



WE CREATE A FUTURE BEYOND FOSSILS

HALF YEAR FINANCIAL REPORT 2022



UPM Half Year Financial Report 2022:

UPM delivers record Q2 earnings with successful margin management in exceptional business environment



Q2 2022 highlights

- Sales increased by 7% to EUR 2,562 million (2,384 million in Q2 2021)
- Comparable EBIT grew by 26% to EUR 387 million, 15.1% of sales (307 million, 12.9%)
- Operating cash flow was EUR -879 million (308 million), impacted by cash flows from energy hedges. Other operating cash flows were largely as expected
- The rise in energy futures prices was unprecedented, as was the related short-term cash flow impact from energy hedges. Respectively, it indicates strong earnings potential of UPM Energy
- Sales prices increased in all business areas and more than offset the negative impact of higher variable costs
- Cash funds and unused committed credit facilities totalled EUR 1.5 billion at the end of Q2 2022
- Transformative growth projects in Uruguay and in Germany proceed well
- In May, UPM announced the acquisition of AMC AG to accelerate growth and enter new product segments in UPM Rafflatac
- In June, UPM announced the sale of the Steyrmühl site in Austria to secure competitiveness and adapt newsprint production to the long-term market development

H1 2022 highlights

- Sales increased by 10% to EUR 5,069 million (4,618 million in H1 2021)
- Comparable EBIT increased by 13% to EUR 664 million (586 million), and was 13.1% (12.7%) of sales
- Operating cash flow was EUR -867 million (526 million), impacted by cash flows from energy hedges in the highly exceptional energy markets
- Net debt increased to EUR 2,688 million (750 million) and net debt to EBITDA ratio was 1.42 (0.49). A significant part of the increase in net debt is temporary, due to the cash flow impacts of energy hedges and future energy generation
- UPM decided to suspend its deliveries to Russia, purchasing of wood in Russia and the UPM Chudovo plywood mill operations
- The strike in Finland affected production and delivery volumes especially in the pulp, paper and biofuels businesses. Estimated full-year earnings impact is not material
- In April, UPM and Paperworkers' Union agreed on first-ever business-specific collective labour agreements and the strike ended at UPM mills in Finland

Key figures

	Q2/2022	Q2/2021	Q1/2022	Q1-Q2/2022	Q1-Q2/2021	Q1-Q4/2021
Sales, EURm	2,562	2,384	2,507	5,069	4,618	9,814
Comparable EBITDA, EURm	506	426	377	883	816	1,821
% of sales	19.7	17.9	15.0	17.4	17.7	18.6
Operating profit, EURm	335	304	183	518	583	1,562
Comparable EBIT, EURm	387	307	277	664	586	1,471
% of sales	15.1	12.9	11.0	13.1	12.7	15.0
Profit before tax, EURm	361	298	179	540	570	1,548
Comparable profit before tax, EURm	413	301	273	686	573	1,457
Profit for the period, EURm	292	243	139	431	470	1,307
Comparable profit for the period, EURm	329	246	232	561	473	1,204
Earnings per share (EPS), EUR	0.53	0.45	0.25	0.78	0.87	2.41
Comparable EPS, EUR	0.60	0.45	0.42	1.02	0.87	2.22
Return on equity (ROE), %	10.5	10.3	5.0	7.7	9.8	12.7
Comparable ROE, %	11.8	10.4	8.4	10.0	9.9	11.7
Return on capital employed (ROCE), %	10.0	10.1	5.8	7.8	9.8	12.4
Comparable ROCE, %	11.5	10.2	8.5	9.7	9.9	11.7
Operating cash flow, EURm	-879	308	12	-867	526	1,250
Operating cash flow per share, EUR	-1.65	0.58	0.02	-1.63	0.99	2.34
Equity per share at the end of period, EUR	20.57	17.62	20.11	20.57	17.62	20.34
Capital employed at the end of period, EURm	15,637	12,226	13,840	15,637	12,226	13,759
Net debt at the end of period, EURm	2,688	750	837	2,688	750	647
Net debt to EBITDA (last 12 months)	1.42	0.49	0.46	1.42	0.49	0.35
Personnel at the end of period	17,601	17,874	16,843	17,601	17,874	16,966

UPM presents certain measures of performance, financial position and cash flows, which are alternative performance measures in accordance with the guidance issued by the European Securities and Markets Authority (ESMA). The definitions of alternative performance measures are presented in » [UPM Annual Report 2021](#)

Jussi Pesonen, President and CEO, comments on the Q2 results:

"UPM delivered record Q2 earnings driven by successful margin management in exceptionally tight markets for our products. All our businesses reported strong earnings amidst a volatile environment of rapid inflation in input costs and challenging supply and logistics chains. In addition, customer deliveries from our Finnish mills started smoothly after the end of the strike in late April. As a result, our quarterly sales increased by 7% to EUR 2,562 million, and comparable EBIT increased by 26% to EUR 387 million. This was a great achievement taking into account that during the first half we only had one month of normal full production. For the full year, we expect to reach a new record of annual earnings.

Operating cash flow was EUR -879 million and our net debt at the end of the quarter was EUR 2,688 million. Cash flow was significantly impacted by the timing of cash flows from our energy hedges during an unprecedented rise in energy futures prices. Due to the nature of our hedging activity, this cash flow is expected to reverse in the future, meaning that a significant part of the increase in net debt is temporary. Our financial position remains strong, with cash funds and unused committed credit facilities totalling EUR 1.5 billion at the end of Q2. We further improved our liquidity in July, with two new credit facilities totalling EUR 500 million. This gives us a solid base to push on with ongoing transformative growth investments and face the unpredictability of the operating environment.

Market fundamentals for UPM Fibres were strong in Q2, for both pulp and timber. Production at the Finnish pulp mills started well after the business specific collective labour agreements were signed in April and two major maintenance shutdowns were completed.

UPM Communication Papers had a strong quarter. Demand for graphic papers was good and price increases exceeded the rise in input costs, with the cost of energy posing a particular challenge. During the quarter we announced the sale of UPM Steyrmühl, in Austria. This is another step in securing competitiveness of the Communication Papers business, adjusting our newsprint production to the long-term market development. Newsprint production at the mill will stop at the end of next year.

UPM Specialty Papers' results showed an improvement from the first quarter. Demand and prices of release liner and packaging papers continued to be good, while the Asian fine paper markets were softer, impacted by the lockdowns in China. Sales prices increased, but input costs were still on the rise, and exchange rates did not develop in our favour.

UPM Raflatac's quarterly result continued at record level despite sales volumes being limited by raw material availability and sales to Russian markets being discontinued. Demand was healthy, and margins were well managed in the environment of high-cost inflation. UPM Raflatac announced the acquisition of AMC AG in Germany, to accelerate growth and expand its product offering. The necessary regulatory approvals for closing the acquisition are expected to be granted in Q3.

UPM Energy reported strong quarterly results as energy markets were very volatile and prices high, providing value creation opportunities for our hydropower generation. In June, prices of energy futures saw an unprecedented rise, resulting in extraordinarily high cash outflow of our energy hedges, totalling EUR -1,032 million in Q2. As our energy hedges are only for hedging our existing electricity generation portfolio, this cash outflow will later be offset by a similar cash inflow from hedges or production.

All in all, there is exceptional uncertainty and tightness in the energy markets. This indicates strong earnings potential of UPM Energy. Furthermore, the OL3 nuclear power plant unit will increase UPM Energy's carbon free electricity generation by nearly 50% at an opportune time.

UPM Plywood's earnings stayed at near-record levels. Plywood markets were tight in all end-use categories. As the world's first plywood manufacturer, UPM launched the lignin-based bonding technology throughout its entire range of products. WISA® BioBond helps customers meet their own sustainability targets.

In other operations, the markets for UPM Biofuels' advanced renewable fuels are favourable, and strong earnings are to be expected once the business can report a full quarter of production again.

Our Paso de los Toros pulp mill project, in Uruguay, has proceeded smoothly and the commissioning phase is now underway. The commissioning plan was granted approval by the Uruguayan environmental authorities in late June. Testing of pulp production equipment at the mill has begun, and other commissioning tasks and the respective adjustment of production equipment will be carried out until the start-up of the mill in Q1 2023.

Construction at the biorefinery-site in Leuna, Germany, has progressed well and commercial activities in various product and application areas have continued to advance. The environmental benefits of the biorefinery and the UPM Biochemicals portfolio have been publicly acknowledged with several nominations. The detailed commercial and basic engineering study for a possible next generation biofuels refinery in Rotterdam, Netherlands, has continued.

Rarely have there been so many uncertainties in the world and in the global economy as there are today. We are well prepared to face this uncertainty as our businesses are competitive and performing well, and our financial position is strong. This year, we are expecting our annual earnings to reach new record highs. Some of the uncertainties in the medium-term outlook are mitigated by our growth projects, which will add significant new earnings, ramping up as early as next year. Over the longer term, I am confident that UPM's Biofore strategy is well-calibrated to provide what the world will need in the future: competitive zero-carbon electricity and sustainable and renewable materials with countless possible end-uses."

Outlook for 2022

UPM's comparable EBIT is expected to increase in 2022 from 2021, and in H2 2022 from H2 2021.

Significant uncertainties remain in the outlook for 2022, related to the war in Ukraine, the ongoing pandemic, growth in the European and global economy, the energy prices and availability in Europe, the start-up of the OL3 power plant unit, and the tight raw material and logistics markets.

In the first half of the year, production was significantly affected by the strike at the Finnish units of UPM Pulp, UPM Biofuels, UPM Raflatac, UPM Specialty Papers and UPM Communication Papers. This no longer limits production and as a result, UPM's delivery volumes are expected to increase in H2 2022 from H1 2022. In the full-year 2022 result, the estimated impact of the strike is not material.

Sales prices and variable costs are expected to be higher in H2 2022 than in H1 2022 in most of UPM businesses. UPM will continue to manage margins with product pricing, optimising its product and market mix, efficient use of assets as well as by taking measures to improve variable and fixed cost efficiency.

Impact of the COVID-19 pandemic

The COVID-19 pandemic, the related containment measures around the world and the rapid changes in the global economy continue to represent significant uncertainty.

Global economy

The COVID-19 pandemic and the related containment measures resulted in a sharp decline in the global economy in 2020. In 2021, the global economy started to recover, but it is uncertain how long-lasting the recovery will be. Despite progress with vaccinations, additional waves of the epidemic in different parts of the world remain possible.

The recovery of the global economy from the deep downturn in 2020, combined with the ongoing pandemic has created tightness and disruptions globally in many supply chains, including logistics and energy, causing rising costs and uncertainty on the price and availability of many raw materials and energy.

Safety and business continuity

UPM has implemented extensive precautions to protect the health and safety of its employees and to ensure business continuity and the progression of its strategic projects during the pandemic. Despite these efforts, the operation of one or more units or the supply chain and logistics could be temporarily disrupted during the pandemic, the related lockdown measures, or the following economic recovery. In these circumstances some units may need to limit operations or be temporarily shut down. So far UPM has been able to protect its business continuity well.

Demand for UPM products

Many of UPM's products serve essential everyday needs and have therefore seen resilient demand during the crisis. These products include pulp, specialty papers and self-adhesive label materials. However, even in these businesses, demand is influenced by general economic activity.

Demand for graphic papers is more prone to be impacted by the lockdowns and economic cycles. Lockdowns limit a wide range of consumer-driven services and retail, as well as work at the office. This has had a negative impact on printed advertising and graphic paper demand during the pandemic.

Lockdowns and the level of economic activity may also influence demand for electricity, plywood and sawn timber.

In 2020, graphic paper demand in Europe decreased by 18% compared to the previous year, particularly as advertising-driven paper consumption and office paper demand was impacted by the lockdowns across Europe. In 2021, as economies in Europe started to gradually open, graphic paper demand increased by 4% compared the previous year.

Pulp demand has held up relatively well, supported by good demand for tissue and hygiene products as well as for some packaging and specialty paper products. Pulp consumption in graphic paper production decreased in 2020 but improved in 2021.

Demand for self-adhesive label materials and specialty papers has grown during the pandemic, as consumers have shifted some of their spending from away-from-home categories to packaged daily consumer goods. E-commerce has continued to grow, supporting some labelling and specialty paper applications.

Adjusting to different scenarios

The potential impacts on UPM are likely to differ by business and phase and waves of the pandemic, lockdown measures, changes in consumer behaviour, and the recession and recovery thereof. UPM has used shift arrangements, temporary lay-offs, or reduced working hours as required to adjust its operations in different scenarios.

Projects and maintenance shutdowns

The pandemic and the required health and safety measures add challenges to large investment projects and maintenance shutdowns. UPM's transformative pulp project in Uruguay and biochemicals project in Germany are proceeding with strict health and safety controls. Despite these efforts, some changes to the detailed timeline and costs of the projects are possible during the pandemic, the related containment measures, or due to tight global logistics and supply chains.

UPM rescheduled the maintenance shutdown at the UPM Kymi pulp mill from Q2 2021 to Q4 2021 due to the pandemic.

Timing of significant maintenance shutdowns in 2022

TIMING	UNIT
Q2/2021	Olkiluoto nuclear power plant UPM Fray Bentos pulp mill
Q4/2021	UPM Kymi pulp mill
Q2/2022	Olkiluoto nuclear power plant UPM Kaukas pulp mill UPM Pietarsaari pulp mill
Q4/2022	UPM Fray Bentos pulp mill UPM Lappeenranta Biorefinery

Financing

UPM's financial position is strong. UPM's net debt was EUR 2,688 million at the end of Q2 2022. Net debt has been especially impacted by energy hedging derivative market value payments, which are driven by the increase in energy future prices and volatility in the energy markets. Cash funds and unused committed credit facilities totalled EUR 1.5 billion at the end of Q2 2022. This includes EUR 400 million under the sustainability-linked EUR 750 million committed syndicated revolving credit facility maturing in 2027 and a EUR 160 million equivalent rolling overdraft facility. In Q2 2022, UPM successfully issued its third Green Bond under its EMTN (Euro Medium Term Note), at EUR 500 million. In addition, UPM has signed two new bilateral credit facilities in July, totalling EUR 500 million. The facilities mature in 2024. The facilities and UPM's outstanding debt have no financial covenants.

Impact of Russia's war in Ukraine

In response to Russia's attack on Ukraine, the European Union as well as the United States, the United Kingdom, and other countries have imposed extensive sanctions on Russia, the breakaway regions Donetsk and Luhansk, and Belarus. Since 21 February 2022, these measures include for example asset freezes and travel restrictions on individuals and entities, economic sanctions targeting sectors of the Russian and Belarusian economies, and diplomatic restrictions. Russia has also implemented several countermeasures affecting especially foreign companies' operations within Russia and with Russian counterparties.

Global economy

While the sanctions primarily target Russia's ability to finance its military operations in Ukraine and cause economic and political costs on people responsible for them, economic and geopolitical uncertainty as well as inflation may accelerate around the world. Import bans concerning various goods categories will restrict the availability of raw materials and drive cost increases in many supply chains that have been under increasing pressure during the COVID-19 pandemic. Export bans will impact industries dependent on Russian markets and shift delivery volumes and services to other markets. Fuel prices are exposed to geopolitical uncertainties. Because of Russia's attack on Ukraine, the sanctions imposed on the Russian energy sector and Russia's countermeasures on gas and electricity deliveries, energy price levels and volatility may increase, especially in Europe if the scope of EU sanctions expands to further fossil fuels such as natural gas.

