Q2 in summary

- Good market situation in folding boxboards, more uncertainty in white kraftliners
- Pulp prices continued to weaken
- Several planned maintenance shutdowns at the Finnish mills
- Metsä Board and Metsä Fibre launched pre-engineering phases for three major investments
Total paperboard delivery volumes in Q2 slightly up from Q1

- White kraftliner
- Folding boxboard

H1 2018 total: 957k tonnes
-7%

H1 2019 total: 886k tonnes
+1%
Paperboard delivery split in H1 2019 vs. H1 2018
Stable in FBB, main changes in white kraftliners in EMEA

Folding boxboard (FBB) deliveries in H1 2019 (H1 2018)
1,000 tonnes

- Americas: 120k (127) - 8%
- APAC: 50k (64) - 22%
- EMEA: 432k (433) - 71%

Total FBB deliveries
H1 2019: 602,000 tonnes
(H1 2018: 624,000)

White kraftliner (WKL) deliveries in H1 2019 (H1 2018)
1,000 tonnes

- Americas: 97k (93) - 35%
- APAC: 4k (3) - 65%
- EMEA: 183k (237)

Total WKL deliveries
H1 2019: 284,000 tonnes
(H1 2018: 332,000)
Sales and profitability behind year-on-year levels

**Sales**

<table>
<thead>
<tr>
<th>EUR million</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>H1 2018</th>
<th>H1 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>519</td>
<td>492</td>
<td>477</td>
<td>487</td>
<td></td>
</tr>
</tbody>
</table>

**Comparable operating result**

<table>
<thead>
<tr>
<th>EUR million</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>H1 2018</th>
<th>H1 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>59</td>
<td>69</td>
<td>41</td>
<td>62</td>
<td></td>
</tr>
</tbody>
</table>

Operating result, % of sales:
- **Q2/19:** 8.6%
- **Q1/19:** 12.7%
Higher FBB prices supported operating result in H1 2019, negative from lower pulp prices and higher production costs

Comparable operating result
Q1 2019 vs. Q2 2019

Q1 2019: EUR 62 million
- market pulp
- annual maintenance

EUR -21 million
+ FBB prices
+ paperboard production costs

Q2 2019: EUR 41 million

Comparable operating result
H1 2018 vs. H1 2019

H1 2018: EUR 128 million
- production costs
- lower delivery volumes
- market pulp

EUR -25 million
+ improved prices in paperboard
+ changes from FX

H1 2019: EUR 103 million
Pulp prices in Europe have declined throughout H1 2019

- In 2019, activity in the pulp market picked up in Q1, especially in China, but weakened again in Q2
- The PIX price of NBSK in Europe has declined by $200/tonne from the beginning of year
- Annual maintenance shutdowns and production curtailments by some producers will reduce short term supply
- Producers’ inventory levels globally are still high

![Pulp price (PIX) development in Europe and China](chart)

**Source:** Thomson Reuters Datastream/ Fastmarkets Ltd, Metsä BI

Note! The specifications of PIX China Net index were renewed in the beginning of 2017. Earlier data not comparable with new
Cost inflation accelerated in 2018 and costs have remained at a high level

**Q2 2019**
- Production costs slightly lower compared to Q1 2019 due to lower energy costs

**H1 2019**
- Clearly higher wood costs as well as other raw material costs compared to H1 2018

**Metsä Board’s cost split in 2018 incl. 24.9% share of Metsä Fibre’s costs**

- Wood: 28%
- Personnel: 13%
- Energy: 14%
- Logistics: 16%
- Chemicals: 15%
- Other fixed: 14%

**Metsä Board’s total costs in 2018:**
- EUR 1.7 billion
  - (2017: EUR 1.6 billion)
Cash flow from operations EUR 67 million in H1 2019

Free cash flow = cash flow from operations − investments
Net debt increased from Q1, leverage at 1.2x

