Jussi Pesonen
President and CEO
UPM today

**UPM BIOREFINING**
- Pulp
- Biofuels
- Timber

**UPM ENERGY**
- Electricity generation and trading

**UPM RAFLATAC**
- Label materials for product and information labelling

**UPM SPECIALTY PAPERS**
- Label papers, release liners, office papers and flexible packaging

**UPM PAPER ENA**
- Magazine papers, newsprint and fine papers

**UPM PLYWOOD**
- Plywood and veneer products

**UPM BIOCOMPOSITES**

**UPM BIOCHEMICALS**

**WOOD SOURCING AND FORESTRY**
Competitive businesses with strong market positions
Operating on healthily growing markets

UPM PLYWOOD
Plywood, veneer ~3%

UPM PAPER ENA
Graphic papers ~−4%

UPM Specialty Papers
Label papers ~4%
High-end office papers ~4%

UPM RAFLATAK
Self-adhesive labels ~4%

UPM BIREFINING
Pulp ~3%
Biofuels strong
Timber ~2%

UPM ENERGY
Electricity ~1%

By comparable EBIT 2016
Demand trend growth, % pa
Global businesses – local presence

UPM's sales by market 2016

EUR 9,812 million

13% North America
63% Europe
18% Asia
6% Rest of the world

54 production plants in 12 countries
19,300 employees in 45 countries
12,000 customers in 120 countries
85,000 shareholders in 40 countries
55,000 suppliers in 70 countries
Contents

• Results 2016
• Responsibility is good business
• UPM in transformation
• Aiming higher
UPM’s operating model is showing results – record-strong year 2016

Top performance
- Comparable EBIT: +25%
- Comparable ROE: +1.4pp

Strong cash flow
- Operating cash flow: +42%

Attractive dividend
- Dividend proposal: +27%

Focused investments
- Attractive returns

Net debt reduction
- -46%

Industry-leading balance sheet
- Net debt/EBITDA: 0.73x
Growth projects contributed significantly and cost efficiency measures continued on a strong track.

Comparable EBIT 2016 vs. 2015

- **Prices**: 916 EURm (9.0%)
- **Variable costs**: 916 EURm
- **Fixed costs**: Delivery costs, other BAs, Paper ENA
- **Currency**: 1,143 EURm (11.6%)
- **Other**: 1,143 EURm (11.6%)

Comparative chart showing changes in EBIT for 2015 vs. 2016.
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

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

80% run-rate of the EUR 200m EBITDA target achieved in 2016
Comparable EBIT by business area

**UPM Biorefining**
- EURm: 500
- % of sales: 25

**UPM Energy**
- EURm: 500
- % of sales: 50

**UPM Paper ENA**
- EURm: 500
- % of sales: 10

**UPM Specialty Papers**
- EURm: 150
- % of sales: 15

**UPM Raflatac**
- EURm: 150
- % of sales: 15

**UPM Plywood**
- EURm: 150
- % of sales: 15

The Biofore Company
Group financial performance

Comparable EBIT
EUR 1,143m

Comparative ROE
10.9%

Net debt
EUR 1,131m

Comparable figures for 2014-2016, excluding special items for earlier years
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
Responsibility is good business

MORE WITH BIOFORE

Creating value through products and innovation

Creating competitive advantage and long-term value

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
Creating competitive advantage and long-term value by engagement

Per million hours

Safety

Lost-time accident frequency

5-year change:
-76%

Index

Employee engagement

Manager effectiveness

Employee engagement

5-year change:
+9

EUR million

Productivity

Sales per employee

5-year CAGR:
+4% pa
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
SO₂ emission: −90% Per tonne of paper

Source: UPM
Creating value through products and innovation

UPM BioVerno – turning residue into high-quality renewable diesel

- 80% fossil CO₂ emissions

100% wood-based material
Consistent long-term work receives external recognition

UPM in sustainability indices

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

Source: Nasdaq, September 2016
UPM IN TRANSFORMATION
2016 performance is the result of 10 years of transformation

Fixing the foundation

Biofore direction

New business model

Six separate businesses
- Focused growth investments
- Continuous improvement
- SMART-programmes
- Compliance

From resources to businesses
- Market-based operating model
- Acquisitions
- Innovations
- Leadership development

Restructuring
- Efficiency
- Functions, centralising
- Divestments
Transformation progress so far

<table>
<thead>
<tr>
<th>2008 vertically integrated paper company</th>
<th>2016 six separate businesses</th>
<th>Business model change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sales</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100 %</td>
<td>100 %</td>
<td></td>
</tr>
<tr>
<td>Paper</td>
<td>Paper ENA</td>
<td></td>
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<tr>
<td>Plywood</td>
<td>Plywood</td>
<td></td>
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<tr>
<td>Raflatac</td>
<td>Energy</td>
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<tr>
<td>Sawmilling</td>
<td>Specialty Papers</td>
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<td></td>
<td>Raflatac</td>
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<td></td>
<td>Biorefining</td>
<td></td>
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<tr>
<td></td>
<td>Others</td>
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</table>