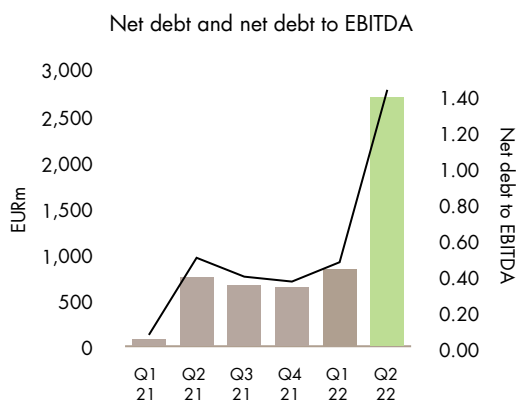
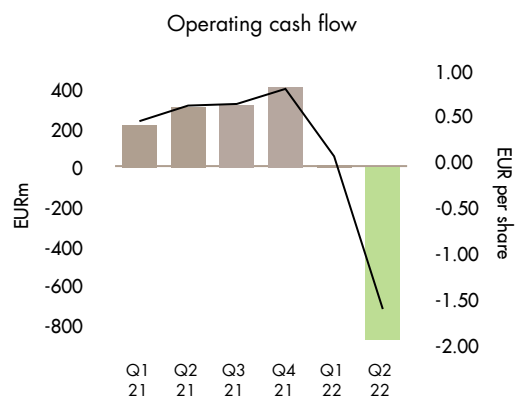
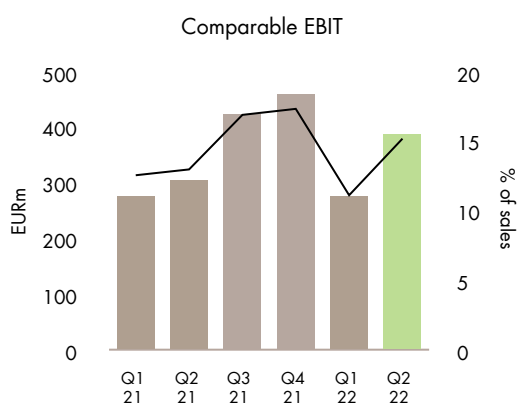
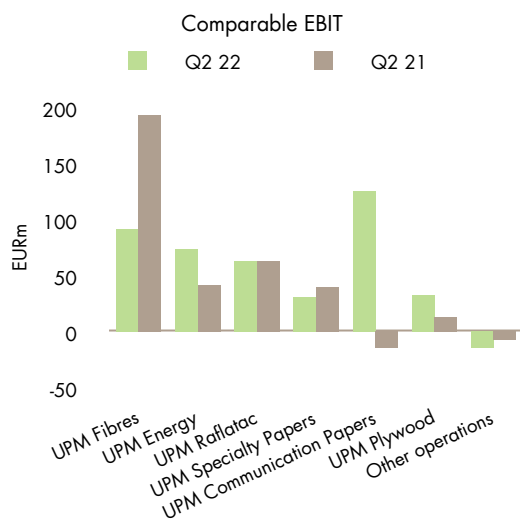
Impact on UPM businesses

The EU has imposed bans on wood product exports and imports, prohibitions of Russian transportation operators entering EU as well as sanctioned several Russian banks. Disruptions in international sales, purchases and payment flows involving Russian counterparties are inevitable. The EU has also imposed restrictions on Russian seaborne crude oil, certain petroleum products and oil transportation services. Russia has also restricted or suspended the flow of natural gas or electricity from Russia. These restrictions have impacted several European countries where UPM has production locations and caused increases in the price of power and gas. The unprecedented increase in energy futures prices has impacted cash flows from energy hedges, temporarily tying liquidity. Major forest certification organisations (i.e. FSCTM and PEFC) have also excluded Russian and Belarusian wood from their certification systems. UPM businesses have suspended deliveries to Russia as well as wood sourcing in and from Russia. UPM also decided to suspend the UPM Chudovo plywood mill operations. Due to the significant uncertainties related to operations in Russia and Ukraine, UPM recognised a write off of all assets and receivables locating or relating to operations in these countries in Q1 2022. Impairment of fixed assets, inventories and other receivables amounting to EUR 95 million was reported as items affecting comparability. In addition, in Q1 the group increased the general provision for expected credit losses on trade receivables by EUR 17 million, which is impacting comparable EBIT. At the end of the Q2 credit loss provision was EUR 14 million. UPM's sales to Russia and Ukraine combined was approximately 2% of UPM's total sales in 2021. Assets in Russia were less than 1% of the group total. In 2021, less than 10% of UPM's wood sourcing to Finland originated from Russia.

Adjusting to different scenarios

The full impact of the current and possible new sanctions, counter-sanctions and market development will be known only as the situation evolves. UPM has implemented mitigation plans to contain and reduce negative consequences for its employees, customers, vendors, and other stakeholders as well as operations affected by the sanctions and the war in Ukraine in general. The potential further impacts to UPM are likely to differ by business and by the pace, scope and duration of

sanctions, market price reactions, development of supply chains' footprint, and the length of the war in Ukraine. UPM is monitoring the situation closely and preparing plans to adjust its operations in different scenarios accordingly.



Results

Q2 2022 compared with Q2 2021

Q2 2022 sales were EUR 2,562 million, 7% higher than the EUR 2,384 million in Q2 2021. Sales increased in UPM Communication Papers, UPM Raflatac, UPM Energy and UPM Plywood business areas driven by higher sales prices. Sales decreased in UPM Fibres and UPM Specialty Papers business areas.

Comparable EBIT increased by 26% to EUR 387 million, which was 15.1% of sales (307 million, 12.9%).

Sales prices increased in all business areas, with the largest increase in UPM Communication Papers.

Variable costs increased in all business areas, especially in UPM Communication Papers. Energy costs in particular increased significantly, despite hedging. At Group level, the positive impact of higher sales prices was larger than the negative impact of higher variable costs.

Delivery volumes decreased in most business areas. The strike in Finland in April and the scheduled maintenance shutdowns at the UPM Kaukas and UPM Pietarsaari pulp mills affected volumes. Fixed costs increased by EUR 50 million mainly due to the scheduled maintenance activity.

Depreciation, excluding items affecting comparability, totalled EUR 113 million (118 million), including depreciation of leased assets totalling EUR 18 million (18 million). The change in the fair value of forest assets net of wood harvested was EUR -8 million (-2 million).

Operating profit was EUR 335 million (304 million). Items affecting comparability in operating profit totalled EUR -52 million in the period (-3 million). Items affecting comparability include EUR 74 million settlement loss resulting from replacement of a defined benefit pension plan in Finland with defined contribution plan, EUR 8 million capital gain on sale of Chapelle mill site in France, EUR 11 million reversal of environmental and restructuring provisions related to Chapelle paper mill and EUR 10 million gain on sale of other non-current assets.

Net interest and other finance income and costs were EUR -9 million (-6 million). The exchange rate and fair value gains and losses were EUR 34 million (0 million). Income taxes were EUR -69 million (-55 million). Items affecting comparability in taxes totalled EUR 15 million (1 million).

Profit for Q2 2022 was EUR 292 million (243 million), and comparable profit was EUR 329 million (246 million).

Q2 2022 compared with Q1 2022

Comparable EBIT increased by 40% to EUR 387 million, which was 15.1% of sales (277 million, 11.0%). Sales prices increased for all business areas, particularly for UPM Communication Papers. Delivery volumes were higher in UPM Fibres and UPM Energy.

Variable costs increased in all businesses, most notably in the UPM Communication Papers and UPM Raflatac business areas.

Fixed costs increased by EUR 110 million mainly due to the scheduled maintenance activity.

Depreciation, excluding items affecting comparability, totalled EUR 113 million (111 million). The change in the fair value of forest assets net of wood harvested was EUR -8 million (12 million).

Operating profit was EUR 335 million (183 million).

January–June 2022 compared with January–June 2021

H1 2022 sales were EUR 5,069 million, 10% higher than the EUR 4,618 million for H1 2021. Sales increased in UPM Communication Papers, UPM Raflatac, UPM Energy, UPM

Plywood and UPM Specialty Papers business areas and decreased in UPM Fibres business area.

Comparable EBIT increased by 13% to EUR 664 million, 13.1% of sales (586 million, 12.7%).

Sales prices increased for all business areas and mostly for UPM Communication Papers.

Delivery volumes were lower in most business areas. The strike in Finland in January-April affected delivery volumes especially in UPM Fibres, UPM Communication Papers, UPM Specialty Papers and UPM Biofuels.

The strike affected the January-June results through lost sales, lower fixed costs and various dynamic impacts.

Fixed costs increased by EUR 20 million mainly due to scheduled maintenance activity.

Depreciation, excluding items affecting comparability, totalled EUR 224 million (234 million) including depreciation of leased assets totalling EUR 37 million (36 million). The change in the fair value of forest assets net of wood harvested was EUR 4 million (3 million).

Operating profit totalled EUR 518 million (583 million). Items affecting comparability in operating profit totalled EUR -146 million in the period (-3 million). In 2022, items affecting comparability include the EUR 95 million impairment charges of assets impacted by Russia's war in Ukraine, EUR 74 million settlement loss resulting from replacement of a defined benefit pension plan in Finland with defined contribution plan, EUR 8 million capital gain on sale of Chappelle mill site in France, EUR 11 million reversal of restructuring provisions related to Chappelle paper mill and EUR 11 million gain on sale of other non-current assets.

Net interest and other finance costs were EUR -13 million (-12 million). The exchange rate and fair value gains and losses were EUR 35 million (0 million). Income taxes totalled EUR -109 million (-100 million).

Profit for H1 2022 was EUR 431 million (470 million), and comparable profit was EUR 561 million (473 million).

Financing and cash flow

In H1 2022 cash flow from operating activities before capital expenditure and financing totalled EUR -867 million (526 million). Working capital increased by EUR 650 million (194 million), mainly due to inflation and energy-related items. In H1 2022, particularly in June, the energy futures markets experienced an unprecedented rise in futures prices. Due to this, the cash outflow of UPM's energy hedges totalled EUR -1.1 billion in H1 2022. As UPM's energy hedges are only for hedging the existing electricity generation and energy consumption, this cash outflow will later be offset by a similar cash inflow from hedges or production. Approximately one quarter of the energy hedging cash outflow during H1 2022 is included in the change in working capital above.

Net debt was EUR 2,688 million at the end of Q2 2022 (750 million). The gearing ratio as of 30 June 2022 was 24% (8%). The net debt to EBITDA ratio, based on the last 12 month's EBITDA, was 1.42 at the end of the period (0.49).

On 30 June 2022 UPM's cash funds and unused committed credit facilities totalled EUR 1.5 billion. This includes EUR 400 million under the sustainability-linked EUR 750 million committed syndicated revolving credit facility maturing in 2027 and a EUR 160 million equivalent rolling overdraft facility. In addition, UPM has signed two new bilateral credit facilities in July, totalling at EUR 500 million.

A dividend of EUR 1.30 per share (totalling EUR 693 million) was paid on 7 April 2022 for the 2021 financial year.

Capital expenditure

In H1 2022, capital expenditure totalled EUR 616 million, which was 12.1% of sales (627 million, 13.6% of sales). Capital expenditure does not include additions to leased assets.

In 2022, UPM's total capital expenditure, excluding investments in shares, is expected to be about EUR 1,500 million, which includes estimated capital expenditure of approximately EUR 1,300 million in transformative projects. Transformative projects consist of the new pulp mill, port operations, local investments outside the mill fence in Uruguay and the biochemicals biorefinery in Germany.

In January 2019, UPM announced that it would invest in the refurbishment of the Kuusankoski hydropower plant in Finland. The average annual production of the Kuusankoski plant is expected to increase from the current 180 GWh to 195 GWh. The investment will be completed by the end of 2022.

In July 2019, UPM announced that it would invest in a 2.1 million tonne greenfield eucalyptus pulp mill near Paso de los Toros, central Uruguay. Additionally, UPM will invest in port operations in Montevideo and in local investments outside the mill fence. The updated schedule for the start-up of the mill is by the end of Q1 2023, and the total investment estimate is USD 3.47 billion.

In October 2019, UPM announced that it would invest EUR 95 million in a Combined Heat and Power (CHP) plant at the UPM Nordland paper mill in Germany. The plant is planned to go on grid in Q3 2022. The annual cost savings of more than EUR 10 million will begin in 2023. The investment is estimated to decrease UPM's CO₂ footprint by 300,000 tonnes.

In January 2020, UPM announced that it would invest in a 220,000 tonnes next-generation biochemicals biorefinery in Leuna, Germany. The updated schedule for the start-up of the facility is by the end of 2023, and the total investment estimate is EUR 750 million.

In December 2021, UPM announced that it would invest EUR 10 million in the development of UPM Plywood's plywood mill in Joensuu, Finland. The investment includes new production lines, new workspaces and 720 square metres of completely new production space. The investment will be completed by the end of 2023.

Personnel

In 2022, UPM had an average of 17,086 employees (17,781). At the beginning of the year, the number of employees was 16,966 and at the end of Q2 2022 it was 17,601.

Uruguay pulp mill investment

On 23 July 2019, UPM announced that it would invest USD 2.72 billion in a 2.1 million tonne greenfield eucalyptus pulp mill near Paso de los Toros, central Uruguay. Additionally, UPM would invest approximately USD 280 million in port operations in Montevideo and USD 70 million in local investments outside the mill fence, including a new residential area in Paso de los Toros. In May 2020, an electrical grid reinforcement investment of USD 70 million was added to the scope of the project to fully utilize and sell the surplus energy of the mill.

The investment will grow UPM's current pulp capacity by more than 50%, resulting in a step change in the scale of UPM's pulp business as well as in UPM's future earnings.

With a combination of competitive wood supply, scale, best available techniques and efficient logistics, the mill is expected to reach a highly competitive cash cost level of approximately USD 280 per delivered tonne of pulp. This figure includes the variable and fixed costs of plantation operations, wood sourcing, mill operations and logistics delivered to the main markets. Furthermore, the safety and sustainability performance of the value chain from plantations to customer delivery is expected to be on an industry-leading level.

Competitive wood supply

Eucalyptus availability for the mill is secured through UPM's own and leased plantations, as well as through wood sourcing agreements with private partners. The plantations that UPM owns and leases in Uruguay cover 500,098 hectares. They will supply the current UPM Fray Bentos mill and the new mill near Paso de los Toros.

State of the art mill design

The pulp mill has been designed as an efficient single-line operation. The machines, materials, level of automation and standards enable a high operating rate and maintainability, as well as a high energy output. This ensures excellent safety, high environmental performance, and low operating costs during the long lifecycle of the mill.

The mill is designed to fully meet strict Uruguayan environmental regulations, as well as international standards and recommendations for modern mills, including the use of the latest and best available technology (BAT). The mill's environmental performance will be verified through comprehensive and transparent monitoring.

The mill's initial annual production capacity is 2.1 million tonnes, and the environmental permits enable further capacity potential. When in operation, the mill generates more than 110 MW surplus of renewable electricity.

Efficient logistics set-up

An efficient logistics chain will be secured by the agreed road improvements, extensive railway modernisation and port terminal construction.

The Public-Private-Partnership agreement between the government and the construction company for the construction of the central railway was signed in May 2019. Works on the central railway are proceeding, but the overall rail project is delayed, and the railway is scheduled to start operations in May 2023. UPM has a contingency plan in place to ensure logistics with truck transportation during this delay.