Net debt / EBITDA target level: <2.5

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Net debt, EUR million</th>
<th>Leverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>6/2017</td>
<td>495</td>
<td>2.0</td>
</tr>
<tr>
<td>9/2017</td>
<td>437</td>
<td>1.7</td>
</tr>
<tr>
<td>12/2017</td>
<td>358</td>
<td>1.2</td>
</tr>
<tr>
<td>3/2018</td>
<td>335</td>
<td>1.1</td>
</tr>
<tr>
<td>6/2018</td>
<td>388</td>
<td>1.2</td>
</tr>
<tr>
<td>9/2018</td>
<td>344</td>
<td>1.0</td>
</tr>
<tr>
<td>12/2018</td>
<td>335</td>
<td>1.0</td>
</tr>
<tr>
<td>3/2019</td>
<td>297</td>
<td>0.9</td>
</tr>
<tr>
<td>6/2019</td>
<td>380</td>
<td>1.2</td>
</tr>
</tbody>
</table>
### Husum pulp mill renewal

**Estimated schedule for the first phase of the investment**

<table>
<thead>
<tr>
<th>Prefeasibility study on the renewal concluded</th>
<th>Final investment decision expected to be made in Q4 2019, at the earliest</th>
<th>~24 months after the investment decision</th>
<th>New recovery boiler and turbine in operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td></td>
<td>2021</td>
<td></td>
</tr>
</tbody>
</table>

The investment value of **the first phase** is ~EUR 300 million, divided between the years 2019–2022.

The second phase of the investment would take place during the 2020s after the first phase is fully completed.
Metsä Board launched new sustainability targets for 2030

Highlights of the new targets:

• Fossil-free mills by 2030 with zero fossil CO₂ emissions, both from
  – own energy production (scope 1)
  – all purchased energy (scope 2)
• 30% reduction in process water use per product tonne and at least 10% improvement in energy efficiency
• At least 90% share of certified wood out of all sourced wood raw material
• More information and all targets at www.metsaboard.com/sustainability
Our R&D and innovation work is based on sustainability

• Metsä Board launched its renewed FBB portfolio in April helping customers tackle big issues in packaging: To save resources and reduce carbon footprint

• Our ecobarrier products have been well received by the markets

• A new R&D excellence centre to be established in Äänekoski to boost the development of new paperboard and packaging solutions of the future
Near-term outlook

• Paperboard delivery volumes in Q3 are expected to remain roughly at the Q2 level
• Good market situation for FBB, some uncertainty with white kraftliners
• Average market pulp prices will be lower in H2 2019 compared to H1 2019
• Planned maintenance shutdowns in Q3:
  – Kemi integrate, Husum integrate (partly)
  – Metsä Fibre’s Rauma pulp mill
• Stable production costs and FX impacts in Q3 compared to Q2
Result guidance for July–September 2019

Metsä Board’s comparable operating result for the third quarter of 2019 is expected to weaken compared to the second quarter of 2019.
Summary

• Market outlook:
  – Good market situation for FBB
  – Stable demand for white kraftliners but pressure in prices
  – Pulp market remains uncertain
• Metsä Board launched ambitious sustainability targets for 2030
• Pre-engineering phase for Husum pulp mill renewal is proceeding
Appendix
## Key financials