Business portfolio change

<table>
<thead>
<tr>
<th>Business performance change</th>
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</thead>
<tbody>
<tr>
<td>Sales EUR 9.5bn</td>
</tr>
<tr>
<td>EBIT EUR 513m</td>
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<tr>
<td>ROE 3.5%</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Business performance change</th>
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</thead>
<tbody>
<tr>
<td>Sales EUR 9.8bn</td>
</tr>
<tr>
<td>EBIT EUR 1,143m</td>
</tr>
<tr>
<td>ROE 10.9%</td>
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<table>
<thead>
<tr>
<th>Capital allocation change</th>
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<tbody>
<tr>
<td>Net debt EUR 4.3bn</td>
</tr>
<tr>
<td>Market cap EUR 4.7bn</td>
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<table>
<thead>
<tr>
<th>Capital allocation change</th>
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</thead>
<tbody>
<tr>
<td>Net debt EUR 1.1bn</td>
</tr>
<tr>
<td>Market cap EUR 12.5bn</td>
</tr>
</tbody>
</table>

1) excluding special items for 2008, comparable figures for 2016
Increasing share of businesses with strong long-term fundamentals for profitability and growth

Sales 2016

Sustainable growth
- Pulp +70,000 t
- Pulp +100,000 t
- Pulp +170,000 t

Maintaining strong cash flow
- Label stock expansions
- Renewable diesel +120m litres
- Specialty papers +360,000 t
- Plywood +40,000 m³
- Label stock expansion

Capacity closures and divestments
- 420,000 t magazine
- 160,000 t fine
- 460,000 t magazine
- 345,000 t news
- 280,000 t news
- 195,000 t magazine
- 305,000 t magazine

Focused investments
- Pulp mill efficiency improvement
- Renewable diesel +120m litres
- Specialty papers +360,000 t
- Plywood +40,000 m³
- Label stock expansion
- 13
- 14
- 15
- 16
- 17
- 18

UPM Biorefining
UPM Raflatac
UPM Specialty Papers
UPM Plywood
UPM Energy
UPM Paper ENA
Value creation through sustainable growth and cash generation

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

Maintain strong cash flow
- Commercial success
- Cost efficiency
- Efficient use of assets, including restructuring
### Focused investments are delivering growth

<table>
<thead>
<tr>
<th>Sales 2016</th>
<th>100%</th>
<th>75%</th>
<th>50%</th>
<th>25%</th>
<th>0%</th>
</tr>
</thead>
</table>

**Average delivery growth 2011–2016**

<table>
<thead>
<tr>
<th>Business Unit</th>
<th>Products</th>
<th>CAGR</th>
</tr>
</thead>
<tbody>
<tr>
<td>UPM Biorefining</td>
<td>Pulp, Biofuels</td>
<td>+3%</td>
</tr>
<tr>
<td></td>
<td><strong>New business</strong></td>
<td></td>
</tr>
<tr>
<td>UPM Raflatac</td>
<td>Standard products, Films and specials</td>
<td>+4%</td>
</tr>
<tr>
<td>UPM Specialty Papers</td>
<td>Label materials, Cut-size</td>
<td>+8%</td>
</tr>
<tr>
<td>UPM Plywood</td>
<td>Plywood</td>
<td>+3%</td>
</tr>
</tbody>
</table>
UPM will continue to invest on growth through focused investments

Focused growth investments
- Sustainable returns, fast payback
- Low implementation risk
- Financed from operating cash flow

Potential larger investments
- Organic growth or M&A
- When the opportunity and timing are right

Attractive returns and continuously strong balance sheet
Uruguay could be a competitive alternative – time schedule is several years

Conversation with Government of Uruguay on local prerequisites

Development of infrastructure and permitting est. 1.5–2 years

Potential UPM investment decision

Pulp mill project est. 2.5 years
Biofuels and biochemicals are natural evolutionary steps in wood based value creation.
New business opportunities for UPM

Biofuels

- High volume products
- Economies of scale
- Drop-in applications

100 kt renewable diesel

Biochemicals

- Life science prod. e.g. cell culturing and medical care
- Performance chemicals e.g. resin for plywood manufacturing

Biofibrils

Lignin

Biocomposites

- Terrace materials
- New applications, e.g. acoustics pr.

Market entry

Scaleup

Biofibrils

Biorefinery

Chemicals

Chemicals

Biochemicals

Market entry

Scaleup

Biofuels

100 kt renewable diesel

Biofibrils

Lignin

Biocomposites
UPM transformation and disciplined capital allocation are reflected in shareholder value
AIMING HIGHER WITH BIOFORE
New phase beginning in UPM transformation

Shareholder value
Performance
Leadership
Growth
Innovation
Sustainability
Renewed financial targets: business area long-term return targets increased

* shareholdings in UPM Energy valued at fair value

Long-term return target
Renewed financial targets: aiming for earnings growth and attractive shareholder returns

Comparable EBIT

- Target: EBIT growth

Comparable ROE

- Target: 10%

Net debt and leverage

- Target: EBIT growth
- Policy: ≤ 2x

Comparable figures for 2014-2016, excluding special items for earlier years
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 and 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
UPM

The Biofore Company