UPM is proceeding with the construction of a deep-sea pulp terminal at Montevideo port with an investment of approximately USD 280 million. Direct rail access from the mill to a modern deep-sea port terminal creates an efficient supply chain to world markets. The Montevideo deep-sea port also enables synergies in ocean logistics with UPM's existing Uruguayan operations.

UPM entered into a port terminal concession agreement in 2019 and signed an agreement on rail logistics services in October 2020. Both agreements are considered in accordance with IFRS 16 Leases. The total amount of such lease payments is expected to be USD 200 million.

Significant impact on the Uruguayan economy

Based on independent socio-economic impact studies, the mill is estimated to increase Uruguay's gross national product by about 2% and the annual value of Uruguay's exports by approximately 12% after completion.

In the most intensive construction phase, more than 6,000 people will be working on the site. When completed, approximately 10,000 permanent jobs are estimated to be created in the Uruguayan economy of which approximately

4,000 would involve direct employment by UPM and its subcontractors. About 600 companies are estimated to be working in the value chain.

The mill will be located in one of Uruguay's many free trade zones and will pay a fixed annual tax of USD 7 million. The mill's value chain is expected to contribute USD 170 million in annual taxes and social security payments and to contribute USD 200 million annually in wages and salaries.

Project schedule and capital outflow

In January 2022 the completion plan was refined for the project due to the challenges caused by the successive waves of the pandemic and tight global supply chains. The start-up will take place by the end of Q1 2023, and the total investment estimate has been increased by 10% to USD 3.47 billion.

Approximately 7,000 people are currently working on the project at the various construction sites. At the pulp mill site in Paso de los Toros, the installation phase with mechanical erection continues to progress in all main process areas and electrical, instrumental and automation works are ongoing. Most of the large civil works have been completed. The commissioning phase is ongoing, and the first tests have already been carried out on the auxiliary boilers.

Large scale cargo transfers from the UPM Fray Bentos port to the new mill site have been completed. The project included more than 7,000 trips, 2,000 large cargoes, some 450 barge crossings and about 22 large-scale vessels to transfer machinery, equipment, and large parts.

Works at the pulp terminal in the port of Montevideo are progressing. The pier walls, storage tanks and warehouse building are ready, all the rest of the works inside of the concession are in progress and ending by early Q3 2022. The focal areas at the ongoing port works are the railway works, pavements and the remaining electrical and automation installation.

The total capital expenditure of USD 3.47 billion will take place in 2019-2023, with 2021 and 2022 being the most intensive years. UPM will hold 91% ownership of the project and a local long-term partner which has also been involved in UPM Fray Bentos, owns 9%. UPM's investment will mainly be financed from operating cash flow complemented by regular group financing activities.

Biochemicals refinery investment

On 30 January 2020 UPM announced that it would invest EUR 550 million in a 220,000 tonnes next-generation biochemicals refinery in Leuna, Germany. Originally, the biorefinery was scheduled to start up by the end of 2022. However, the pandemic has slowed down the completion of the detailed engineering in Leuna. Disruptions to global supply chains have affected both the availability and costs of critical construction materials. Hence the start-up schedule has been updated to take place by the end of 2023. The capital expenditure estimate has been increased to EUR 750 million.

The biorefinery will produce a range of 100% wood-based biochemicals, which will enable a switch from fossil raw materials to sustainable alternatives in various consumer-driven end-uses. The investment opens up totally new markets for UPM, with large growth potential for the future.

The industrial scale biorefinery will convert solid wood into next generation biochemicals: bio-monoethylene glycol (BioMEG) and renewable functional fillers. In addition, the biorefinery will produce bio-monopropylene glycol (BioMPG) and industrial sugars. Once the facility is fully ramped up and optimized, it is expected to achieve the ROCE target of 14%.

A combination of a sustainable wood supply, a unique technology concept, integration into existing infrastructure at Leuna and the proximity to customers will ensure the

competitiveness of operations. The safety and sustainability of the value chain will be based on UPM's high standards.

Infraleuna GmbH, in the state of Saxony-Anhalt, offers very competitive conditions for constructing a biorefinery with its logistics arrangements and infrastructure for various services and utilities. In October 2020, UPM entered into service agreements with Infraleuna GmbH related to wood handling, wastewater treatment and other utilities, which will be recognised as lease assets and liabilities under IFRS 16 Leases upon the commencement date. The total amount of such lease assets and liabilities is estimated to be EUR 120 million.

Construction at the biorefinery-site in Leuna continues with visible progress. Major overground structures have been emerging. The erection of pipe racks, casings, tanks and the substation buildings is progressing with good speed. Also, large parts of the reactors, furnaces and columns have been delivered and are stored on site.

The business foundation has been strengthened further. Business function teams are in place and hiring the operations staff has progressed enabling entering to concrete start- and ramp-up preparations from training through process development and concrete operations planning. Also, the research and analytics laboratories are now established in Leuna and the teams are staffed and working – an important step towards quality assurance, process optimisation and to define future development options.

Commercial activities have continued to proceed positively in different product and application areas. After the launch of UPM BioMotion™ Renewable Functional Fillers (RFF) in October 2021, joint product development activities with potential customers in the rubber value chain have progressed further as have discussions with OEMs, especially in the automotive sector, with good results regarding both the technical and commercial viability of our product. We made further progress in taking renewable bio-monoethylene glycols (bMEG) to market, advancing sales capabilities and extending pre-commercial discussions with potential customers, as well as end-users in the packaging, textile and automotive end-uses.

The environmental benefits of the biorefinery and the UPM Biochemicals portfolio continue to be publicly acknowledged with nominations as finalist in the Packaging Europe's "Renewables, Pre Commercialized" category and first position in the sustainability ranking in the European Rubber Journal.

Biofuels business development

In January 2021, UPM announced that it moves forward with biofuels growth plans and starts the basic engineering phase of a next generation biorefinery. The potential biorefinery would have an annual capacity of 500,000 tonnes of high-quality renewable fuels including sustainable jet fuel. The products would significantly reduce the carbon footprint of road transport and aviation, as well as replace fossil raw materials with renewable alternatives in chemicals and bioplastics. Feedstock sourcing will focus on UPM's own ecosystem and wood biomass-based residues play a substantial role. In addition, the biorefinery would use sustainable liquid waste and residue raw materials.

UPM is proceeding with a detailed commercial and basic engineering study to define the business case, select an innovative technology option and sustainable feedstock mix and estimate the investment need.

The site assessment of the potential biofuels refinery was completed in January 2022 and Rotterdam in the Netherlands has been selected as the optimal location.

If all preparations are concluded successfully, UPM would initiate the company's standard procedure of analysing and preparing an investment decision. Due to the current challenging investment environment for new major projects like this, further decisions are not planned before Q1 2023.

OL3 power plant project

Teollisuuden Voima Oyj (TVO) is in the process of constructing a third nuclear power plant unit, OL3 EPR, at the Olkiluoto site (OL3). UPM participates in OL3 through its shareholding in Pohjolan Voima Oyj (PVO), which is the majority shareholder in TVO. UPM's indirect share of OL3 is approximately 31%. The OL3 plant supplier, a consortium consisting of AREVA GmbH, AREVA NP SAS and Siemens AG (Supplier), is constructing OL3 as a turnkey project.

As announced by TVO in December 2021, the Radiation and Nuclear Safety Authority in Finland (STUK) granted TVO a permission for making the OL3's reactor critical and conducting lower power tests. On 21 December 2021, TVO announced that OL3's reactor started up, i.e. the first criticality of OL3 was reached, and on 12 March, 2022 TVO announced that the electricity production at OL3 had started, when OL3 was connected to the national grid. On 30 March 2022, according to TVO, STUK granted TVO a permission to increase OL3's power level to 60 percent and carry out new power tests at power levels between 30-60 percent. During the test production phase, the OL3 power output will be gradually increased to 1,600 megawatts.

On 29 April, 2022 TVO announced that due to inspection and possible repair needs of the generator's cooling system and additional time needed for upcoming testing and analysis thereof, the regular electricity production at OL3 would according to information received from the Supplier start in September 2022, instead of the previously estimated start at the end of July. On 15 June, TVO announced that OL3's test production was interrupted due to foreign material issues observed in the turbine's steam reheater. Further, TVO announced that according to information received from the Supplier, OL3's regular electricity production is to start in December 2022, instead of the previously announced start in September 2022.

When completed, OL3 will supply electricity to its shareholders on a cost-price principle (Mankala-principle), which is widely applied in the Finnish energy industry. Under the Mankala-principle electricity and/or heat is supplied to shareholders in proportion to ownership, and each shareholder is, pursuant to the specific stipulations of the respective articles of association, severally responsible for its respective share of the production costs of the energy company concerned.

OL3 will increase UPM Energy's electricity generation capacity significantly. The new power plant unit is expected to be highly efficient and meet the highest safety standards. Its power generation will be CO₂-free and TVO will have a secure solution for the final disposal of used fuel.

Events during the reporting period

On 1 January, UPM announced that members of the Paperworkers' Union, the Finnish Electrical Workers' Union and the Trade Union Pro have started strikes at UPM mills in Jämsänkoski, Kouvola, Lappeenranta, Pietarsaari, Rauma, Tampere and Valkeakoski. UPM businesses currently affected by the strikes in Finland are UPM Pulp, UPM Biofuels, UPM Communication Papers, UPM Specialty Papers and UPM Raffiac. The duration of the strike has since been extended several times (5 January, 20 January, 4 February, 24 February, 16 March, 31 March and 14 April).

On 1 March, UPM launched a new forest responsibility programme.

On 3 March, UPM announced that it would cease deliveries to Russia.

On 9 March, UPM announced that would suspend the purchasing of wood in and from Russia as well as the UPM Chudovo plywood mill operations for the time being.

On 12 March, electricity production at the OL3 EPR unit began.

This half year financial report is unaudited

On 22 March, UPM announced that a proposal for a settlement to the collective labour agreement negotiations between UPM Pulp and the Paperworkers' Union had been submitted.

On 29 March, UPM held its Annual General Meeting.

On 9 April, UPM announced that the conciliator had interrupted the conciliation between UPM Communication Papers and the Paperworkers' Union.

On 11 April, UPM announced that conciliator submits settlement proposals for UPM Specialty Papers and UPM Raflatac.

On 12 April, UPM announced that the conciliator had submitted settlement proposal for UPM Biofuels.

On 14 April, UPM announced that UPM and the Paperworkers' Union had not been able to come to a new collective labour agreements. The union turned down four settlement proposals submitted by the conciliator.

On 21 April, UPM announced that the conciliator has submitted settlement proposals to five businesses in collective bargaining between UPM's businesses and the Paperworkers' Union.

On 22 April, UPM announced that UPM and Paperworkers' Union agreed on first-ever business-specific collective labour agreements and the strike ended at UPM mills in Finland.

On 16 May, UPM announced that it has issued a new EUR 500 million green bond under its EMTN (Euro Medium Term Note) programme and its Green Finance Framework. The bond matures in May 2029 and pays a fixed coupon of 2.25%.

On 23 May, UPM announced that it has applied for listing of a EUR 500 million Green Bond under its Euro Medium Term Note (EMTN) programme to Irish Stock Exchange plc, trading as Euronext Dublin.

On 27 May, UPM announced that UPM Raflatac had signed an agreement to acquire AMC AG (Advanced Methods of Coating), a Germany-based company. The transaction is expected to be closed latest in Q3, 2022.

On 14 June, UPM announced that it had raised its earnings outlook for H1 2022 and for the full year 2022.

On 21 June, UPM announced that it had signed an agreement to sell 100% of the shares of its Austrian subsidiary UPM-Kymmene Austria GmbH to the HEINZEL GROUP. The transaction comprises the UPM Steyermühl site with approx. 400 employees, including the newsprint paper machine with an annual capacity of 320,000 tonnes and the Steyermühl sawmill operations with an annual timber capacity of 370,000 cubic meters.

Events after the balance sheet date

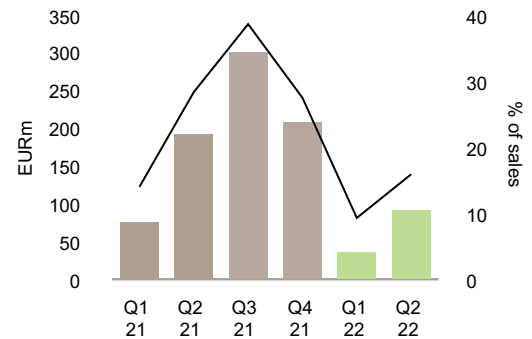
The Group's management is not aware of any significant events occurring after 30 June 2022.

On 1 January 2022, UPM has changed its reportable segments composition by moving the UPM Biofuels business into Other Operations. Following the change, Other Operations include UPM Forest, UPM Biofuels, UPM Biochemicals, UPM Biomedicals and UPM Biocomposites businesses as well as group services. UPM Pulp and UPM Timber previously reported under UPM Biorefining are reported as UPM Fibres business area from 1 January 2022. Refer to Note 10 Change in the composition of reportable segments.

UPM Fibres

UPM Fibres consists of pulp and timber businesses. UPM Pulp offers a versatile range of responsibly-produced pulp grades suitable for a wide range of end-uses. UPM Timber offers certified sawn timber. UPM has three pulp mills in Finland, one mill and plantation operations in Uruguay and operates four sawmills in Finland.

Comparable EBIT



	Q2/22	Q1/22	Q4/21	Q3/21	Q2/21	Q1/21	Q1- Q2/22	Q1- Q2/21	Q1- Q4/21
Sales EURm	584	404	766	783	682	563	988	1,245	2,794
Comparable EBITDA, EURm	139	78	258	345	237	120	216	357	961
% of sales	23.7	19.3	33.7	44.1	34.7	21.4	21.9	28.7	34.4
Change in fair value of forest assets and wood harvested, EURm	1	2	-6	-2	-1	0	3	-1	-9
Share of results of associated companies and joint ventures, EURm	1	0	0	1	0	0	1	1	2
Depreciation, amortisation and impairment charges, EURm	-49	-44	-43	-43	-44	-43	-92	-87	-173
Operating profit, EURm	32	37	209	301	192	78	69	270	781
% of sales	5.5	9.1	27.3	38.5	28.2	13.8	7.0	21.7	27.9
Items affecting comparability in operating profit, EURm ¹⁾	-60	—	—	—	—	—	-60	—	—
Comparable EBIT, EURm	92	37	209	301	192	78	129	270	781
% of sales	15.7	9.1	27.3	38.5	28.2	13.8	13.0	21.7	27.9
Capital employed (average), EURm	5,615	5,158	4,855	4,465	4,041	3,747	5,387	3,894	4,277
Comparable ROCE, %	6.5	2.9	17.3	27.0	19.0	8.3	4.8	13.9	18.3
Pulp deliveries, 1000 t	609	461	931	957	884	952	1,070	1,836	3,724

Pulp mill maintenance shutdowns: Q2 2022 UPM Kaukas and UPM Pietarsaari, Q2 2021 UPM Fray Bentos, Q4 2021 UPM Kymi.

¹⁾ Q2 2022 items affecting comparability include settlement loss resulting from replacement of defined benefit pension plan in Finland with defined contribution plan.