<table>
<thead>
<tr>
<th></th>
<th>Q2/19</th>
<th>Q2/18</th>
<th>Change Q2/19 vs. Q2/18</th>
<th>H1/19</th>
<th>H1/18</th>
<th>Change H1/19 vs. H1/18</th>
<th>FY 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>EUR, m</td>
<td>477</td>
<td>519</td>
<td>-9%</td>
<td>964</td>
<td>1,011</td>
<td>-5%</td>
</tr>
<tr>
<td>EBITDA*</td>
<td>EUR, m</td>
<td>68</td>
<td>84</td>
<td>-19%</td>
<td>158</td>
<td>178</td>
<td>-11%</td>
</tr>
<tr>
<td>Operating result*</td>
<td>EUR, m</td>
<td>41</td>
<td>59</td>
<td>-31%</td>
<td>103</td>
<td>128</td>
<td>-20%</td>
</tr>
<tr>
<td>% of sales*</td>
<td>%</td>
<td>8.6</td>
<td>11.4</td>
<td>10.7</td>
<td>12.7</td>
<td></td>
<td>13.0</td>
</tr>
<tr>
<td>Metsä Fibre’s share of operating result*</td>
<td>EUR, m</td>
<td>16</td>
<td>30</td>
<td>-47%</td>
<td>38</td>
<td>58</td>
<td>-34%</td>
</tr>
<tr>
<td>Earnings per share</td>
<td>EUR</td>
<td>0.10</td>
<td>0.12</td>
<td>-17%</td>
<td>0.27</td>
<td>0.27</td>
<td></td>
</tr>
<tr>
<td>ROCE*</td>
<td>%</td>
<td>9.7</td>
<td>13.9</td>
<td>11.7</td>
<td>15.1</td>
<td></td>
<td>14.4</td>
</tr>
<tr>
<td>Capex</td>
<td>EUR, m</td>
<td>18</td>
<td>15</td>
<td>20%</td>
<td>24</td>
<td>26</td>
<td>-8%</td>
</tr>
<tr>
<td>Cash flow from operations</td>
<td>EUR, m</td>
<td>31</td>
<td>36</td>
<td>-14%</td>
<td>67</td>
<td>67</td>
<td></td>
</tr>
<tr>
<td>IB Net debt, at end of period</td>
<td>EUR, m</td>
<td>380</td>
<td>388</td>
<td>-2%</td>
<td>380</td>
<td>388</td>
<td>-2%</td>
</tr>
</tbody>
</table>

*comparable
Favourable impacts from FX changes

FX impact, including hedges:

- Q2 2019 vs Q1 2019: Neutral
- H1 2019 vs H1 2018: EUR +21 million

FX sensitivities excluding hedges

10% strengthening of foreign currency vs. EUR would have an impact on Metsä Board’s EBIT of

<table>
<thead>
<tr>
<th>Currency</th>
<th>Next 12 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>USD, $</td>
<td>EUR +65 million</td>
</tr>
<tr>
<td>SEK, kr</td>
<td>EUR -40 million</td>
</tr>
<tr>
<td>GBP, £</td>
<td>EUR +8 million</td>
</tr>
</tbody>
</table>

Annual transaction exposure total EUR 1.1 billion
H1 2019 ROCE at 11.7%

Return on capital employed, %

- Target level > 12%
- R12m: 13.3%
- Q2/19: 9.7%

Quarterly | Rolling 12m | Target
Our long-term financial targets aim for profitability and a strong balance sheet

**Comparable ROCE:**
At least 12%

**Net debt/comparable EBITDA:**
Maximum level 2.5x

**Dividend policy:**
Payout ratio at least 50% of net result

In April, Metsä Board removed its earlier growth target for annual paperboard volumes. The target was to exceed average market growth. Other financial targets and the dividend policy remained unchanged.
**Capex in H1 2019 was EUR 24 million**

**Investments in growth 2011–2018:**

- **2018**
  - New baling line in Kaskinen BCTMP mill: 30,000 new BCTMP capacity
  - New sheeting line in Äänekoski (to be in production 9/2019)

- **2017**
  - New extrusion coating line in Husum: 100,000 t/a PE coating capacity

- **2015–16**
  - New folding boxboard production line in Husum: 400,000 t/a of FBB and linerboard production line conversion: 250,000 t/a of WKL

- **2011–12**
  - Debottlenecking in Simpele, Äänekoski and Kyro mills: total 150,000 t/a of FBB

Note! The planned investments announced on 26 April are not included in the 2019E capex
Debt and its maturity
30 June 2019

