

1. Introduction to the company

UPM-Kymmene Corporation, commonly known as UPM, is a global leader in the bio-based industries. Established in Finland, UPM has a long history of producing sustainable, renewable, and innovative solutions that cater to various industries, including energy, forestry, chemicals, and packaging. UPM operates through multiple business segments, including UPM Biorefining, UPM Communication Papers, UPM Specialty Papers, UPM Raflatac, and UPM Energy.

With its commitment to **"The Biofore Company"** strategy, UPM aims to create a future beyond fossils by driving innovation in sustainable and renewable products. The company is deeply invested in sustainable operations, focusing on long-term growth, environmental stewardship, and developing renewable energy and bio-based products. UPM continues to expand its influence through strategic investments, particularly in renewable energy sources, biochemicals, and pulp production, further strengthening its leadership in sustainability.

2. Horizontal and Vertical analysis

In 2022, compared to 2019, sales, operating profit, and profit before tax saw the most significant growth (114.48%, 146.88%, and 148.74% respectively). While in 2023, sales also grew by 102.17% compared to 2019, there was a significant decline in operating profit and profit before tax, with reductions of 45.24% and 35.5%, respectively. This is likely related to the "unprecedented destocking" mentioned on page 21 of the UPM Biofore Beyond Fossils 2024 investor presentation. The operating profit growth in 2022 can be attributed to strong market demand, effective inventory management, and cost control. Destocking may have already begun in 2022, but high sales and profits were still maintained during that year. The description of the second half of 2023 and the outlook for 2024 suggests that the market is gradually recovering, but the destocking process is still ongoing. This indicates that the changes in 2022 and 2023 can be partially attributed to inventory management issues. The company may have boosted sales and operating profit through high sales volume in 2022, but by 2023, further inventory clearing was necessary, which led to the decline in operating profit.

The 2023 ratio of non-current assets accounting for 75% and current assets for 25% also reflects the statements made in UPM Biofore Beyond Fossils 2024 investor presentation page 13, such as "increased capital employed," "further growth in industrial operations," and "sustainable value creation in forest and energy assets." The investment in non-current assets is expected to generate significant returns in the coming years. The smaller proportion of current assets indicates that the company has a lower demand for short-term working capital and is more focused on the efficient utilization of long-term capital. Therefore, the changes in asset allocation in 2023 are aligned with its long-term investment strategy.

The year-on-year growth in non-controlling equity, particularly in 2022 and 2023 where it was more than three times that of 2019, also reflects the dividend policy mentioned in the UPM Biofore Beyond Fossils 2024 investor presentation page 18, specifically "UPM aims to pay attractive dividends."

Besides, from both vertical and horizontal analyses (see Figure 1 & 2), UPM Communication Papers had the highest proportion of sales from 2019 to 2023, followed by UPM Biorefining. During 2020 to 2022, the growth of UPM Communication Papers was more evident, while UPM Biorefining's growth was relatively steady. However, in 2023, the sales proportion of UPM Communication

19.10.2024

Papers decreased, whereas UPM Biorefining's proportion increased. Additionally, the sales of UPM Biorefining in 2023 exceeded that of 2019, while the sales of UPM Communication Papers were lower than in 2019.

