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 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

- Net debt / EBITDA (trailing 12 months)
  - 2011: 6.23
  - 2012: 4.1x
  - 2013: 3.0x
  - 2014: 2.5x
  - 2015: 2.0x
  - 2016: 1.0x
  - Q3/17: 0.41x
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 m³ to 155,000 m³
- 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.
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

- **Bio-Monoethylene glycol (MEG)**
- **Bio-Monopropylene glycol (MPG)**
- **Lignin**

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<th>BIOMASS</th>
<th>SUGARS</th>
<th>GREEN ENERGY</th>
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<tr>
<td>40% Cellulose</td>
<td>30% Hemi-cellulose</td>
<td>25% Lignin</td>
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Biochemicals products are sustainable and competitive drop-in alternatives for brand owners

Mono Ethylene Glycol
- bMEG
- Existing fossil-based market
- Market demand > 26 mio tons
- CAGR >3%
- Application examples: Textiles, Bottles & Packaging, Deicing fluids

Mono Propylene Glycol
- bMPG
- 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
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

* Shareholdings in UPM Energy valued at fair value

Long-term return target
Group financial performance

**Comparable EBIT**

![Comparable EBIT Chart]

**Comparable ROE**

![Comparable ROE Chart]

**Net debt and leverage**

![Net debt and leverage Chart]

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

Target: EBIT growth

Target: 10%

Policy: ≤ 2x

Target: 10%
5-year cumulative cash flow – disciplined capital allocation in action

- Strong operating cash flow: EUR 5.9bn
- Deleveraging: EUR 2.1bn
- Focused investments: EUR 1.9bn
- Attractive dividend: EUR 1.9bn

Industry-leading balance sheet:
Net debt / EBITDA: 0.41x
## Capital allocation – maintaining capability for future opportunities

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| **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

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<th>USD</th>
<th>GBP</th>
<th>JPY</th>
<th>Others</th>
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<tr>
<td>EURm</td>
<td>1,060</td>
<td>370</td>
<td>210</td>
<td>90</td>
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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

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<tr>
<td>Comparable EBIT, EURm</td>
<td>217</td>
<td>186</td>
<td>202</td>
<td>181</td>
<td>116</td>
<td>22</td>
<td>12</td>
<td>26</td>
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<td>% of sales</td>
<td>45.0</td>
<td>39.9</td>
<td>43.5</td>
<td>43.6</td>
<td>32.7</td>
<td>27.5</td>
<td>18.3</td>
<td>30.5</td>
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Graphic paper prices

Europe

North America

China

EUR/t

USD/t

USD/t

Sources: PPI, RISI

WFC r (100% chemical pulp)

Uncoated Woodfree Reels (100% chemical pulp)
Paper price vs. cash cost of marginal cost producer

Sources: PPI, RISI, Pöyry