- Good pulp and timber markets
- Scheduled maintenance shutdowns at UPM Kaukas and UPM Pietarsaari pulp mills
- Strong production after the strike and the maintenance shutdowns

Results

Q2 2022 compared with Q2 2021

Comparable EBIT for UPM Fibres decreased. Pulp production and delivery volumes were lower due to the strike in Finland in April and the scheduled maintenance shutdowns at the UPM Kaukas and UPM Pietarsaari pulp mills. Fixed costs were higher. Pulp and timber sales prices were higher.

The average price in euro for UPM's pulp deliveries increased by 23%.

Q2 2022 compared with Q1 2022

Comparable EBIT increased due to higher production and delivery volumes. The comparison period was impacted by the strike in Finland. Pulp and timber sales prices were higher. Fixed costs were higher due to the scheduled maintenance shutdowns at the UPM Kaukas and UPM Pietarsaari pulp mills.

The average price in euro for UPM's pulp deliveries increased by 16%.

January–June 2022 compared with January–June 2021

Comparable EBIT decreased. Pulp production and delivery volumes were lower due to the strike in Finland in January-April and the scheduled maintenance shutdowns at the UPM Kaukas

and UPM Pietarsaari pulp mills. Variable and fixed costs were higher. Pulp and timber sales prices were higher.

The average price in euro for UPM's pulp deliveries increased by 30%.

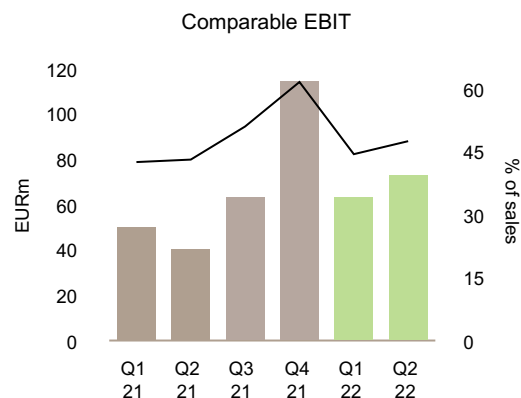
Market environment

- In Q2 2022, global chemical pulp demand growth was good.
- In Europe, the market price for both northern bleached softwood kraft (NBSK) pulp and bleached hardwood kraft pulp (BHKP) increased in Q2 2022 compared with Q1 2022.
- In China, the market price for both northern bleached softwood kraft (NBSK) pulp and bleached hardwood kraft pulp (BHKP) increased in Q2 2022 compared with Q1 2022.
- In Q2 2022, the average European market price in euro was 30% higher for NBSK and 39% higher for BHKP, compared with Q2 2021. In China, the average market price in US dollars was 1% higher for NBSK and 4% higher for BHKP, compared with Q2 2021.
- In Q2 2022, demand for sawn timber was strong. Market prices were at a high level.

Sources: FOEX, UPM

UPM Energy

UPM Energy generates cost competitive, zero-carbon electricity. Operations also include physical electricity and financial portfolio management as well as services to industrial electricity consumers. UPM Energy is the second largest electricity producer in Finland. UPM's power generation capacity consists of hydropower, nuclear power and thermal power.



	Q2/22	Q1/22	Q4/21	Q3/21	Q2/21	Q1/21	Q1- Q2/22	Q1- Q2/21	Q1- Q4/21
Sales EURm	154	143	187	124	95	119	297	214	526
Comparable EBITDA, EURm	75	65	117	65	43	52	140	95	277
% of sales	48.5	45.4	62.5	52.4	44.7	43.9	47.0	44.3	52.7
Depreciation, amortisation and impairment charges, EURm	-2	-2	-2	-2	-2	-2	-3	-3	-7
Operating profit, EURm	73	63	115	63	41	50	136	91	270
% of sales	47.4	44.3	61.5	50.9	43.0	42.4	45.9	42.7	51.3
Items affecting comparability in operating profit, EURm	—	—	—	—	—	—	—	—	—
Comparable EBIT, EURm	73	63	115	63	41	50	136	91	270
% of sales	47.4	44.3	61.5	50.9	43.0	42.4	45.9	42.7	51.3
Capital employed (average), EURm	3,148	2,848	2,622	2,370	2,278	2,231	2,998	2,255	2,375
Comparable ROCE, %	9.3	8.9	17.5	10.7	7.2	9.0	9.1	8.1	11.4
Electricity deliveries, GWh	2,373	2,335	2,540	2,199	2,150	2,411	4,708	4,561	9,300

- The OL3 EPR unit's test production was interrupted, regular electricity production is estimated to start in December 2022
- High electricity market prices, hydropower generation benefited from volatile markets
- Energy storage with an ultracapacitor has been taken into production use at the Ontojoki hydropower plants

Results

Q2 2022 compared with Q2 2021

Comparable EBIT for UPM Energy increased due to significantly higher electricity sales prices.

UPM's average electricity sales price increased by 47% to EUR 60.4/MWh (41.2/MWh).

Q2 2022 compared with Q1 2022

Comparable EBIT increased due to higher electricity sales prices. Nuclear power generation was lower due to a maintenance shutdown at the Olkiluoto nuclear power plant.

UPM's average electricity sales price increased by 7% to EUR 60.4/MWh (56.7/MWh).

January–June 2022 compared with January–June 2021

Comparable EBIT increased due to significantly higher electricity sales prices.

UPM's average electricity sales price increased by 39% to EUR 58.7/MWh (42.2/MWh).

Market environment

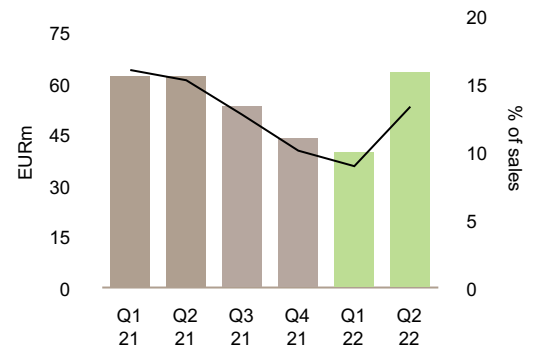
- The Nordic hydrological balance was slightly below the long-term average at the end of June. In Finland, the hydrological situation was close to normal.
- The CO₂ emission allowance price of EUR 89.5/tonne at the end of Q2 2022 was higher than at the end of Q2 2021 (EUR 56.7/tonne).
- The average Finnish area spot price on the Nordic electricity exchange in Q2 2022 was EUR 117.5/MWh, 28% higher than in Q1 2022 (91.7/MWh) and 154% higher than in Q2 2021 (46.3/MWh).
- The front-year forward electricity price for the Finnish area closed at EUR 137.3/MWh in June, 141% higher than at the end of Q1 2022 (56.9/MWh).

Sources: The Norwegian Water Resources and Energy Directorate, Svensk Energi, Finnish Environment Institute, Nord Pool, NASDAQ OMX, Bloomberg, UPM

UPM Raflatac

UPM Raflatac offers innovative and sustainable self-adhesive label materials for branding and promotion, information and functional labelling in the food, beverage, personal care, pharmaceutical and logistic segments, for example. UPM Raflatac is the second-largest producer of self-adhesive label materials worldwide.

Comparable EBIT



	Q2/22	Q1/22	Q4/21	Q3/21	Q2/21	Q1/21	Q1- Q2/22	Q1- Q2/21	Q1- Q4/21
Sales EURm	479	451	442	425	413	391	930	804	1,671
Comparable EBITDA, EURm	72	49	53	63	72	71	120	143	259
% of sales	15.0	10.8	12.0	14.7	17.3	18.2	13.0	17.8	15.5
Depreciation, amortisation and impairment charges, EURm	-9	-12	-9	-9	-9	-9	-22	-18	-36
Operating profit, EURm	61	33	44	54	61	62	95	124	222
% of sales	12.8	7.4	10.0	12.7	14.9	15.9	10.2	15.4	13.3
Items affecting comparability in operating profit, EURm ¹⁾	-2	-7	—	—	-1	—	-9	-1	-1
Comparable EBIT, EURm	63	40	44	54	63	62	103	125	223
% of sales	13.2	8.8	10.0	12.6	15.2	15.9	11.1	15.5	13.3
Capital employed (average), EURm	599	581	579	562	549	523	590	536	553
Comparable ROCE, %	42.3	27.5	30.5	38.2	45.6	47.6	35.0	46.6	40.2

¹⁾ In Q2 and Q1 2022 items affecting comparability relate mainly to impairment charges of assets impacted by Russia's war in Ukraine. In 2021 items affecting to comparability relate to restructuring charges.

- Signing of agreements to acquire AMC AG in Germany
- Launch of Ocean Action label material as world's first to use certified ocean bound plastic waste as raw material
- Continued actions to mitigate the significant raw material cost increases and supply shortages

Results

Q2 2022 compared with Q2 2021

Comparable EBIT for UPM Raflatac remained unchanged. Sales prices were higher, and more than offset the negative impact of higher variable costs. Delivery volumes were lower.

Q2 2022 compared with Q1 2022

Comparable EBIT increased. Sales prices were higher, offsetting the negative impact of higher variable costs and lower delivery volumes. The comparison period was affected by a provision for expected credit losses related to Russian trade receivables.

January–June 2022 compared with January–June 2021

Comparable EBIT decreased due to higher variable costs and lower delivery volumes. Sales prices were higher. Q1 2022 was affected by a provision for expected credit losses related to Russian trade receivables.

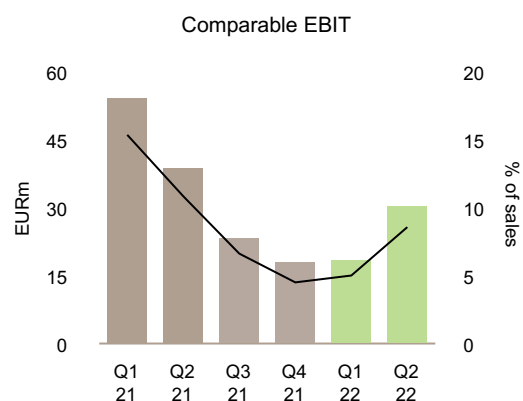
Market environment

- In Q2 2022, demand for self-adhesive label materials was good in Europe and North America.
- In Q2 2022, demand was softer in Asia.

Sources: UPM, FINAT, TLMi

UPM Specialty Papers

UPM Specialty Papers offers labelling and packaging materials as well as office and graphic papers for labelling, commercial silicising, packaging, office use and printing. The production plants are located in China, Finland and Germany.



	Q2/22	Q1/22	Q4/21	Q3/21	Q2/21	Q1/21	Q1- Q2/22	Q1- Q2/21	Q1- Q4/21
Sales EURm	357	377	407	358	361	355	734	717	1,482
Comparable EBITDA, EURm	50	38	36	43	58	73	87	131	209
% of sales	13.9	10.0	8.8	11.9	16.0	20.6	11.9	18.3	14.1
Depreciation, amortisation and impairment charges, EURm	-19	-19	-18	-19	-19	-19	-39	-38	-75
Operating profit, EURm	30	19	18	23	39	54	49	93	135
% of sales	8.5	4.9	4.4	6.5	10.8	15.3	6.6	13.0	9.1
Items affecting comparability in operating profit, EURm	—	—	—	—	—	—	—	—	—
Comparable EBIT, EURm	30	19	18	23	39	54	49	93	135
% of sales	8.5	4.9	4.4	6.5	10.8	15.3	6.7	13.0	9.1
Capital employed (average), EURm	843	884	889	845	853	870	863	862	864
Comparable ROCE, %	14.4	8.4	8.1	11.1	18.2	24.9	11.3	21.6	15.6
Paper deliveries, 1000 t	323	371	422	388	414	434	693	849	1,658

- Good market demand for label, release base and packaging papers
- Actions to mitigate high input costs
- Development work continues in demanding barrier paper applications

Results

Q2 2022 compared with Q2 2021

Comparable EBIT for UPM Specialty Papers decreased. The negative impact of higher input costs and lower delivery volumes more than offset the positive impact of higher sales prices.

Q2 2022 compared with Q1 2022

Comparable EBIT increased due to higher sales prices. Delivery volumes were lower.

January–June 2022 compared with January–June 2021

Comparable EBIT decreased due to higher input costs. Delivery volumes were lower. Sales prices were higher.

Market environment

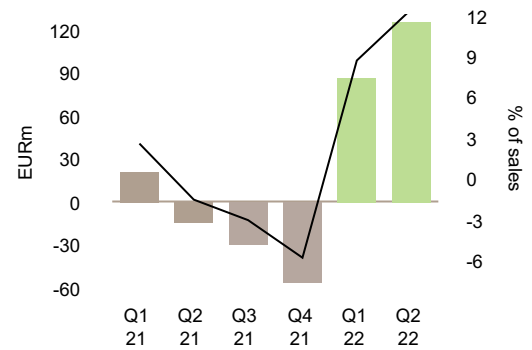
- Global demand for label, release base and packaging papers was good in Q2 2022. In Asia, demand was softer. Demand was driven by fast moving consumer goods and e-commerce. Market prices increased.
- In Q2 2022, fine paper demand in the Asia-Pacific region was improving. However, fine paper demand was impacted by the COVID-19 lockdowns and containment measures in China.
- In Q2 2022, fine paper market prices in the Asia-Pacific region increased compared to Q1 2022.

Sources: UPM, RISI, AFRY, AWA

UPM Communication Papers

UPM Communication Papers offers an extensive product range of sustainably produced graphic papers for advertising and publishing as well as home and office uses. The business has extensive low-cost operations consisting of 13 efficient paper mills in Europe and the United States, a global sales network and an efficient logistic system. The main customers are publishers, cataloguers, retailers, printers and merchants.

Comparable EBIT



	Q2/22	Q1/22	Q4/21	Q3/21	Q2/21	Q1/21	Q1- Q2/22	Q1- Q2/21	Q1- Q4/21
Sales EURm	1,017	1,001	950	945	867	815	2,019	1,681	3,577
Comparable EBITDA, EURm	145	106	-33	-3	12	47	251	59	23
% of sales	14.3	10.6	-3.5	-0.4	1.4	5.7	12.4	3.5	0.6
Share of results of associated companies and joint ventures, EURm	1	0	0	0	0	0	1	0	0
Depreciation, amortisation and impairment charges, EURm	-20	-20	-75	-26	-27	-27	-40	-54	-155
Operating profit, EURm	139	86	-102	106	-14	23	225	9	14
% of sales	13.6	8.6	-10.7	11.2	-1.6	2.8	11.1	0.6	0.4
Items affecting comparability in operating profit, EURm ¹⁾	13	—	-46	135	—	2	13	3	93
Comparable EBIT, EURm	126	86	-56	-30	-14	20	212	6	-79
% of sales	12.4	8.6	-5.9	-3.1	-1.6	2.5	10.5	0.4	-2.2
Capital employed (average), EURm	1,396	1,381	1,237	1,283	1,239	1,340	1,388	1,289	1,275
Comparable ROCE, %	36.1	25.0	-18.1	-9.2	-4.5	6.1	30.6	1.0	-6.2
Paper deliveries, 1000 t	1,001	1,113	1,443	1,496	1,495	1,396	2,114	2,890	5,828

¹⁾ Q2 2022 includes EUR 11 million settlement loss resulting from replacement of a defined benefit pension plan in Finland with defined contribution plan, EUR 8 million capital gain on sale of Chapelle mill site in France, EUR 11 million reversal of restructuring provisions related to Chapelle paper mill, EUR 7 million gain on sale of non-current assets and EUR 3 million charges related to prior capacity closures. Q1 2022 includes EUR 1 million gain on sale of non-current assets and EUR 1 million impairment charges related to assets impacted by Russia's war in Ukraine. Q4 2021 includes EUR 50 million impairment charges of newsprint fixed assets, EUR 6 million gain on sale of non-current assets and EUR 2 million restructuring charges. Q3 2021 includes the gain on sale of Shotton Mill Ltd amounting to EUR 133 million. Q1 2021 items affecting comparability relate to prior capacity closures.

