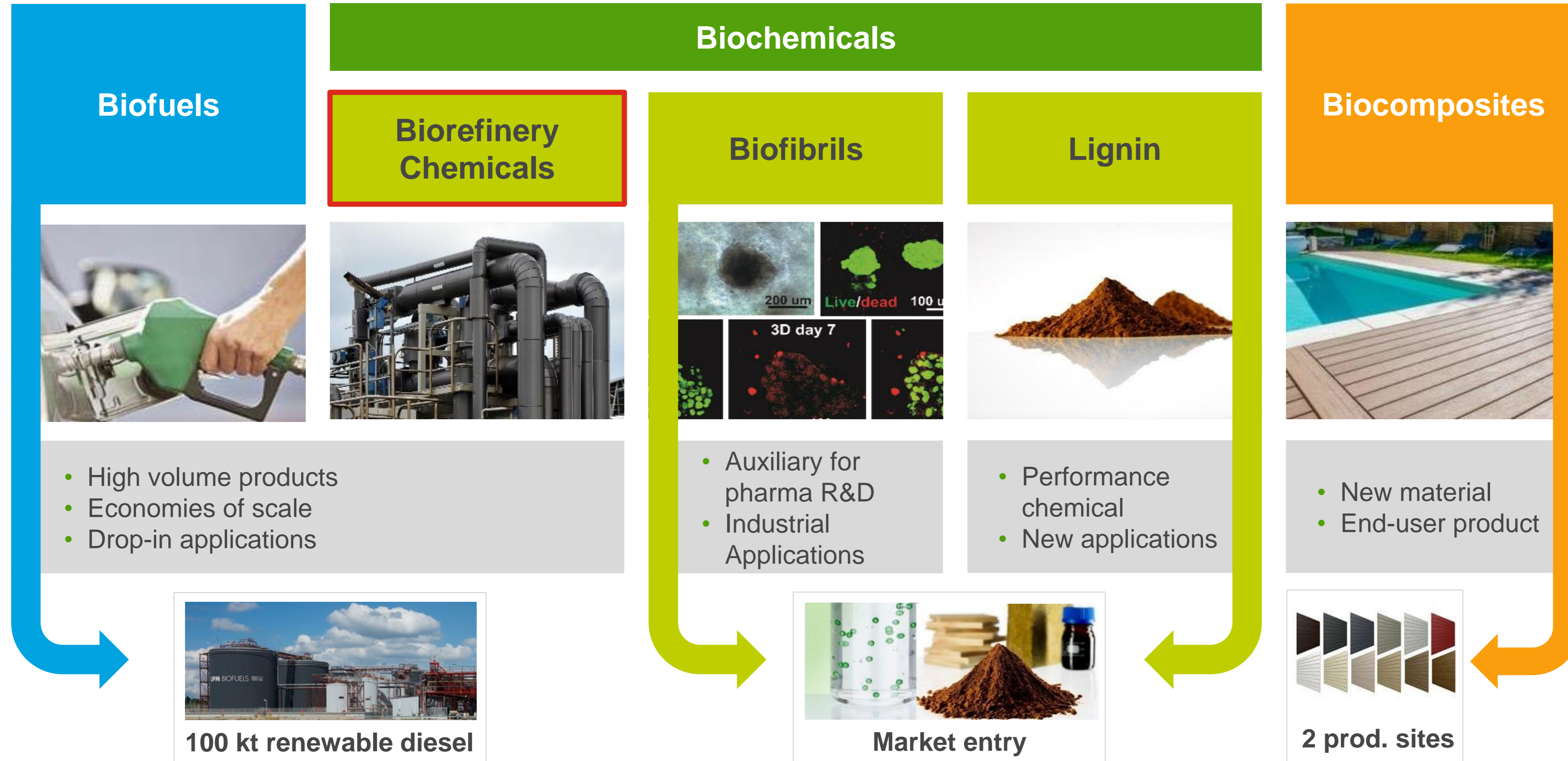


- The recovery of the European construction sector is driving demand (annual growth 2–3% p.a.)
- The financial crisis created a backlog for trailers driving the current replacement need (average growth 4% p.a.)
- The LNG market is expected to remain solid as countries secure energy availability, thereby supporting the demand for LNG vessels (existing orderbook for plywood based LNGC ~90 vessels)