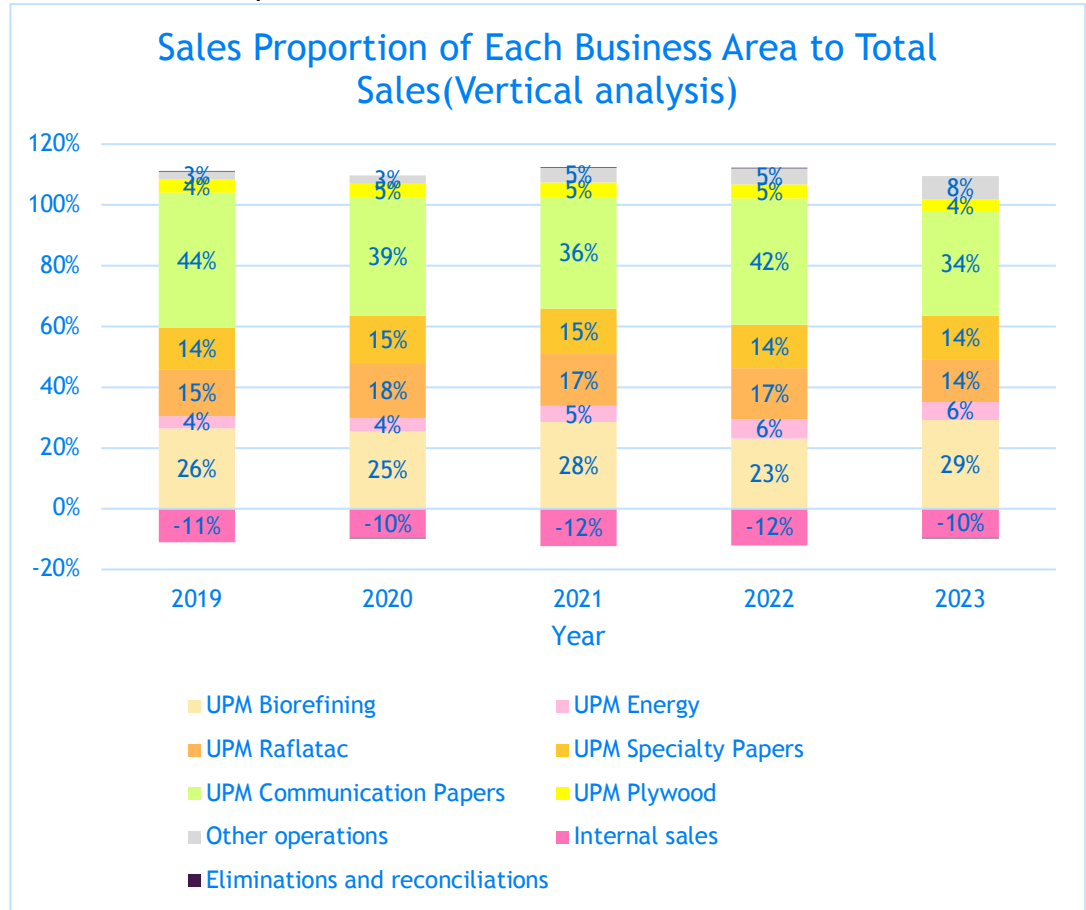


Figure 1: Sales Proportion of Each Business Area to Total Sales (Vertical analysis)