- Sales price increases, efficiency improvement initiatives and cost containment measures to mitigate cost increases
- Successful start-up at Finnish mills after strike
- Signing of agreement to sell the Steyrermühl site to the HEINZEL GROUP

Results

Q2 2022 compared with Q2 2021

Comparable EBIT for UPM Communication Papers increased. Significantly higher sales prices more than offset the negative impact of higher variable costs.

The average price in euro for UPM's paper deliveries increased by 77%.

Q2 2022 compared with Q1 2022

Comparable EBIT increased due to higher sales prices. Variable costs increased.

The average price in euro for UPM's paper deliveries increased by 14%.

January–June 2022 compared with January–June 2021

Comparable EBIT increased. Significantly higher sales prices more than offset the negative impact of higher variable costs. Production and delivery volumes were lower due to the strike in Finland in January-April 2022.

The average price in euro for UPM's paper deliveries increased by 64%.

Market environment

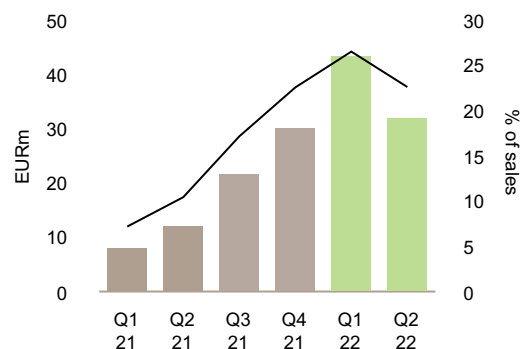
- In the first half of 2022, demand for graphic papers in Europe was 4% lower than in the first half of 2021. Newsprint demand decreased by 3%, magazine papers decreased by 10% and fine papers decreased by 1% compared to the first half of 2021.
- In Q2 2022, demand for graphic papers in Europe was 7% lower than in Q2 2021. Newsprint demand decreased by 9%, magazine papers decreased by 13% and fine papers decreased by 2% compared to Q2 2021.
- In Q2 2022, publication paper prices in Europe were 11% higher compared with Q1 2022. Compared with Q2 2021 publication paper prices were 92% higher. In Q2 2022, fine paper prices in Europe were 17% higher than in the previous quarter. Compared with Q2 2021, fine paper prices were 52% higher.
- In the first five months of 2022, demand for magazine papers in North America increased by 3%, compared with the same period last year. The average price in US dollars for magazine papers in Q2 2022 increased by 8% compared with Q1 2022 and by 32% compared with Q2 2021.

Sources: PPI/RISI, Euro-Graph, PPPC

UPM Plywood

UPM Plywood offers high quality WISA® plywood and veneer products for construction, vehicle flooring, LNG shipbuilding, parquet manufacturing and other industrial applications. Production facilities are located in Finland, Estonia and Russia.

Comparable EBIT



	Q2/22	Q1/22	Q4/21	Q3/21	Q2/21	Q1/21	Q1-Q2/22	Q1-Q2/21	Q1-Q4/21
Sales EURm	143	164	134	127	119	112	307	231	492
Comparable EBITDA, EURm	37	50	37	28	19	14	87	33	99
% of sales	26.2	30.3	27.5	22.4	15.8	12.9	28.4	14.4	20.0
Depreciation, amortisation and impairment charges, EURm	-5	-52	-7	-6	-6	-6	-57	-13	-25
Operating profit, EURm	33	-20	30	26	15	8	13	23	80
% of sales	23.0	-12.2	22.6	20.5	13.0	7.1	4.1	10.2	16.2
Items affecting comparability in operating profit, EURm ¹⁾	1	-63	—	4	3	—	-63	3	8
Comparable EBIT, EURm	32	43	30	22	12	8	75	20	72
% of sales	22.4	26.3	22.4	17.0	10.3	7.1	24.5	8.7	14.6
Capital employed (average), EURm	230	274	295	282	282	287	252	284	286
Comparable ROCE, %	55.8	63.1	40.8	30.5	17.3	11.0	59.7	14.2	25.1
Plywood deliveries, 1000 m ³	168	198	172	178	198	191	366	388	738

¹⁾ In Q2 and Q1 2022 items affecting comparability relate mainly to impairment charges of assets impacted by Russia's war in Ukraine. In Q3 2021 items affecting comparability include EUR 3 million restructuring charges reversals and EUR 1 million impairment reversals related to Jyväskylä plywood mill closure in 2020. In Q2 2021, items affecting comparability include reversals of restructuring charges related to Jyväskylä plywood mill closure in 2020.

- Strong market demand and successful price increases in all end-uses
- The lignin-based WISA® BioBond bonding technology was launched for all UPM's WISA spruce plywood products

Results

Q2 2022 compared with Q2 2021

Comparable EBIT for UPM Plywood increased due to higher sales prices. Variable costs increased and delivery volumes were lower.

Q2 2022 compared with Q1 2022

Comparable EBIT decreased due to increased variable costs and lower delivery volumes. Sales prices were higher.

January–June 2022 compared with January–June 2021

Comparable EBIT increased due to significantly higher sales prices. Variable costs increased.

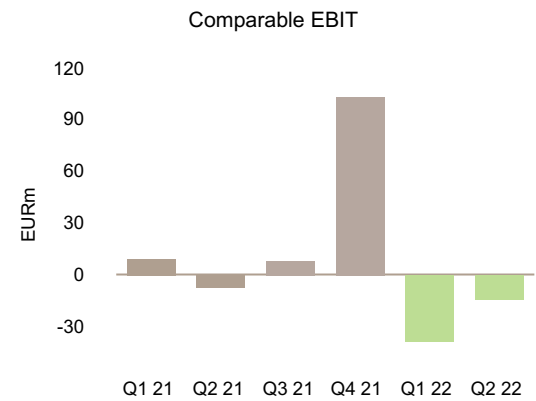
Market environment

- In Q2 2022, demand for spruce plywood was strong, driven by the building and construction industry.
- In Q2 2022, demand for birch plywood was strong in panel trading and industrial applications.

Source: UPM

Other operations

Other Operations includes UPM Forest, UPM Biofuels, UPM Biochemicals, UPM Biomedicals and UPM Biocomposites business units as well as biofuels development and group services. UPM Forest secures competitive wood and biomass for UPM businesses and manages UPM-owned and privately-owned forests in North Europe. In addition, UPM Forest offers forestry services to forest owners and forest investors. UPM Biofuels produces wood-based renewable diesel for all diesel engines and renewable naphtha that can be used as a biocomponent for gasoline or for replacing fossil raw materials in petrochemical industry. UPM operates one biorefinery in Finland.



	Q2/22	Q1/22	Q4/21	Q3/21	Q2/21	Q1/21	Q1- Q2/22	Q1- Q2/21	Q1- Q4/21
Sales EURm	110	70	133	116	124	110	180	234	483
Comparable EBITDA, EURm	4	-34	5	12	5	14	-30	19	36
Change in fair value of forest assets and wood harvested, EURm	-9	9	109	6	-1	5	1	4	120
Share of results of associated companies and joint ventures, EURm	0	-1	0	0	0	0	-1	0	0
Depreciation, amortisation and impairment charges, EURm	-9	-33	-11	-10	-11	-11	-42	-22	-44
Operating profit, EURm	-14	-61	103	8	-8	9	-75	1	112
Items affecting comparability in operating profit, EURm ¹⁾	1	-23	—	—	-1	—	-23	—	-1
Comparable EBIT, EURm	-14	-38	103	8	-7	9	-53	1	113
Capital employed (average), EURm	2,504	2,421	2,209	2,146	2,147	2,106	2,463	2,126	2,152
Comparable ROCE, %	-2.3	-6.3	18.7	1.5	-1.4	1.6	-4.3	0.1	5.2

Comparative figures 2021 have been restated due to change in the composition of reportable segments. Refer to Note 10 Change in the composition of reportable segments.

¹⁾ Q2 2022 includes settlement loss of EUR 3 million resulting from replacement of defined benefit pension plan in Finland with defined contribution plan and EUR 3 million capital gain on sale of non-current assets. Q1 2022 items affecting comparability mainly relate to impairment charges of assets impacted by Russia's war in Ukraine. In 2021, items affecting to comparability relate to restructuring charges.

Results

Q2 2022 compared with Q2 2021

Comparable EBIT for other operations decreased. The change in the fair value of forest assets net of wood harvested was EUR -9 million (-1 million). The increase in the fair value of forest assets was EUR 15 million (15 million). The cost of wood harvested from UPM forests was EUR 24 million (16 million). In Q2, UPM Biofuels only had one month of production due to the strike in April and the long ramp-up of the process.

Q2 2022 compared with Q1 2022

Comparable EBIT increased. The change in the fair value of forest assets net of wood harvested was EUR -9 million (9 million). The increase in the fair value of forest assets was EUR 15 million (16 million). The cost of wood harvested from UPM forests was EUR 24 million (7 million).

In January-April 2022, UPM Biofuels production and deliveries were impacted by the strike.

January-June 2022 compared with January-June 2021

Comparable EBIT for other operations decreased. The change in the fair value of forest assets net of wood harvested was EUR 1 million (4 million). The increase in the fair value of forest assets was EUR 31 million (31 million). The cost of wood harvested from UPM forests was EUR 30 million (27 million).

In January-April 2022, UPM Biofuels production and deliveries were impacted by the strike.

Market environment

- In Q2 2022, market demand for advanced renewable fuels was strong and prices were at a high level.
- In Q2 2022, interest for bio-based MEG and renewable functional fillers in Europe remained strong. Prices for MEG and carbon black were at a high level.
- In Q2 2022, market demand for biocomposites remained firm in Europe, driven by the continued demand for sustainable products. However, shortages in raw-materials affected delivery volumes. Market prices increased in response to input cost inflation.
- In UPM Biomedicals, hydrogel demand for cell cultivation is driven by material shortages in market. Hospitals continue to explore new sustainable advanced wound care dressings.

Source: UPM

Risks and near-term uncertainties

The main uncertainties in UPM's earnings relate to the sales prices and delivery volumes of the Group's products, as well as to changes to the main input cost items and currency exchange rates. Most of these items depend on general economic developments.

The COVID-19 pandemic continues to cause significant uncertainty. The pandemic and the related containment measures resulted in a severe global recession in 2020. In 2021 the economic recovery was fast, although uneven in different parts of the world. The rapid economic recovery supported demand and pricing for UPM products. However, it also led to tight global supply and logistics chains and was accompanied by increasing inflation and inflation expectations. For UPM, variable cost increases were significant across most raw materials and energy.

The duration and changing nature of the pandemic with new virus variants and progressing vaccinations remain uncertain. The pandemic itself, the lockdowns and containment measures, and the resulting impacts on the global economy may all affect UPM's operations and supply chain, the demand, supply and pricing of UPM's products and the inputs, or progress of UPM's large investment projects. The fast-spreading Omicron variant could temporarily disrupt operations in some of UPM's units, its supply or logistics chains or progress in investment projects. The COVID-19 pandemic and related issues are discussed earlier in this report.

The strict COVID-19 containment measures in China may affect economic growth in China and globally, as well as UPM's production in China, its product and raw material markets, and global logistics chains.

Russia's war in Ukraine has caused further uncertainty in European and global economic recovery, growth and inflation. The sanctions by EU and the US on Russia, escalated global geopolitical and trade tensions and the resulting impacts on the global economy may all affect UPM's operations and supply chain, the demand, supply and pricing of UPM's products and the inputs, or progress of UPM's large investment projects.

The very tight energy market situation in Europe as well as in China has recently added significantly to UPM's energy costs and represents further uncertainty in the coming months and quarters. In 2021, this was at Group level mitigated by a very strong performance in UPM Energy. However, this may not always be the case, due to geographical differences in UPM's energy sales and purchases. In addition to high and uncertain cost of energy, Russia's war in Ukraine and the related potential future sanctions and counter sanctions may affect availability of certain forms of energy, e.g. natural gas.

Many global commodity prices increased significantly during 2021. This, combined with the recovering global economy and possible supply restrictions could have a further increasing impact on UPM's raw material cost items.

Current bottlenecks in global logistics represent further challenges to delivering UPM products, sourcing raw materials for UPM businesses and delivering equipment to UPM's investments projects. The logistics chains may be further affected by Russia's war in Ukraine, and the strict COVID-19 containment measures in China.

Changes to the monetary policies of major central banks may significantly impact various currencies that directly or indirectly affect UPM.

In Finland, UPM is participating in a project to construct a new nuclear power plant unit, Olkiluoto 3 EPR (OL3), through its shareholdings in Pohjolan Voima Oyj. Pohjolan Voima Oyj is a majority shareholder of Teollisuuden Voima Oyj (TVO), holding 58.5% of its shares. UPM's indirect share of OL3 is approximately 31%.

According to TVO, OL3 was procured as a fixed price turnkey project from a consortium formed by Areva GmbH, Areva NP SAS and Siemens AG (the Supplier). As stipulated in

the plant contract, the consortium companies have joint and several liability for the contractual obligations.

In March 2018 TVO announced that it had signed a Global Settlement Agreement (the GSA) with the Supplier and the Areva Group parent company, Areva SA, a company wholly owned by the French state. The Global Settlement Agreement, which concerns the completion of the OL3 project and related disputes entered into force in late March 2018. According to TVO's announcement, the GSA was amended with agreements signed in June 2021.

In the GSA, the Supplier consortium companies committed to ensuring that the funds dedicated to the completion of the OL3 project are sufficient and cover all applicable guarantee periods. Consequently, a trust mechanism was set up funded by Areva companies to secure the funds required to cover Areva's costs for the completion of the OL3 project.

According to TVO the key matters of the amendment agreements to the GSA are:

- The Areva companies' trust mechanism, established in the GSA of 2018, was replenished in July 2021 with EUR 432.3 million.
- Both TVO and the Supplier are to cover their own costs as of July 2021 until end of February 2022.
- In the case that the Supplier consortium companies would not complete the OL3 project by the end of February 2022, they would pay additional compensation for delays, depending on the date of completion.
- In connection with the amendment of GSA entering into force, the Supplier paid EUR 206.9 million of the EUR 400.0 million delay compensation as agreed in the GSA 2018.

According to TVO, all payments related to the settlement compensations have been recorded in the consolidated balance sheet as property, plant and equipment.

TVO announced in its Annual Report of 2021 that as the Supplier did not finish the OL3 project by the end of February 2022, as was stipulated in the amendment agreements, the Supplier will pay an additional delay compensation to TVO depending on the date of completion as of the beginning of March 2022.

TVO announced in its Interim Report Q2 2022 that the trust, which was replenished in July 2021, has been used to cover costs incurred to Areva companies for the completion of the OL3 project in accordance with the GSA. Further, TVO announced that TVO had recorded receivables from the Supplier for the additional delay compensation accumulated by the end of Q2 2022 in accordance with the amended GSA. At the end of Q2 2022, TVO has recognized current receivables EUR 225.5 million from the Supplier. The delay compensation and additional delay compensation has been recorded as EUR 32.4 million at the end of Q2 2022.