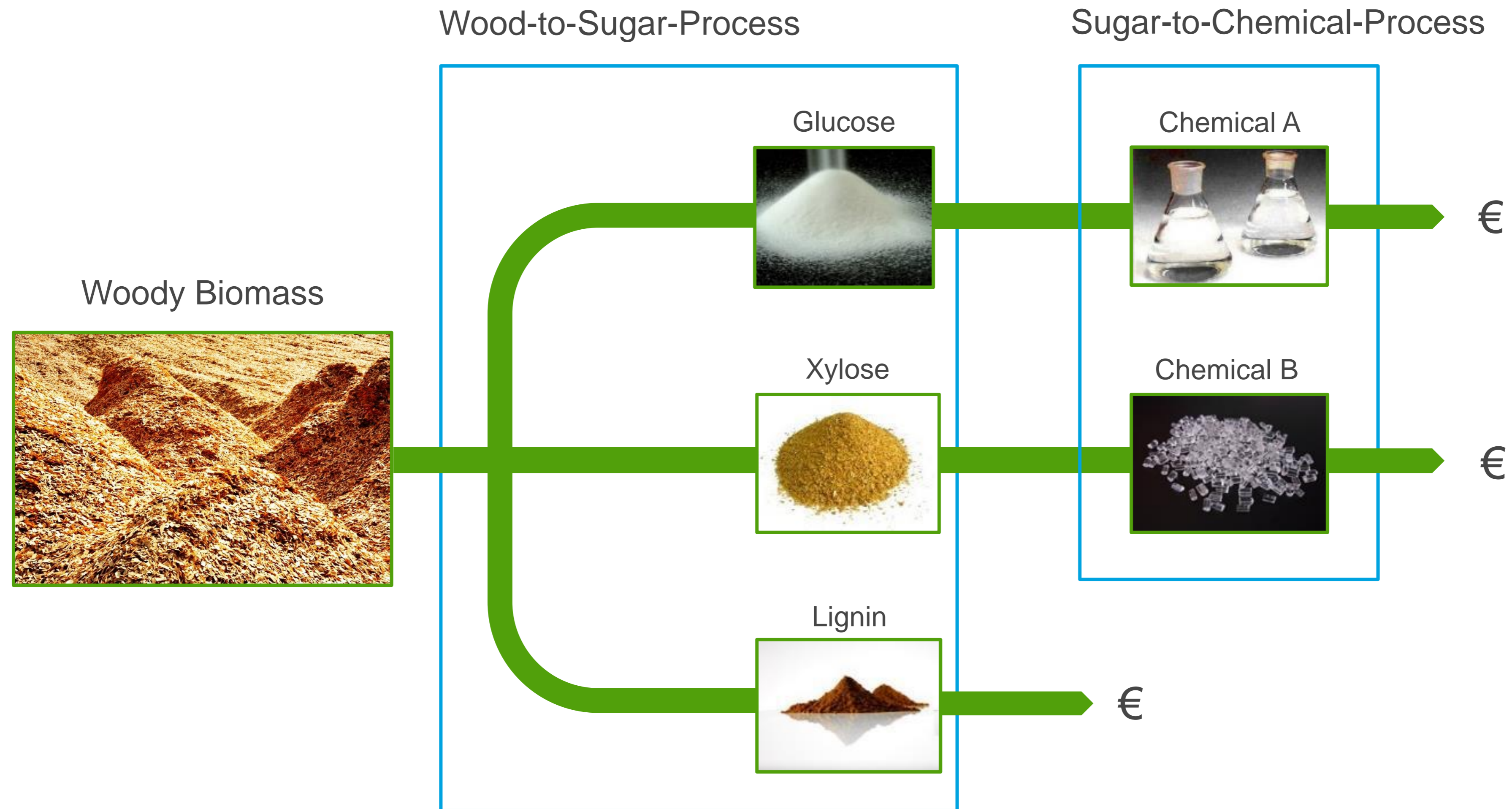
Sources: Euroconstruct, West European trailer registrations for Big 7 Countries (1985–2016), LNG World Shipping