19.10.2024

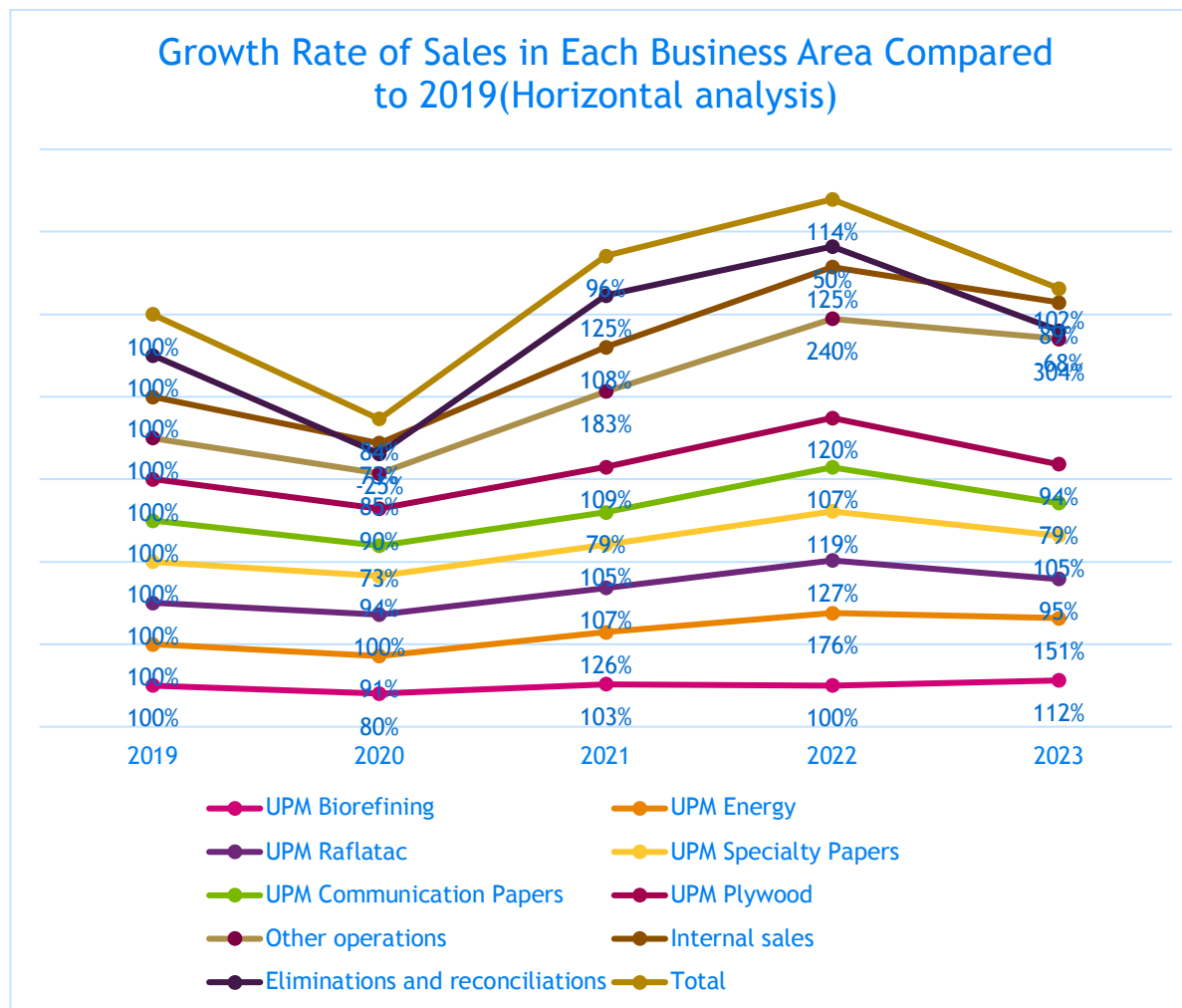


Figure 2: Growth Rate of Sales in Each Business Area Compared to 2019(Horizontal analysis)

3. Visualization of data and Ratio analysis

From the Different business areas' sales in 2023(See Figure 3), the top two sales leaders for UPM were UPM Communication Papers and UPM Biorefining, followed by UPM Raflatac and UPM Specialty Papers, both accounting for 12%. Additionally, from the Sales and Growth Rate (See Figure 4), it is evident that the growth rates increased in 2021 and 2022, but sharply declined in 2023. The growth rate of sales, operating profit, profit for the period, return on equity (ROE), return on capital employed (ROCE) from 2019-2023(See Figure 5) illustrates the fluctuations in UPM's financial performance from 2019 to 2023. Sales and operating profit both show significant volatility during this period, with sales growth peaking in 2021 but declining in 2022 and 2023, while operating profit saw a dramatic rise in 2021, followed by a substantial drop in 2022 and 2023. The profit for the period reflects similar trends. ROE and ROCE, despite showing improvements in 2021 and 2022, experienced declines in 2023, suggesting challenges in capital efficiency and profitability during that year. As shown in Figure 6, the proportion of fossil oil usage has decreased year by year since 2021. This aligns with UPM Biorefining's primary

19.10.2024

goal of producing ingredients that can replace fossil oil (UPM Biochemical 2024), and it is reflected in UPM's overall resource usage.