As announced by TVO in December 2021, the Radiation and Nuclear Safety Authority in Finland (STUK) had granted permission for making the OL3's reactor critical and conducting lower power tests. On 21 December 2021, TVO announced that the OL3's reactor had started up, i.e. the first criticality of OL3 was reached, and on 12 March 2022 TVO announced that the electricity production at OL3 had started, when OL3 was connected to the national grid. TVO has announced that OL3's regular electricity production starts in July 2022. On 30 March 2022, according to TVO, STUK granted TVO permission to increase OL3's power level to 60 percent and carry out new power tests at power levels between 30-60 percent. During the test production phase, the OL3 power output will be gradually increased to 1,600 megawatts.

On 29 April, 2022 TVO announced that due to inspection and possible repair needs of the generator's cooling system and additional time needed for upcoming testing and analysis thereof, the regular electricity production at OL3 would according to information received from the Supplier start in September 2022, instead of the previously estimated start at the end of July. On 15 June, TVO announced that OL3's test production was interrupted due to foreign material issues observed in the turbine's steam reheater. Further, TVO announced that according to information received from the Supplier, OL3's regular electricity production is to start in

December 2022, instead of the previously announced start in September 2022.

TVO estimated in its Annual Report 2021 that its total investment in the OL3 project will be approximately EUR 5.7 billion.

The COVID-19 pandemic may have added significantly uncertainty to the progress of the project. Despite COVID-19-related restrictions, work has been able to continue under special arrangements.

On 16 December 2020, TVO announced that the shareholders of TVO, including PVO, had signed an additional shareholder loan commitment, comprising a total of EUR 400 million new subordinated shareholder loan agreements. According to TVO with the new shareholder loan commitment, TVO is preparing to maintain a sufficient liquidity buffer and equity ratio to complete OL3.

On 21 March 2022, TVO announced that S&P Global Ratings upgraded its long-term credit rating from "BB" to "BB+" and affirmed its positive outlook.

Further delays to the OL3 project could have an adverse impact on PVO's business and financial position, the fair value of UPM's energy shareholdings in PVO and/or the cost of energy sourced from OL3, when completed. It is possible that the cost of energy sourced from OL3 at the time when it starts regular electricity production may be higher than the market price of electricity at that time.

The recent development of Renewable Energy Sources Act (EEG) related lawsuits in Germany for alleged non-payment of EEG based surcharges may have an adverse impact on UPM, albeit UPM is not currently party to any such lawsuits.

The main earnings sensitivities and the group's cost structure are presented on pages 165–166 of the Annual Report 2021. Risks and opportunities are discussed on pages 34–35, and risks and risk management are presented on pages 131–135.

Labour negotiations in Finland

By decision of its member companies, The Finnish Forest Industries Federation, which has earlier been responsible for the country level collective bargaining among others with the Paperworkers' Union and Industrial Union, discontinued its engagement in the bargaining in November 2020. In the future, the new terms of employment will be based on agreements between each company and the unions. Each company will carry out negotiations based on its own considerations, and, as the negotiation parties change, the terms of previous collective labour agreements will not be applied after their terms expire. UPM's target is to negotiate business specific agreements, improve the competitiveness of products and create prerequisites for the further development of units. At the same time, UPM aims to be an attractive employer, with competitive offering for all UPM employees.

In the spring of 2021, UPM sent invitations to negotiations to the unions and to its own employee representatives. At the same time UPM decided on an extensive benefits package, which it offers equally to all employees in Finland, independent of the personnel group or the union agreement applied. The benefits package guarantees support in different life situations, as well as compensation elements. With the benefits package, the actual negotiations could focus on issues related to the competitiveness of the businesses, like productivity development, wages and working hours as well as the competence development of employees.

Negotiations with the employee representatives and Industrial Union started at UPM Plywood and UPM Timber in May 2021 and the agreement was signed for each business in December 2021.

Meanwhile the Paperworkers' Union declined the invitations sent by UPM Pulp, UPM Communication Papers, UPM Specialty Papers, UPM Raflatac and UPM Biofuels. At that point, the union wanted to negotiate one group level agreement with the corporation. Due to the different needs of

the various businesses, UPM's starting point was, however, business-specific agreements.

As the new agreements were not reached before the old agreements expired at the end of 2021, UPM communicated well in time temporary terms of labour, which are based on labour law, UPM practices and personal employment contracts. They would be applied until the business specific agreements would be concluded.

The Paperworkers' Union started a strike in five of UPM's businesses in Finland as of 1 January 2022. The negotiations started slowly. Despite intense business-specific negotiations and official conciliation process during the latter part of Q1 2022, UPM and the Paperworkers' Union were not able to settle on new collective labour agreements. On 22 March 2022, the conciliator gave a settlement proposal in the collective labour agreement negotiations for UPM Pulp. A couple of weeks later on 9 April 2022, the conciliator interrupted the conciliation between UPM Communication Papers and Paperworkers' Union, as the parties' views were still far apart. The conciliation in UPM Specialty Papers, UPM Raflatac and UPM Biofuels continued, and the conciliator gave settlement proposals also for these businesses.

On 14 April 2022, the union turned down all four settlement proposals submitted by the conciliator. The exceptionally long strike at UPM Pulp, UPM Communication Papers, UPM Specialty Papers, UPM Raflatac and UPM Biofuels units in Finland thus continued. UPM would have approved the settlement proposals.

On 21 April 2022, the conciliator gave settlement proposals for all five businesses and parties accepted them the following day. As the agreements were reached on 22 April, strikes at UPM mills in Finland ended.

Shares

In Q2 2022 UPM shares worth a total of EUR 5,057 million (4,548 million) were traded on the Nasdaq Helsinki stock exchange. This is estimated to represent more than 60% of the total trading volume in UPM shares. The highest listing was EUR 35.68 in January and the lowest was EUR 24.85 in March.

The Annual General Meeting held on 29 March 2022 authorised the Board of Directors to decide on the repurchase of a maximum of 50,000,000 of the Company's own shares. The authorisation will be valid for 18 months from the date of the AGM's resolution.

The Annual General Meeting held on 29 March 2022 authorised the Board of Directors to decide on the issuance of new shares, the transfer of treasury shares and the issuance of special rights entitling to shares in proportion to the shareholders' existing holdings in the Company, or in a directed share issue, deviating from the shareholder's preemptive subscription right. The Board of Directors may also decide on a share issue without payment to the Company itself. The aggregate maximum number of new shares that may be issued and treasury shares that may be transferred is 25,000,000, including the number of shares that can be received on the basis of special rights. The authorisation will be valid for 18 months from the date of the AGM resolution.

Aside from the above, the Board of Directors has no current authorization to issue shares, convertible bonds or share options.

The number of shares entered in the Trade Register on 30 June 2022 was 533,735,699. Through the issuance authorisation, the number of shares may increase to a maximum of 558,735,699.

On 30 June 2022, the Company held 411,653 of its own shares, representing approximately 0.08% of the total number of company shares and voting rights. The Board of Directors may decide to retain, transfer or cancel the treasury shares.

Legal proceedings

The Group's management is not aware of any significant litigation at the end of Q2 2022.

In October 2021, the European Commission conducted an unannounced inspection at UPM's premises. According to the Commission's press release on 12 October, the Commission has concerns that the inspected companies in the wood pulp sector may have violated EU antitrust rules that prohibit cartels and restrictive business practices. The Commission states that the unannounced inspections are a preliminary step in an investigation into suspected anticompetitive practices, and the

fact that the Commission carries out such inspections does not mean that the companies are guilty of anti-competitive behaviour nor does it prejudge the outcome of the investigation itself. UPM takes any suspected violation of antitrust rules very seriously and has a compliance programme in place to mitigate the risk of such violations. For example, all employees and executives are required to take training on the UPM Code of Conduct, which includes a section regarding antitrust compliance. In addition, UPM has also in place a specific training programme regarding antitrust rules which covers approximately 3,000 employees and executives.

Helsinki, 21 July 2022

UPM-Kymmene Corporation
Board of Directors

Financial statement information

Consolidated income statement

EURm	Q2/2022	Q2/2021	Q1-Q2/2022	Q1-Q2/2021	Q1-Q4/2021
Sales (Note 3)	2,562	2,384	5,069	4,618	9,814
Other operating income	43	22	115	43	254
Costs and expenses	-2,151	-1,982	-4,377	-3,847	-8,104
Change in fair value of forest assets and wood harvested	-8	-2	4	3	111
Share of results of associated companies and joint ventures	2	1	1	1	2
Depreciation, amortisation and impairment charges	-113	-118	-294	-235	-515
Operating profit	335	304	518	583	1,562
Exchange rate and fair value gains and losses	34	0	35	0	-3
Interest and other finance costs, net	-9	-6	-13	-12	-12
Profit before tax	361	298	540	570	1,548
Income taxes	-69	-55	-109	-100	-240
Profit for the period	292	243	431	470	1,307
Attributable to:					
Owners of the parent company	283	239	416	463	1,286
Non-controlling interests	9	4	14	7	22
	292	243	431	470	1,307
Earnings per share for profit attributable to owners of the parent company					
Basic earnings per share, EUR	0.53	0.45	0.78	0.87	2.41
Diluted earnings per share, EUR	0.53	0.45	0.78	0.87	2.41

Consolidated statement of comprehensive income

EURm	Q2/2022	Q2/2021	Q1-Q2/2022	Q1-Q2/2021	Q1-Q4/2021
Profit for the period	292	243	431	470	1,307
Other comprehensive income for the period, net of tax					
Items that will not be reclassified to income statement:					
Actuarial gains and losses on defined benefit obligations	150	55	296	111	96
Changes in fair value of energy shareholdings	351	19	543	71	632
Items that may be reclassified subsequently to income statement:					
Translation differences	272	-31	358	131	337
Net investment hedge	-20	-1	-24	-8	-21
Cash flow hedges	-778	10	-734	-10	-127
Other comprehensive income for the period, net of tax	-25	53	440	294	918
Total comprehensive income for the period	267	296	871	764	2,225
Total comprehensive income attributable to:					
Owners of the parent company	242	294	835	754	2,194
Non-controlling interests	25	2	36	10	31
	267	296	871	764	2,225

Consolidated balance sheet

EURm	30 JUN 2022	30 JUN 2021	31 DEC 2021
ASSETS			
Goodwill	246	232	237
Other intangible assets	440	326	366
Property, plant and equipment (Note 4)	6,225	4,813	5,569
Leased assets	654	572	608
Forest assets	2,441	2,139	2,328
Energy shareholdings (Note 5)	3,130	2,007	2,579
Other non-current financial assets	98	146	133
Deferred tax assets	577	380	466
Net retirement benefit assets	59	101	79
Investments in associates and joint ventures	26	33	33
Other non-current assets	19	20	20
Non-current assets	13,916	10,768	12,420
Inventories	1,839	1,351	1,594
Trade and other receivables	2,548	1,897	2,024
Other current financial assets	109	51	139
Income tax receivables	42	21	40
Cash and cash equivalents	938	1,578	1,460
Current assets	5,476	4,898	5,257
Assets classified as held for sale (Note 9)	7	16	—
Assets	19,399	15,683	17,676
EQUITY AND LIABILITIES			
Share capital	890	890	890
Treasury shares	-2	-2	-2
Translation reserve	640	143	329
Other reserves	1,743	1,485	1,938
Reserve for invested non-restricted equity	1,273	1,273	1,273
Retained earnings	6,429	5,611	6,419
Equity attributable to owners of the parent company	10,973	9,399	10,846
Non-controlling interests	325	208	261
Equity	11,298	9,607	11,106
Deferred tax liabilities	674	541	596
Net retirement benefit liabilities	446	688	676
Provisions (Note 8)	101	185	155
Non-current debt	3,940	2,542	2,566
Other non-current financial liabilities	124	99	109
Non-current liabilities	5,285	4,056	4,102
Current debt	399	77	86
Trade and other payables	2,159	1,828	2,254
Other current financial liabilities	224	49	95
Income tax payables	34	66	32
Current liabilities	2,816	2,019	2,468
Liabilities	8,101	6,075	6,570
Equity and liabilities	19,399	15,683	17,676

Consolidated statement of changes in equity

EURm	SHARE CAPITAL	TREASURY SHARES	TRANSLATION RESERVE	OTHER RESERVES	RESERVE FOR INVESTED NON-RESTRICTED EQUITY	RETAINED EARNINGS	EQUITY ATTRIBUTABLE TO OWNERS OF THE PARENT COMPANY	NON-CONTROLLING INTERESTS	TOTAL EQUITY
Value at 1 January 2022	890	-2	329	1,938	1,273	6,419	10,846	261	11,106
Profit for the period	—	—	—	—	—	416	416	14	431
Translation differences	—	—	336	—	—	—	336	22	358
Cash flow hedges - reclassified to income statement, net of tax	—	—	—	89	—	—	89	—	89
Cash flow hedges - reclassified to PPE	—	—	—	9	—	—	9	1	10
Cash flow hedges - changes in fair value, net of tax	—	—	—	-830	—	—	-830	-2	-832
Net investment hedge, net of tax	—	—	-24	—	—	—	-24	—	-24
Energy shareholdings - changes in fair value, net of tax	—	—	—	542	—	1	543	—	543
Actuarial gains and losses on defined benefit plans, net of tax	—	—	—	—	—	296	296	—	296
Total comprehensive income for the period	—	—	312	-190	—	714	835	36	871
Share-based payments, net of tax	—	—	—	-4	—	-10	-15	—	-15
Dividend distribution	—	—	—	—	—	-693	-693	-28	-721
Contributions by non-controlling interests	—	—	—	—	—	—	—	57	57
Total transactions with owners for the period	—	—	—	-4	—	-704	-708	29	-679
Value at 30 June 2022	890	-2	640	1,743	1,273	6,429	10,973	325	11,298
Value at 1 January 2021	890	-2	25	1,430	1,273	5,735	9,351	162	9,513
Profit for the period	—	—	—	—	—	463	463	7	470
Translation differences	—	—	126	—	—	—	126	5	131
Cash flow hedges - reclassified to income statement, net of tax	—	—	—	-3	—	—	-3	—	-3
Cash flow hedges - reclassified to PPE	—	—	—	-10	—	—	-10	-1	-11
Cash flow hedges - changes in fair value, net of tax	—	—	—	5	—	—	5	-1	4
Net investment hedge, net of tax	—	—	-8	—	—	—	-8	—	-8
Energy shareholdings - changes in fair value, net of tax	—	—	—	71	—	—	71	—	71
Actuarial gains and losses on defined benefit plans, net of tax	—	—	—	—	—	111	111	—	111
Total comprehensive income for the period	—	—	118	62	—	574	754	10	764
Share-based payments, net of tax	—	—	—	-8	—	-6	-13	—	-13
Dividend distribution	—	—	—	—	—	-693	-693	-12	-706
Other items	—	—	—	—	—	1	1	-1	—
Contributions by non-controlling interests	—	—	—	—	—	—	—	49	49
Total transactions with owners for the period	—	—	—	-8	—	-698	-706	36	-670
Value at 30 June 2021	890	-2	143	1,485	1,273	5,611	9,399	208	9,607