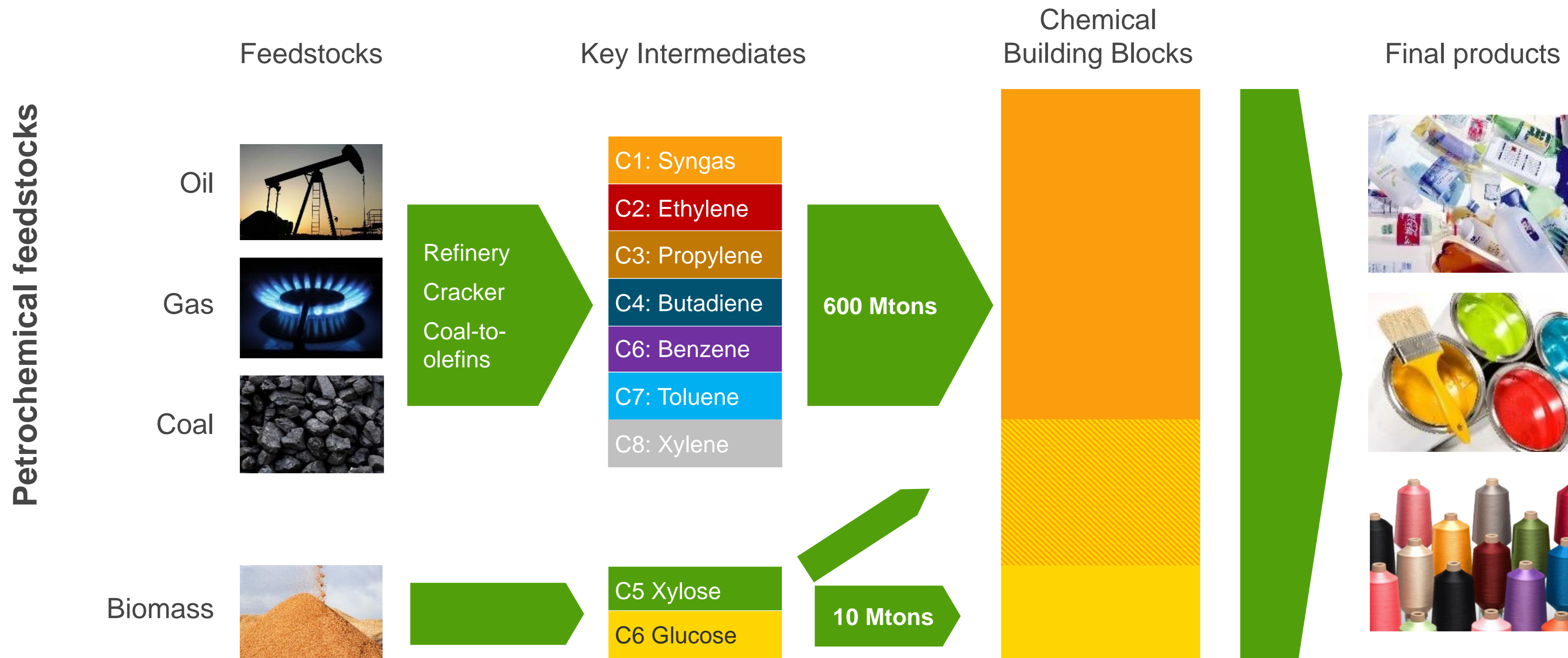
# New business opportunities for UPM



# New separation technologies ensure best overall value capture



# Partial overlap with fossil-based value chains in chemicals





**UPM**

The Biofore  
Company