Figure 3: Different business areas sales in 2023

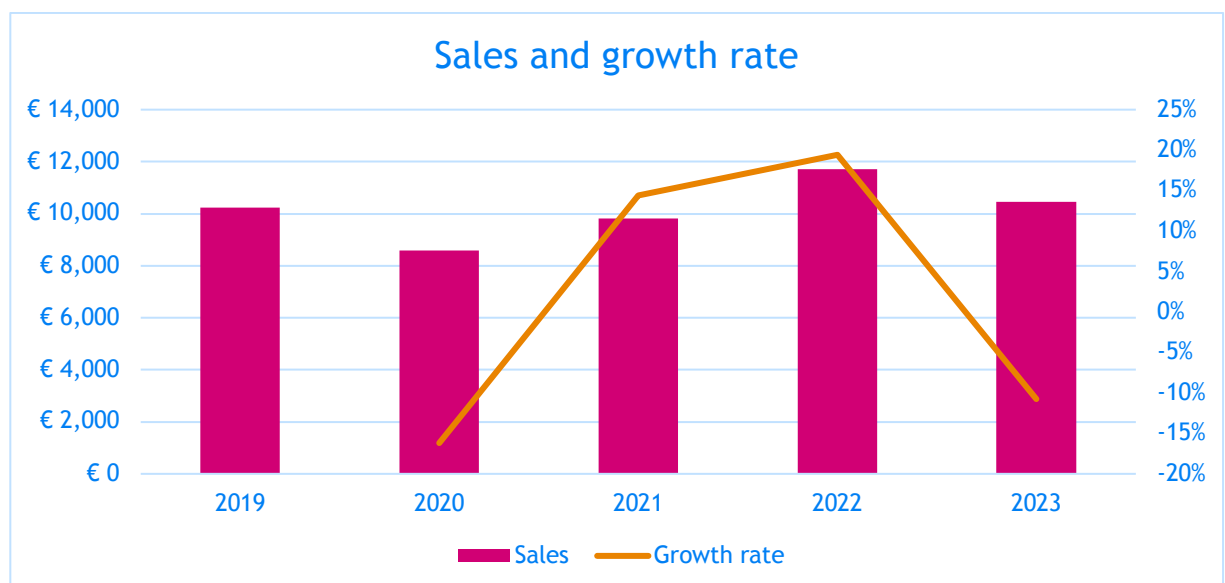


Figure 4: Sales and growth rate

19.10.2024

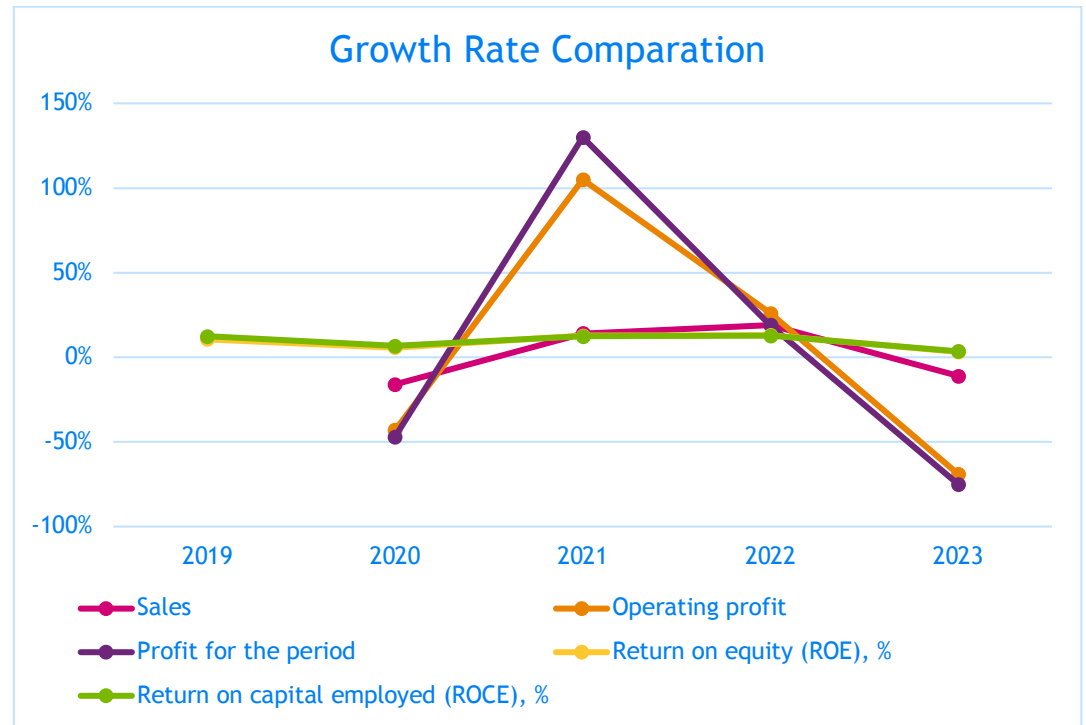


Figure 5: Growth rate comparison

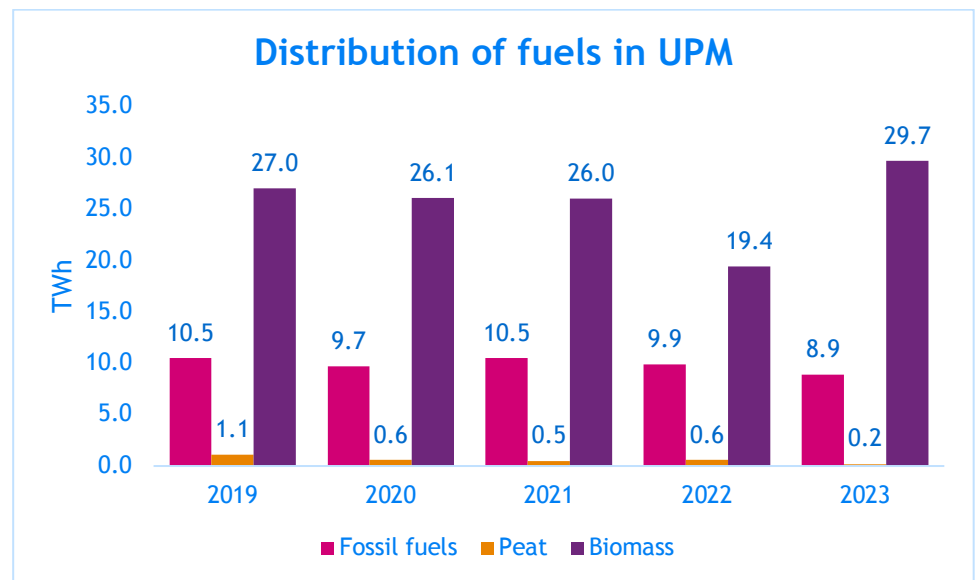


Figure 6: Distribution of fuels in UPM

4. Summary

First, I read through the UPM Biofore Beyond Fossils 2024 investor presentation. After conducting vertical, horizontal, and ratio analysis, visualize the data into charts to better understand the trends, thereby performing descriptive analysis. Then, observe

19.10.2024

any special trends in the charts and identify whether they are anomalies or driven by company strategy, using the UPM Biofore Beyond Fossils 2024 investor presentation. This will allow me to analyze the possible causes and complete a diagnostic analysis.

The performance from 2019 to 2020 was affected by weak market demand and the global economic environment (such as COVID-19), leading to a decline in sales, profits, and return rates. However, the performance in 2021 and 2022 showed a gradual market recovery, with sales growth and cost control driving increases in operating profit and net profit, while maintaining stable capital returns. In 2023, the decline in sales and the sharp drop in profits may be related to the destocking mentioned in the company's report, reflecting that market demand had not fully recovered, which adversely affected the company's profits. Overall, this financial analysis indicates that despite the profit decline in 2023, UPM's financial situation aligns with the company's strategies of destocking, dividends, long-term investments, and sustainability.

Source references

UPM Biochemical (2024). Building the future of the biochemicals industry. Assessed 21 October 2024. <https://www.upmbiochemicals.com/biorefinery/>.

Attachments: Excel data sheet

Financial data_23

Key_figures_annuals_23_excelsheet

Sustainability data sheet