Consolidated cash flow statement

EURm	Q2/2022	Q2/2021	Q1- Q2/2022	Q1- Q2/2021	Q1- Q4/2021
Cash flows from operating activities					
Profit for the period	292	243	431	470	1,307
Adjustments ¹⁾	-698	181	-537	335	356
Interest received	1	0	1	1	1
Interest paid	-12	-3	-21	-15	-26
Dividends received	2	1	2	1	2
Other financial items, net	-27	-4	-19	-4	-2
Income taxes paid	-44	-38	-72	-68	-275
Change in working capital	-393	-72	-650	-194	-115
Operating cash flow	-879	308	-867	526	1,250
Cash flows from investing activities					
Capital expenditure	-325	-369	-651	-635	-1,432
Additions to forest assets	-45	-41	-52	-48	-89
Proceeds from sale of property, plant and equipment and intangible assets, net of tax	21	5	23	7	17
Proceeds from sale of forest assets, net of tax	1	0	2	6	6
Advances received and proceeds from disposal of businesses and subsidiaries	15	81	15	81	157
Proceeds from disposal of energy shareholdings	0	0	2	0	1
Net cash flows from net investment hedges	-47	12	-47	12	9
Change in other non-current assets	0	0	0	5	6
Investing cash flow	-381	-310	-710	-573	-1,323
Cash flows from financing activities					
Proceeds from non-current debt	1,350	0	1,351	600	600
Payments of non-current debt	-1	-1	-3	-12	-16
Lease repayments	-21	-20	-43	-43	-84
Change in current liabilities	115	0	289	-1	0
Net cash flows from derivatives	2	5	12	17	34
Dividends paid to owners of the parent company	-693	-693	-693	-693	-693
Dividends paid to non-controlling interests	-27	-12	-27	-12	-12
Contributions paid by non-controlling interests	18	20	57	50	82
Change in investment funds	99	0	99	0	-100
Other financing cash flow	-2	-2	-3	-3	-5
Financing cash flow	840	-704	1,038	-97	-194
Change in cash and cash equivalents	-420	-706	-539	-144	-268
Cash and cash equivalents at the beginning of the period	1,342	2,284	1,460	1,720	1,720
Exchange rate effect on cash and cash equivalents	16	0	17	2	8
Change in cash and cash equivalents	-420	-706	-539	-144	-268
Cash and cash equivalents at the end of the period	938	1,578	938	1,578	1,460

¹⁾ Adjustments

EURm	Q2/2022	Q2/2021	Q1- Q2/2022	Q1- Q2/2021	Q1- Q4/2021
Change in fair value of forest assets and wood harvested	8	2	-4	-3	-111
Share of results of associated companies and joint ventures	-2	-1	-1	-1	-2
Depreciation, amortisation and impairment charges	113	118	294	235	515
Capital gains and losses on sale of non-current assets	-19	-2	-21	-3	-146
Financial income and expenses	-26	6	-22	13	15
Income taxes	69	55	109	100	240
Utilised provisions	-9	-15	-32	-45	-85
Non-cash changes in provisions	-18	0	-11	-3	1
Other adjustments ²⁾	-813	18	-850	43	-70
Total	-698	181	-537	335	356

²⁾ 2022 other adjustments include energy hedging derivative market value payments.

Notes to the financial statements

1 Basis of preparation and accounting policies

This unaudited interim report has been prepared in accordance with the accounting policies set out in International Accounting Standard 34 on Interim Financial Reporting and group's consolidated statements for 2021.

Alternative performance measures presented in this report should not be considered as a substitute for measures of performance in accordance with the IFRS and may not be comparable to similarly titled amounts used by other companies.

Figures presented in this report have been rounded and therefore the sum of individual figures might deviate from the presented total figure. Key figures have been calculated using exact figures.

Accounting implications of the effects of the Russia's war in Ukraine

The group has assessed the balance sheet impact of Russia's war in Ukraine and the related sanctions imposed on Russia, by considering indicators of impairment of goodwill and other intangible assets, recoverable amount of property, plant and equipment, recoverability of deferred tax assets, valuation of inventories, and collectability of trade receivables. The expectations of future cash flows have been revised to reflect changed economic environment.

Due to the significant uncertainties related to operations in Russia and Ukraine, the group has recognised in Q1 2022 impairment charges of EUR 95 million on property, plant and equipment, leased assets, inventories and other receivables. In addition, in Q1 the group has increased the general provision for expected credit losses on trade receivables by EUR 17 million. At the end of the Q2 2022 credit loss provision was EUR 14 million.

For the time being, UPM businesses have suspended deliveries to Russia as well as wood sourcing in and from Russia. UPM has also decided to suspend the UPM Chudovo plywood mill operations following carefully the legislation in Russia and with due consideration of local employees, customers, and stakeholders.

The group expects that it will continue to operate and meet its liabilities as they fall due.

2 Quarterly information by business area

EURm, OR AS INDICATED	Q2/22	Q1/22	Q4/21	Q3/21	Q2/21	Q1/21	Q1- Q2/22	Q1- Q2/21	Q1- Q4/21
Sales									
UPM Fibres	584	404	766	783	682	563	988	1,245	2,794
UPM Energy	154	143	187	124	95	119	297	214	526
UPM Raflatac	479	451	442	425	413	391	930	804	1,671
UPM Specialty Papers	357	377	407	358	361	355	734	717	1,482
UPM Communication Papers	1,017	1,001	950	945	867	815	2,019	1,681	3,577
UPM Plywood	143	164	134	127	119	112	307	231	492
Other operations	110	70	133	116	124	110	180	234	483
Internal sales	-286	-102	-349	-355	-279	-233	-387	-511	-1,215
Eliminations and reconciliation	4	-1	2	1	1	2	2	3	5
Sales, total	2,562	2,507	2,673	2,523	2,384	2,234	5,069	4,618	9,814
Comparable EBITDA									
UPM Fibres	139	78	258	345	237	120	216	357	961
UPM Energy	75	65	117	65	43	52	140	95	277
UPM Raflatac	72	49	53	63	72	71	120	143	259
UPM Specialty Papers	50	38	36	43	58	73	87	131	209
UPM Communication Papers	145	106	-33	-3	12	47	251	59	23
UPM Plywood	37	50	37	28	19	14	87	33	99
Other operations	4	-34	5	12	5	14	-30	19	36
Eliminations and reconciliation	-15	27	-3	-17	-18	-3	12	-22	-42
Comparable EBITDA, total	506	377	470	535	426	389	883	816	1,821
Operating profit									
UPM Fibres	32	37	209	301	192	78	69	270	781
UPM Energy	73	63	115	63	41	50	136	91	270
UPM Raflatac	61	33	44	54	61	62	95	124	222
UPM Specialty Papers	30	19	18	23	39	54	49	93	135
UPM Communication Papers	139	86	-102	106	-14	23	225	9	14
UPM Plywood	33	-20	30	26	15	8	13	23	80
Other operations	-14	-61	103	8	-8	9	-75	1	112
Eliminations and reconciliation	-19	27	-4	-17	-23	-6	7	-29	-50
Operating profit, total	335	183	415	564	304	279	518	583	1,562
% of sales	13.1	7.3	15.5	22.4	12.8	12.5	10.2	12.6	15.9
Items affecting comparability									
UPM Fibres	-60	—	—	—	—	—	-60	—	—
UPM Energy	—	—	—	—	—	—	—	—	—
UPM Raflatac	-2	-7	—	—	-1	—	-9	-1	-1
UPM Specialty Papers	—	—	—	—	—	—	—	—	—
UPM Communication Papers	13	—	-46	135	—	2	13	3	93
UPM Plywood	1	-63	—	4	3	—	-63	3	8
Other operations	1	-23	—	—	-1	—	-23	—	-1
Eliminations and reconciliation ¹⁾	-4	—	-1	—	-5	-3	-4	-8	-9
Items affecting comparability in operating profit, total	-52	-94	-46	140	-3	—	-146	-3	91
Comparable EBIT									
UPM Fibres	92	37	209	301	192	78	129	270	781
UPM Energy	73	63	115	63	41	50	136	91	270
UPM Raflatac	63	40	44	54	63	62	103	125	223
UPM Specialty Papers	30	19	18	23	39	54	49	93	135
UPM Communication Papers	126	86	-56	-30	-14	20	212	6	-79
UPM Plywood	32	43	30	22	12	8	75	20	72
Other operations	-14	-38	103	8	-7	9	-53	1	113
Eliminations and reconciliation	-15	27	-3	-17	-18	-3	12	-22	-42
Comparable EBIT, total	387	277	461	424	307	279	664	586	1,471
% of sales	15.1	11.0	17.2	16.8	12.9	12.5	13.1	12.7	15.0

¹⁾ Eliminations and reconciliations includes changes in fair value of unrealised cash flow and commodity hedges.

Items affecting comparability

Certain non-operational or non-cash valuation transactions with significant income statement impact are considered as items affecting comparability and reported separately to reflect the underlying business performance and to enhance comparability from period to period. In Q2 2022, other non-operational items affecting comparability relate to settlement loss resulting from replacement of a defined benefit pension plan in Finland with

defined contribution plan. Capital gains relate to sale of Chapelle mill site in France and other non-current assets sales in Finland. Q1 2022, items affecting comparability mainly relate to impairment charges of assets impacted by Russia's war in Ukraine. In 2021, items affecting comparability mainly relate to the gain on sale of Shotton Mill Ltd and impairment charges of newsprint related fixed assets.

EURm	Q2/22	Q1/22	Q4/21	Q3/21	Q2/21	Q1/21	Q1- Q2/22	Q1- Q2/21	Q1- Q4/21
Comparable profit for the period	329	232	373	359	246	228	561	473	1,204
Items affecting comparability									
Impairment charges	4	-95	-52	1	0	-1	-91	-1	-52
Restructuring charges	5	0	0	5	2	4	5	6	11
Change in fair value of unrealised cash flow and commodity hedges	-4	0	0	0	-5	-3	-4	-8	-8
Capital gains and losses on sale of non-current assets	18	1	7	134	0	0	19	0	140
Other non-operational items	-74	0	0	0	0	0	-74	0	0
Total items affecting comparability in operating profit	-52	-94	-46	140	-3	0	-146	-3	91
Taxes relating to items affecting comparability	15	1	13	-1	1	0	16	0	12
Items affecting comparability in taxes	15	1	13	-1	1	0	16	0	12
Items affecting comparability, total	-37	-93	-33	139	-3	0	-130	-3	103
Profit for the period	292	139	340	497	243	227	431	470	1,307

3 External sales by major products

BUSINESS AREA	BUSINESS	Q2/2022	Q2/2021	Q1-Q2/2022	Q1-Q2/2021	Q1-Q4/2021
EURm						
UPM Fibres	UPM Pulp UPM Timber	447	509	837	939	2,092
UPM Energy	UPM Energy	77	54	209	131	290
UPM Raflatac	UPM Raflatac	479	413	930	804	1,671
UPM Specialty Papers	UPM Specialty Papers	310	314	631	625	1,275
UPM Communication Papers	UPM Communication Papers	1,002	857	1,989	1,663	3,536
UPM Plywood	UPM Plywood	139	114	297	221	471
Other operations	UPM Forest UPM Biofuels UPM Biochemicals UPM Biomedicals UPM Biocomposites	105	123	173	231	474
Eliminations and reconciliations		4	1	2	3	5
Total		2,562	2,384	5,069	4,618	9,814

BUSINESS	PRODUCT RANGE
UPM Pulp	Softwood, birch and eucalyptus pulp
UPM Timber	Standard and special sawn timber
UPM Energy	Electricity and related services
UPM Raflatac	Self-adhesive paper and film label stock
UPM Specialty Papers	Labelling materials, release base papers, flexible packaging materials, office papers, graphic papers
UPM Communication Papers	Graphic papers for various end uses
UPM Plywood	Plywood and veneer products
UPM Forest	Wood and wood-based biomass (logs, pulpwood, chips, forest residues etc.), full forestry service offering
UPM Biofuels	Wood-based renewable diesel for transport and renewable naphtha for transport and petrochemicals
UPM Biochemicals	Lignin products for industrial use
UPM Biomedicals	Wood-based products for biomedical applications
UPM Biocomposites	UPM ProFi decking products and UPM Formi granules

4 Changes in property, plant and equipment

EURm	Q1-Q2/22	Q1-Q2/21	Q1-Q4/2021
Book value at beginning of period	5,569	4,316	4,316
Reclassification to assets held for sale, net	—	-13	-13
Capital expenditure	630	624	1,515
Decreases	-2	-3	-12
Depreciation	-179	-186	-368
Impairment charges	-56	-3	-54
Impairment reversal	1	1	2
Translation difference and other changes	262	78	184
Book value at end of period	6,225	4,813	5,569

Capital expenditure in 2022 and 2021 mainly relate to the construction of the new pulp mill in Uruguay and the construction of the new biorefinery in Germany. Impairment charges in 2022

relate to assets impacted by the Russia's war in Ukraine and in 2021 mainly to newsprint fixed assets.

5 Financial assets and liabilities

Financial assets and liabilities measured at fair value

EURm	30 JUN 2022				30 JUN 2021				31 DEC 2021			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Financial assets												
Investment funds	—	1	—	1	—	—	—	—	—	100	—	100
Derivatives non-qualifying hedges	—	32	—	32	—	17	—	17	—	13	—	13
Derivatives under hedge accounting	17	146	—	163	5	164	—	168	1	148	—	149
Energy shareholdings	—	—	3,130	3,130	—	—	2,007	2,007	—	—	2,579	2,579
Total	17	179	3,130	3,326	5	180	2,007	2,192	1	261	2,579	2,841
Financial liabilities												
Derivatives non-qualifying hedges	—	63	—	63	—	23	—	23	—	20	—	20
Derivatives under hedge accounting	90	217	—	307	2	46	—	48	6	102	—	108
Total	90	280	—	371	2	70	—	72	6	122	—	128

There have been no transfers between Levels.

Specific valuation techniques used to value financial instruments at level 2 include the following methods: Interest forward rate agreements (FRA) are fair valued based on quoted market rates on the balance sheet date. Forward foreign exchange contracts are fair valued based on the contract forward rates at the balance sheet date. Foreign currency options are fair valued based on quoted market rates and market volatility rates on the balance sheet date by using the Black&Scholes option valuation model.

Interest and currency swap instruments are fair valued as present value of the estimated future cash flows based on observable yield curves. Commodity swaps are fair valued based on forward curve quotations received from service providers. Valuation of investment funds is based on quoted prices (unadjusted) for identical assets in markets that are not active.

Fair value measurements using significant unobservable inputs, Level 3

EURm	ENERGY SHAREHOLDINGS		
	Q1-Q2/22	Q1-Q2/21	Q1-Q4/2021
Book value at beginning of period	2,579	1,936	1,936
Disposals	-2	0	-1
Fair value changes recognised in other comprehensive income	553	70	643
Book value at end of period	3,130	2,007	2,579

Fair valuation of energy shareholdings in UPM Energy (Pohjolan Voima Oyj's A, B, B2, C, C2, M and V-shares, Kemijoki Oy shares, and Länsi-Suomen Voima Oy shares) is based on discounted cash flows model. The electricity price estimate is based on fundamental simulation of the Finnish area electricity price. A change of 5% in the electricity price used in the model would change the total value of the assets by approximately EUR 410 million.

The discount rate of 5.08% used in the valuation model is determined using the weighted average cost of capital method. A change of 0.5 percentage points in the discount rate would change the total value of the assets by approximately EUR 320 million.

Other uncertainties and risk factors in the value of the assets relate to start-up schedule of the fixed price turn-key Olkiluoto 3 EPR nuclear power plant project. UPM's indirect share of the capacity of Olkiluoto 3 EPR is approximately 31%, through its PVO B2 shares.