- Interest-bearing debt on 30 June was EUR 466 million (30.6.2018: EUR 483 million)
- Interest-bearing net debt on 30 June was EUR 380 million (30.6.2018: EUR 388 million)

In addition, Metsä Board has an undrawn revolving credit facility of EUR 150 million maturing in 2020 and unraised pension loans of EUR 166 million.
• Net financial costs, including foreign exchange differences, in 1–6/2019 were EUR 7.4 million (1–6/2018: 10.5 EUR million)

• Average interest rate on loans at the end of review period was 2.5% and the average maturity of long-term loans was 6.2 years
Debt structure and liquidity on 30 June 2019

Interest-bearing debt
EUR 466 million
- Bonds: 248
- Loans from financial institutions
  - Pension loans
- Loans from Metsä Group Treasury
  - Finance leases and other loans
- Other loans: 100
- Treasury: 46
- Finance leases and other loans: 50

Available liquidity
EUR 399 million
- Cash and cash equivalents: 83
- RCF, unraised: 166
- Pension loans, unraised: 150

Average maturity of long-term loans on 30 June 2019 was 6.2 years.
Metsä Board shares are listed on Nasdaq Helsinki

### Market cap and foreign owners
30 June 2019

- **Market cap, EUR million**
- **Share of foreign owners, %**

### Ownership distribution
30 June 2019

- **Foreign owners** 15%
- **Metsäliitto Cooperative** 41%
- **Domestic private investors** 22%
- **Domestic institutional investors** 22%
External recognition and commitments in sustainability

Metsä Board has been included on the CDP Water A List every year since 2015 and on the CDP Climate A List since 2016. In addition, Metsä Board has scored A- in the CDP Forest programme since 2015, and is included on the Supplier Engagement leader board in 2019 for its efforts to address climate change.

Metsä Board scored the highest recognition level “Gold” in EcoVadis’ CSR ranking in 2018, and is included in the top 1% of suppliers assessed across all categories.

Metsä Board received a rating of AAA (on a scale of AAA-CCC) in the MSCI ESG Ratings assessment in June 2018.

Metsä Board as part of Metsä Group is committed to the UN Global Compact corporate responsibility initiative and its principles in the areas of human rights, labour, environment and anti-corruption.

Metsä Board has an overall ESG score of 86/100 and is considered a Leader in Sustainalytics’ assessment in May 2018.

As a member of Pack2Go Europe, Metsä Board is committed to the environmental, health and safety aspects within the on-the-go food and beverage packaging industry.

Metsä Board is committed to Science Based Targets to reduce its GHG emissions in line with the goal of the Paris Agreement.

Metsä Board was awarded “Prime” status in ISS-oekom corporate responsibility rating in May 2018.
Price development of pulp in Europe (PIX)
Long-fibre (SW) and short-fibre (HW) pulp

Source: Fastmarkets Foex
Price development of folding boxboard and white kraftliner in Europe

**Folding boxboard**

**White-top kraftliner**

Sources: Fastmarkets RISI & Fastmarkets FOEX
Price development of roadside pulpwood in Finland and Sweden

Pulpwood roadside prices in Finland, EUR/m³

Pulpwood roadside prices in Sweden*, SEK/m³

Sources: Luke (Natural Resources Institute Finland) and Skogsstyrelsen (The Swedish Forest Agency)
FX rates development: EUR/USD and EUR/SEK

EUR/USD

EUR/SEK

29.12.2017 11,1
29.1.2018 11,3
28.2.2018 11,6
31.3.2018 11,9
30.4.2018 10,1
31.5.2018 10,3
30.6.2018 10,5
31.7.2018 10,7
31.8.2018 10,9
30.9.2018 10,7
31.10.2018 10,5
30.11.2018 10,3
31.12.2018 10,1
31.1.2019 9,9
28.2.2019 9,7
31.3.2019 9,9
30.4.2019 10,1
31.5.2019 10,3
30.6.2019 10,5
Make the most of Metsä Board