The increase in fair value during reporting period was mainly due to the increase in electricity forward rates.

Fair value of financial assets and liabilities measured at amortised cost

EURm	30 JUN 2022		30 JUN 2021		31 DEC 2021	
	Carrying amount	Fair value	Carrying amount	Fair value	Carrying amount	Fair value
Bonds	2,036	1,872	1,625	1,633	1,624	1,633
Other non-current debt excl. derivative financial instruments and lease liabilities	1,252	1,268	422	440	414	436
Total	3,288	3,140	2,047	2,073	2,038	2,069

The carrying amounts are not significantly different from fair values due to hedges. The fair values of all other financial assets and liabilities approximate their carrying amount.

6 Commitments and contingencies

EURm	30 JUN 2022	30 JUN 2021	31 DEC 2021
On behalf of others			
Guarantees	3	2	2
Other own commitments			
Commitments related to off-balance sheet short-term leases	2	4	4
Other commitments	207	214	213
Total	211	220	220

The lease commitments for leases not commenced on 30 June 2022 amounted to EUR 332 million (EUR 409 million on 31 December 2021) and are related to long-term charter agreements, railway service agreement in Uruguay and service agreements related to wastewater treatment and other utilities in Leuna, Germany.

Capital commitments

EUR	COMPLETION	TOTAL COST	BY 31 DEC 2021	Q1-Q2/22	AFTER 30 JUN 2022
New biorefinery / Germany	Q4 2023	750	235	113	402
CHP power plant / Germany	Q3 2022	95	63	15	17
New pulp mill / Uruguay	Q1 2023	3,062	1,656	432	974
Renovation and modernisation / Kuusankoski hydro power plant	Q4 2022	22	12	2	8
Mill development / Plywood Joensuu	Q4 2023	10	2	1	6

7 Notional amounts of derivative financial instruments

EURm	30 JUN 2022	30 JUN 2021	31 DEC 2021
Interest rate futures	2,241	3,766	2,280
Interest rate swaps	1,111	1,066	1,081
Forward foreign exchange contracts	3,897	3,891	3,550
Currency options, bought	—	—	—
Currency options, written	12	—	—
Cross currency swaps	148	160	161
Commodity contracts	3,010	955	1,508

8 Provisions

EURm	RESTRUCTURING	TERMINATION	ENVIRONMENTAL	EMISSIONS	OTHER	TOTAL
Value at 1 January 2022	24	36	30	39	26	155
Provisions made during the year	3	1	0	44	11	59
Provisions utilised during the year	-7	-20	-1	-54	-19	-101
Unused provisions reversed	-2	0	-9	0	0	-12
Value at 30 June 2022	18	17	20	29	18	101

9 Assets and liabilities classified as held for sale and disposals

Assets classified as held for sale as at 30 June 2022 relate to investment in the associated company Encore Ympäristöpalvelut Oy. Assets classified as held for sale as at 30 June 2021 relate to Shotton paper mill assets located in United Kingdom.

10 Change in the composition of reportable segments

The group has changed its reportable segments composition by moving the UPM Biofuels business into Other Operations on 1 January 2022.

UPM has formed a new business unit by combining UPM Biofuels, UPM Biochemicals, UPM Biomedicals and UPM Biocomposites businesses. The aim is to speed up business growth and to leverage the capabilities and competences across projects efficiently. This unit has inherited the name UPM

Biorefining and is reported as part of Other operations. UPM Pulp and UPM Timber priorly reported under UPM Biorefining are reported as UPM Fibres business area from 1 January 2022.

Following the change, Other Operations include UPM Forest, UPM Biofuels, UPM Biochemicals, UPM Biomedicals and UPM Biocomposites businesses as well as group services. The change has impacted KPIs of UPM Biorefining (1.1.2022 UPM Fibres) reportable segment and Other Operations. The comparative periods have been restated according to the new reporting principles. The reporting change has no impact on group financial result or balance sheet.

UPM Biorefining (1.1.2022 UPM Fibres)

	UPM Biorefining as published					UPM Fibres restated				
	Q4/21	Q3/21	Q2/21	Q1/21	Q1-Q4/21	Q4/21	Q3/21	Q2/21	Q1/21	Q1-Q4/21
Sales EURm	813	811	714	606	2,945	766	783	682	563	2,794
Comparable EBITDA, EURm	270	370	239	137	1,016	258	345	237	120	961
% of sales	33.2	45.6	33.5	22.6	34.5	33.7	44.1	34.7	21.4	34.4
Change in fair value of forest assets and wood harvested, EURm	-6	-2	-1	—	-9	-6	-2	-1	—	-9
Share of results of associated companies and joint ventures, EURm	—	1	—	—	2	—	1	—	—	2
Depreciation, amortisation and impairment charges, EURm	-48	-47	-49	-47	-191	-43	-43	-44	-43	-173
Operating profit, EURm	216	321	190	90	817	209	301	192	78	781
% of sales	26.6	39.6	26.6	14.9	27.8	27.3	38.5	28.2	13.8	27.9
Comparable EBIT, EURm	216	321	190	90	817	209	301	192	78	781
% of sales	27	40	27	15	28	27	38	28	14	28
Capital employed (average), EURm	5,013	4,625	4,201	3,910	4,437	4,855	4,465	4,041	3,747	4,277
Comparable ROCE, %	17.2	27.8	18.1	9.2	18.4	17.3	27.0	19.0	8.3	18.3

Other Operations

	As published					Restated				
	Q4/21	Q3/21	Q2/21	Q1/21	Q1- Q4/21	Q4/21	Q3/21	Q2/21	Q1/21	Q1- Q4/21
Sales EURm	66	74	82	58	280	133	116	124	110	483
Comparable EBITDA, EURm	-7	-13	2	-2	-19	5	12	5	14	36
Change in fair value of forest assets and wood harvested, EURm	109	6	-1	5	120	109	6	-1	5	120
Depreciation, amortisation and impairment charges, EURm	-7	-6	-6	-6	-25	-11	-10	-11	-11	-44
Operating profit, EURm	96	-12	-5	-3	75	103	8	-8	9	112
Items affecting comparability in operating profit, EURm	—	—	-1	—	-1	—	—	-1	—	-1
Comparable EBIT, EURm	96	-12	-5	-4	76	103	8	-7	9	113
Capital employed (average), EURm	2,050	1,986	1,987	1,944	1,992	2,209	2,146	2,147	2,106	2,152
Comparable ROCE, %	18.8	-2.4	-1.0	-0.8	3.8	18.7	1.5	-1.4	1.6	5.2

Alternative performance measures

Quarterly key figures

In addition to the conventional financial performance measures established by the IFRS, certain key figures (alternative performance measures) are presented to reflect the underlying business performance and enhance comparability from period to period.

	Q2/22	Q1/22	Q4/21	Q3/21	Q2/21	Q1/21	Q1- Q2/22	Q1- Q2/21	Q1- Q4/21
Sales EURm	2,562	2,507	2,673	2,523	2,384	2,234	5,069	4,618	9,814
Comparable EBITDA, EURm	506	377	470	535	426	389	883	816	1,821
% of sales	19.7	15.0	17.6	21.2	17.9	17.4	17.4	17.7	18.6
Comparable EBIT, EURm	387	277	461	424	307	279	664	586	1,471
% of sales	15.1	11.0	17.2	16.8	12.9	12.5	13.1	12.7	15.0
Comparable profit before tax, EURm	413	273	466	418	301	272	686	573	1,457
Capital employed (average, EURm)	14,738	13,799	13,399	12,633	12,080	11,744	14,698	11,891	12,657
Comparable ROCE, %	11.5	8.5	14.1	13.4	10.2	9.5	9.7	9.9	11.7
Comparable profit for the period, EURm	329	232	373	359	246	228	561	473	1,204
Total equity, average, EURm	11,167	11,071	10,760	10,011	9,454	9,407	11,202	9,560	10,310
Comparable ROE, %	11.8	8.4	13.8	14.3	10.4	9.7	10.0	9.9	11.7
Average number of shares basic (1,000)	533,324	533,324	533,324	533,324	533,324	533,324	533,324	533,324	533,324
Comparable EPS, EUR	0.60	0.42	0.69	0.66	0.45	0.42	1.02	0.87	2.22
Items affecting comparability in operating profit, EURm	-52	-94	-46	140	-3	0	-146	-3	91
Items affecting comparability in taxes, EURm	15	1	13	-1	1	0	16	0	12
Operating cash flow, EURm	-879	12	406	318	308	217	-867	526	1,250
Operating cash flow per share, EUR	-1.65	0.02	0.76	0.60	0.58	0.41	-1.63	0.99	2.34
Net debt at the end of period, EURm	2,688	837	647	667	750	83	2,688	750	647
Net debt to EBITDA (last 12 m.)	1.42	0.46	0.35	0.38	0.49	0.06	1.42	0.49	0.35
Gearing ratio, %	24	8	6	6	8	1	24	8	6
Equity per share at the end of period, EUR	20.57	20.11	20.34	19.08	17.62	17.06	20.57	17.62	20.34
Capital expenditure, EURm	360	256	491	365	375	252	616	627	1,483
Capital expenditure excluding acquisitions, EURm	359	256	491	365	374	246	616	621	1,477
Equity to assets ratio, %	58.4	61.3	62.9	62.8	61.7	58.5	58.4	61.7	62.9
Personnel at the end of period	17,601	16,843	16,966	17,085	17,874	17,670	17,601	17,874	16,966

The definitions of alternative performance measures are presented in other financial information in » [UPM Annual Report 2021](#)

Reconciliation of key figures to IFRS

EURm, OR AS INDICATED	Q2/22	Q1/22	Q4/21	Q3/21	Q2/21	Q1/21	Q1- Q2/22	Q1- Q2/21	Q1- Q4/21
Items affecting comparability									
Impairment charges	4	-95	-52	1	0	-1	-91	-1	-52
Restructuring charges	5	0	0	5	2	4	5	6	11
Change in fair value of unrealised cash flow and commodity hedges	-4	0	0	0	-5	-3	-4	-8	-8
Capital gains and losses on sale of non-current assets	18	1	7	134	0	0	19	0	140
Other non-operational items	-74	0	0	0	0	0	-74	0	0
Total items affecting comparability in operating profit	-52	-94	-46	140	-3	0	-146	-3	91
Taxes relating to items affecting comparability	15	1	13	-1	1	0	16	0	12
Items affecting comparability in taxes	15	1	13	-1	1	0	16	0	12
Items affecting comparability, total	-37	-93	-33	139	-3	0	-130	-3	103
Comparable EBITDA									
Operating profit	335	183	415	564	304	279	518	583	1,562
Depreciation, amortisation and impairment charges excluding items affecting comparability	113	111	113	116	118	116	224	234	463
Change in fair value of forest assets and wood harvested excluding items affecting comparability	8	-12	-103	-5	2	-5	-4	-3	-111
Share of result of associates and joint ventures	-2	1	-1	-1	-1	0	-1	-1	-2
Items affecting comparability in operating profit	52	94	46	-140	3	—	146	3	-91
Comparable EBITDA	506	377	470	535	426	389	883	816	1,821
% of sales	19.7	15.0	17.6	21.2	17.9	17.4	17.4	17.7	18.6
Comparable EBIT									
Operating profit	335	183	415	564	304	279	518	583	1,562
Items affecting comparability in operating profit	52	94	46	-140	3	—	146	3	-91
Comparable EBIT	387	277	461	424	307	279	664	586	1,471
% of sales	15.1	11.0	17.2	16.8	12.9	12.5	13.1	12.7	15.0
Comparable profit before tax									
Profit before tax	361	179	420	558	298	272	540	570	1,548
Items affecting comparability in operating profit	52	94	46	-140	3	—	146	3	-91
Comparable profit before tax	413	273	466	418	301	272	686	573	1,457
Comparable ROCE, %									
Comparable profit before tax	413	273	466	418	301	272	686	573	1,457
Interest expenses and other financial expenses	9	21	6	6	7	7	30	15	26
Capital employed, average	422	294	471	424	308	280	716	588	1,483
Comparable ROCE, %	11.5	8.5	14.1	13.4	10.2	9.5	9.7	9.9	11.7
Comparable profit for the period									
Profit for the period	292	139	340	497	243	227	431	470	1,307
Items affecting comparability, total	37	93	33	-139	3	—	130	3	-103
Comparable profit for the period	329	232	373	359	246	228	561	473	1,204
Comparable EPS, EUR									
Comparable profit for the period	329	232	373	359	246	228	561	473	1,204
Profit attributable to non-controlling interest	-9	-5	-5	-9	-4	-3	-14	-7	-22
Average number of shares basic (1,000)	320	226	367	350	242	224	547	466	1,183
Comparable EPS, EUR	0.60	0.42	0.69	0.66	0.45	0.42	1.02	0.87	2.22
Comparable ROE, %									
Comparable profit for the period	329	232	373	359	246	228	561	473	1,204
Total equity, average	11,167	11,071	10,760	10,011	9,454	9,407	11,202	9,560	10,310
Comparable ROE, %	11.8	8.4	13.8	14.3	10.4	9.7	10.0	9.9	11.7
Net debt									
Non-current debt	3,940	2,534	2,566	2,545	2,542	2,556	3,940	2,542	2,566
Current debt	399	269	86	80	77	76	399	77	86
Total debt	4,339	2,803	2,652	2,625	2,619	2,632	4,339	2,619	2,652
Non-current interest-bearing assets	112	120	148	155	160	161	112	160	148
Cash and cash equivalents	938	1,342	1,460	1,613	1,578	2,284	938	1,578	1,460
Other current interest-bearing assets	601	504	398	191	130	104	601	130	398
Total interest-bearing assets	1,650	1,966	2,006	1,959	1,869	2,550	1,650	1,869	2,006
Net debt	2,688	837	647	667	750	83	2,688	750	647

It should be noted that certain statements herein, which are not historical facts, including, without limitation, those regarding expectations for market growth and developments; expectations for growth and profitability; and statements preceded by "believes", "expects", "anticipates", "foresees", or similar expressions, are forward-looking statements. Since these statements are based on current plans, estimates and projections, they involve risks and uncertainties which may cause actual results to materially differ from those expressed in such forward-looking statements. Such factors include, but are not limited to: (1) **operating factors** such as continued success of manufacturing activities and the achievement of efficiencies therein including the availability and cost of production inputs, continued success of product development, acceptance of new products or services by the Group's targeted customers, success of the existing and future collaboration arrangements, changes in business strategy or development plans or targets, changes in the degree of protection created by the Group's patents and other intellectual property rights, the availability of capital on acceptable terms; (2) **industry conditions**, such as strength of product demand, intensity of competition, prevailing and future global market prices for the Group's products and the pricing pressures thereto, financial condition of the customers and the competitors of the Group, the potential introduction of competing products and technologies by competitors; and (3) **general economic conditions**, such as rates of economic growth in the Group's principal geographic markets or fluctuations in exchange and interest rates. The main earnings sensitivities and the group's cost structure are presented on pages 165-166 of the 2021 Annual Report. Risks and opportunities are discussed on pages 34-35 and risks and risk management are presented on pages 131-135 of the report.



UPM-Kymmene Corporation

Alvar Aallon katu 1

PO Box 380

FI-00101 Helsinki, Finland

Tel. +358 2041 5111

Fax +358 2041 5110

ir@upm.com